Subnational Under-five and Neonatal Mortality Estimates, 2000–2021

Estimates developed by the United Nations Inter-agency Group for Child Mortality Estimation (UN IGME)

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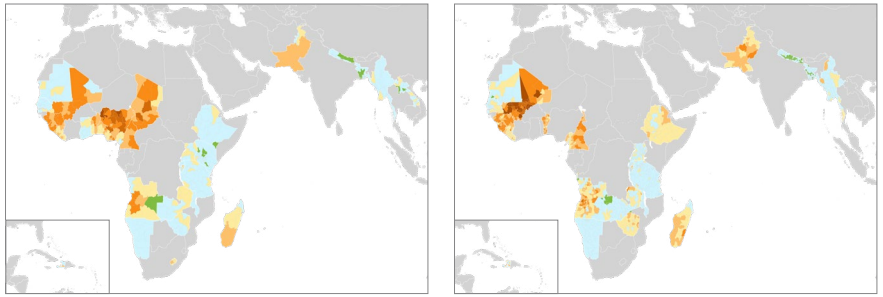
Subnational under-five mortality rate (U5MR) and neonatal mortality rate (NMR) estimates, 2000–2021, provide critical insight into mortality rates and trends at the level at which health interventions and decisions on resource allocation are typically made

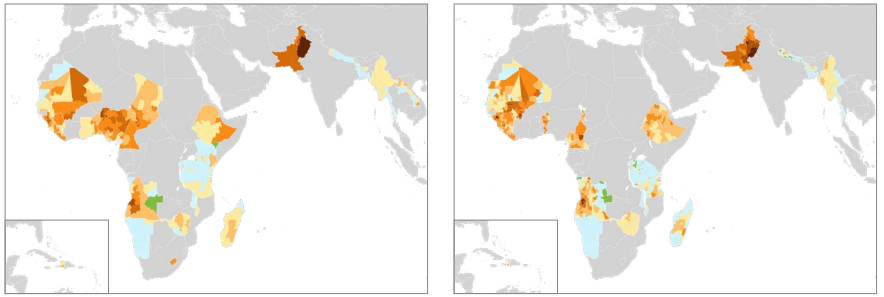
Under-five mortality rate at administrative level 1 and administrative level 2, 2021



Administrative level 1
422 divisions across
31 countries

Administrative level 2
1,751 divisions across
24 countries

Neonatal mortality rate at administrative level 1 and administrative level 2, 2021

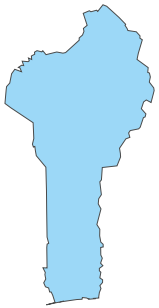


Administrative level 1
397 divisions across
29 countries

Administrative level 2
1,490 divisions across
22 countries

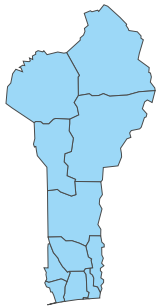
Administrative divisions of Benin

Administrative level 0



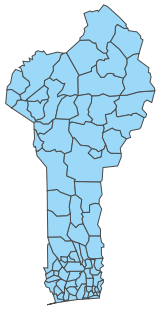
National-level estimate

Administrative level 1



Broadest subnational estimate after national level

Administrative level 2



Finest subnational-level estimate

Finer geographical gradation

Note: Benin is used here for illustrative purposes.

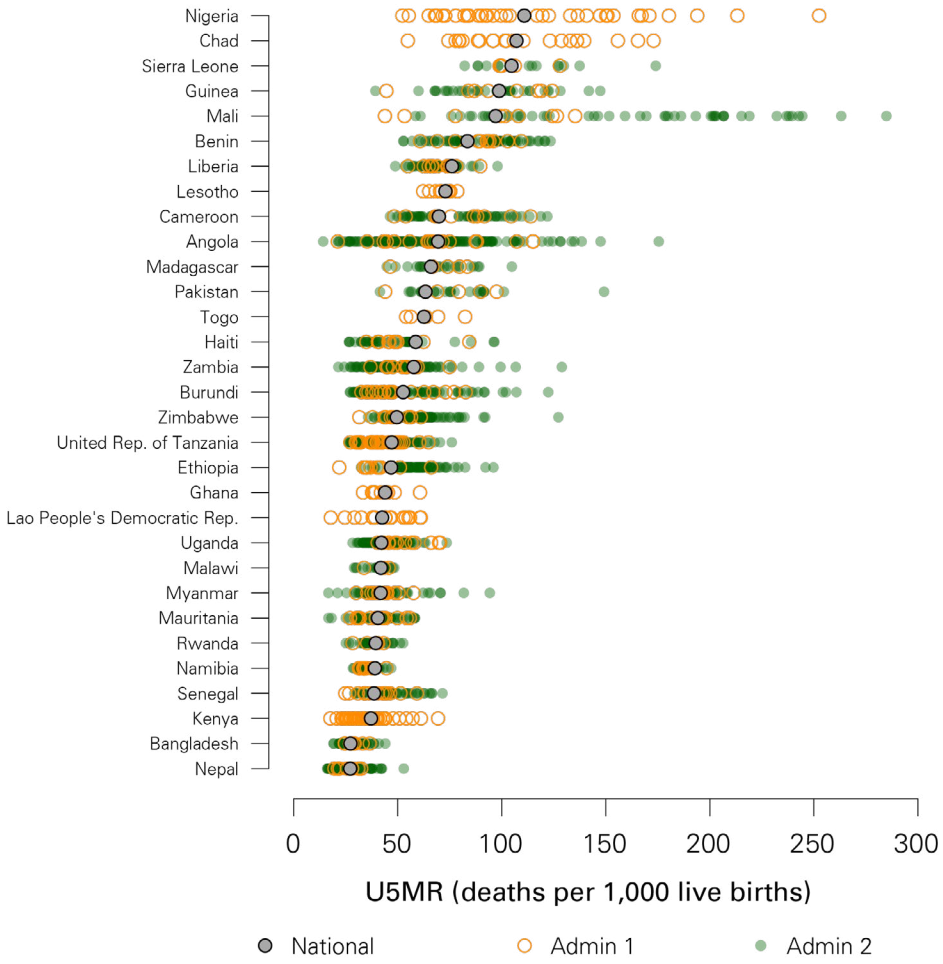
These maps do not reflect a position by UNICEF or UN IGME on the legal status of any country, territory, or administrative division or the delimitation of any frontiers.

Subnational estimates can help target interventions where most needed

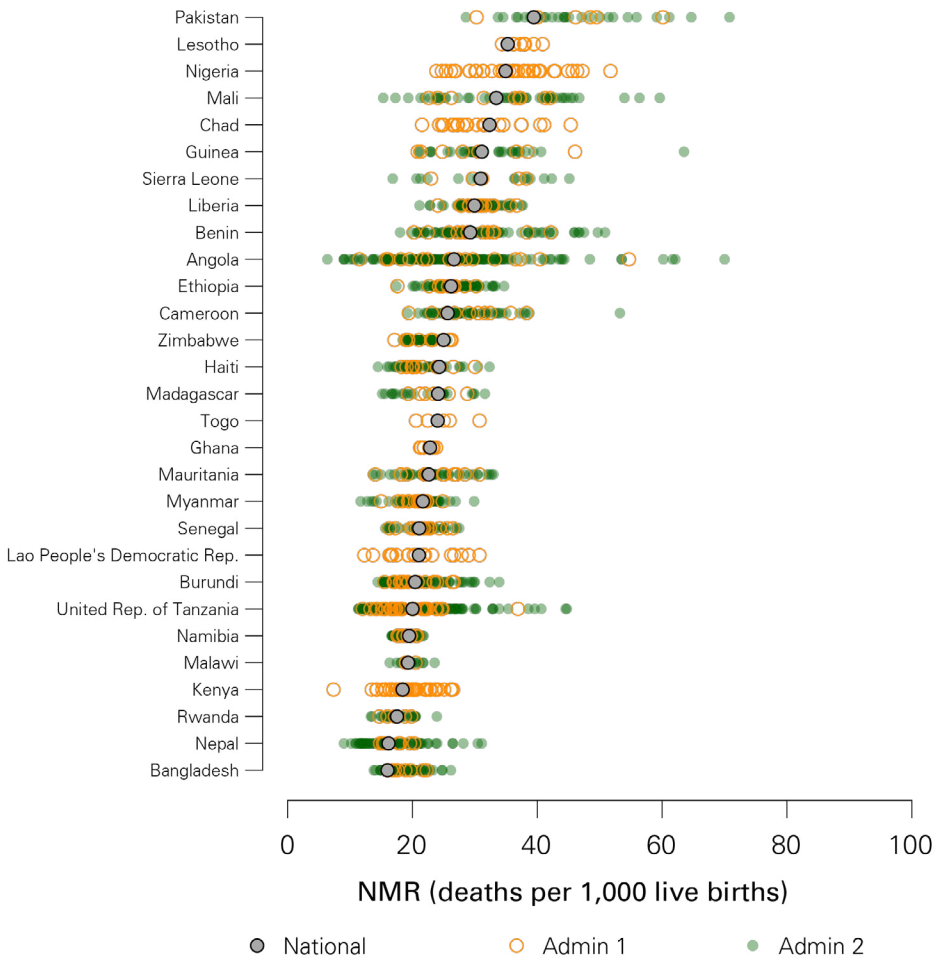
In Nigeria, where the national under-five mortality rate for 2021 was 111 deaths per 1,000 live births, rates at administrative level 1 ranged from a low of 52 deaths per 1,000 live births to a high of 253 deaths per 1,000 live births in 2021.

In Angola, the national neonatal mortality rate was 27 deaths per 1,000 live births, while subnational rates at administrative level 2 ranged from a low of 6 to a high of 70 deaths per 1,000 live births in 2021.

Under-five mortality rate estimates by administrative 1 and administrative 2 divisions for 31 countries, 2021



Neonatal mortality rate estimates by administrative 1 and administrative 2 divisions for 29 countries, 2021

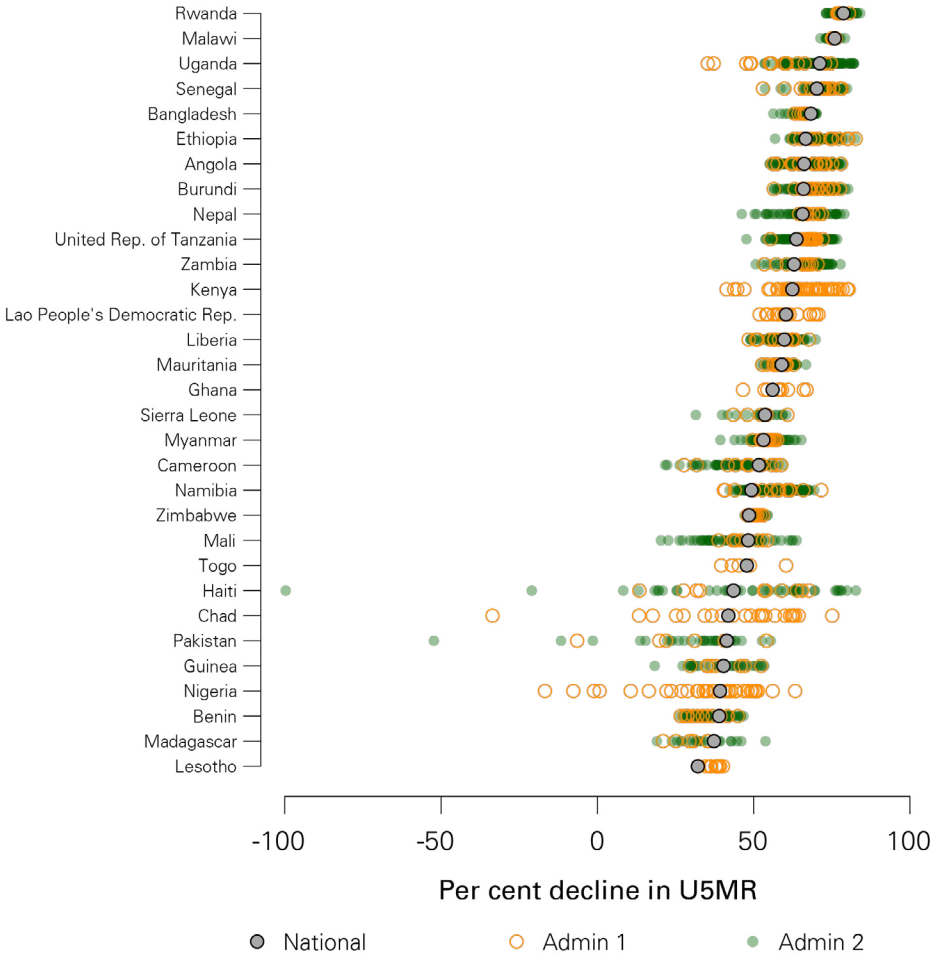


National progress in reducing under-five and neonatal mortality can obscure uneven subnational trends

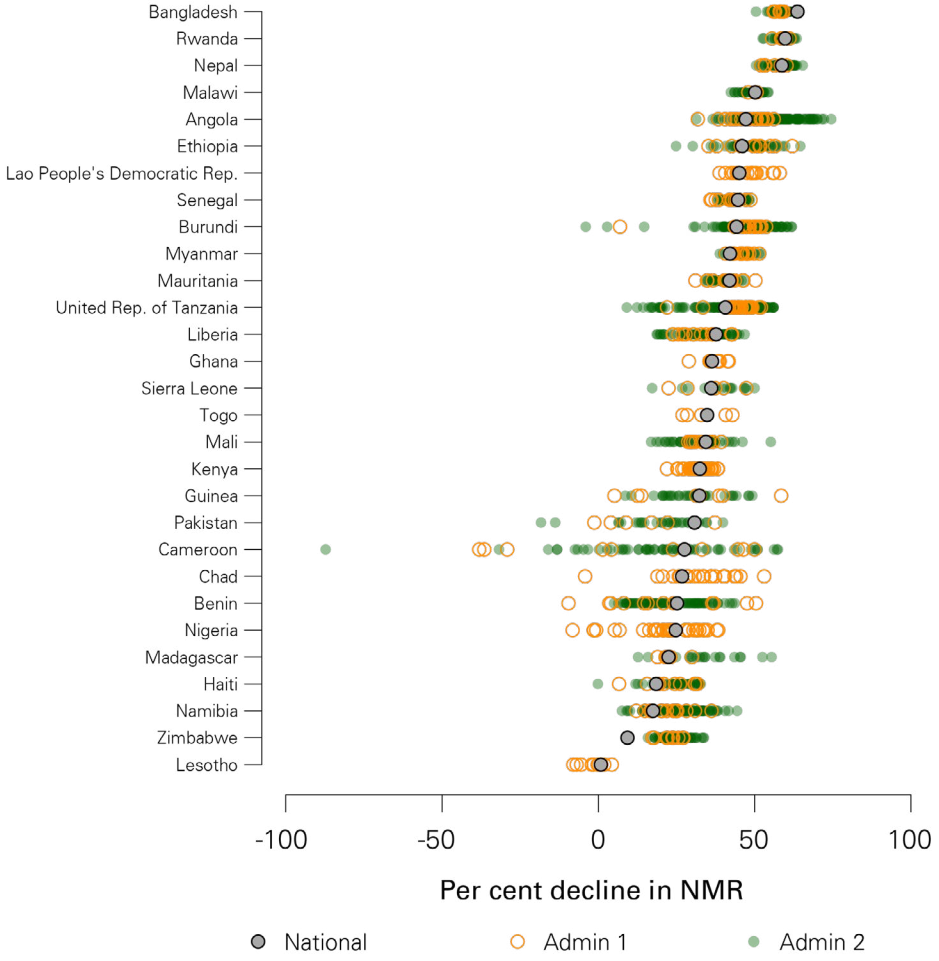
In Chad, the national under-five mortality rate has declined by 42 per cent since 2000, while the per cent decline within administrative level 1 divisions ranged from a high of 75 per cent to a low of -34 per cent (an increase since 2000).

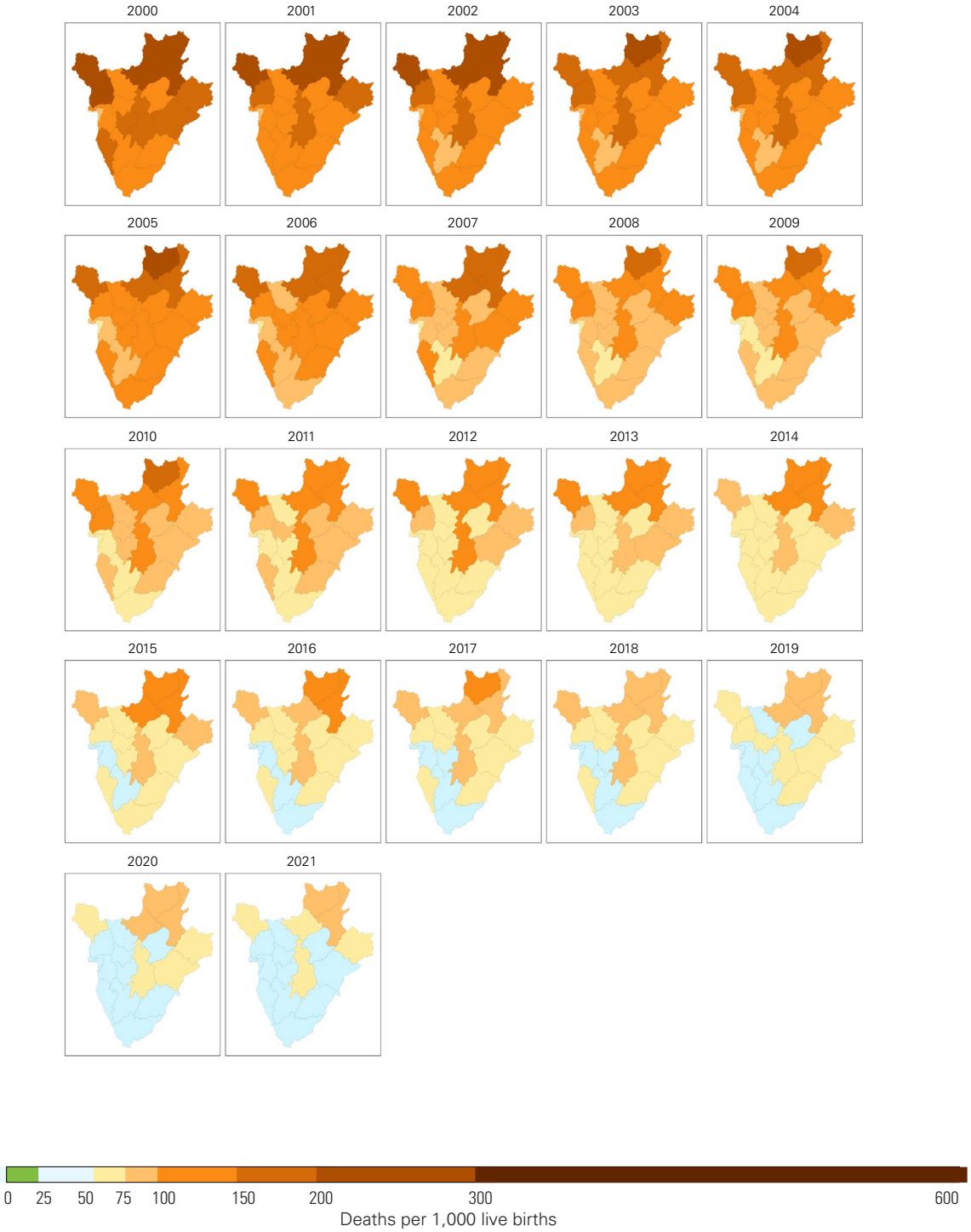
In Haiti, the national neonatal mortality rate has declined by 18 per cent since 2000, while the per cent decline within administrative level 1 divisions ranged from a high of 32 per cent to a low of just 7 per cent.

Percentage decline in the under-five mortality rate at administrative level 1 and administrative level 2 (where available) for 31 countries, 2000–2021



Percentage decline in the neonatal mortality rate at administrative level 1 and administrative level 2 (where available) for 29 countries, 2000–2021





Subnational regional variation in under-five mortality rates persists in some cases, even while all subnational areas see decline

In Burundi, mortality risk has remained lower in the southern provinces relative to the northern provinces, even while the national under-five mortality rate fell by 66 per cent since 2000 and all provinces (administrative level 1) saw a decline in under-five mortality since 2000.

Under-five mortality rate at administrative level 1 in Burundi, 2000-2021

These maps do not reflect a position by UNICEF or UN IGME on the legal status of any country, territory, or administrative division or the delimitation of any frontiers.

ANGOLA

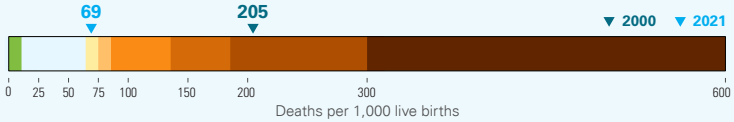
U5MR

Administrative level 1 (Province): **18**

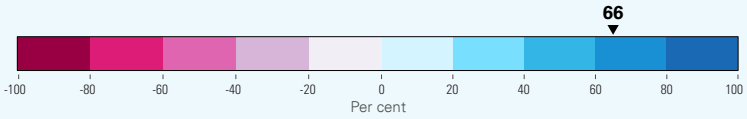
Administrative level 2 (Communes): **163**

National level

Under-five mortality rate, 2000 and 2021

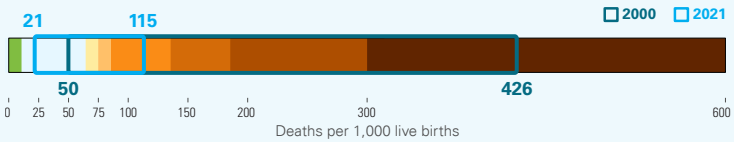


Percentage decline in under-five mortality rate, 2000–2021

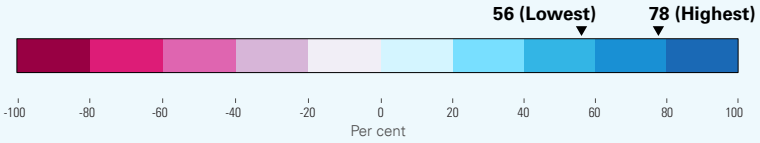


Administrative level 1

Under-five mortality rate, 2000 and 2021 (range)

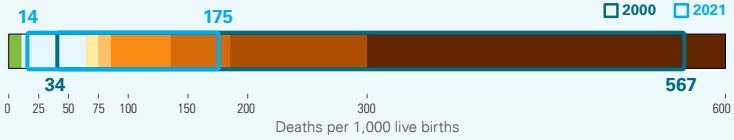


Percentage decline in under-five mortality rate, 2000–2021 (range)

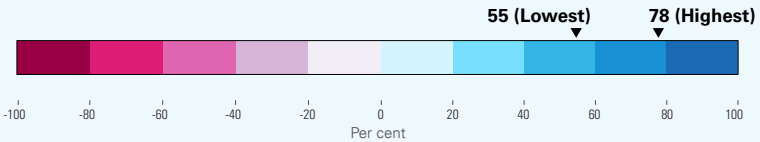


Administrative level 2

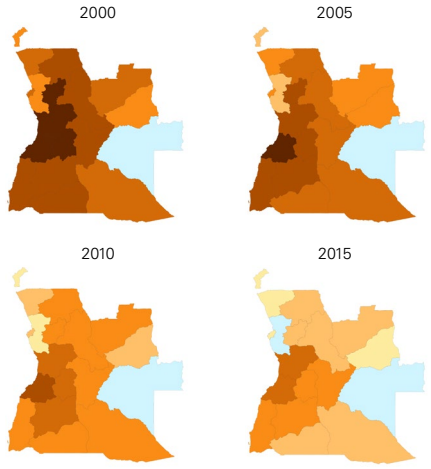
Under-five mortality rate, 2000 and 2021 (range)



Percentage decline in under-five mortality rate, 2000–2021 (range)

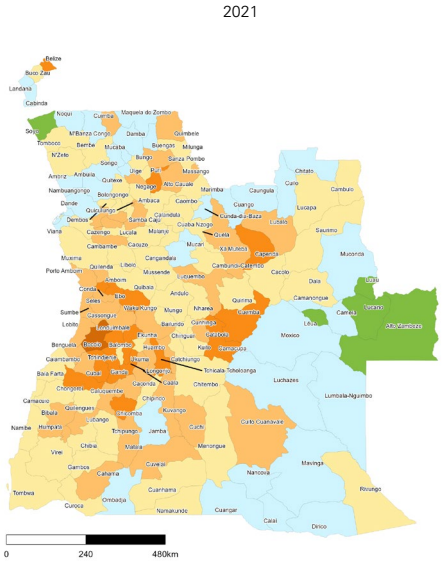


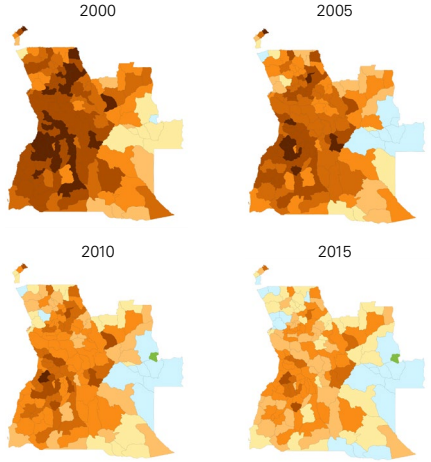
U5MR by administrative 1 area in Angola, 2000-2021



In 2000, U5MR ranged from 50 to 426 deaths per 1,000 live births. By 2021, U5MR ranged from 21 to 115 deaths per 1,000 live births.

U5MR by administrative 2 area in Angola, 2000-2021





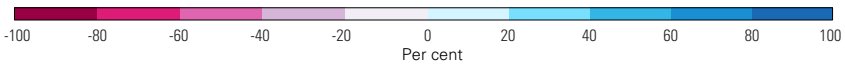
In 2000, U5MR ranged from 34 to 567 deaths per 1,000 live births. By 2021, U5MR ranged from 14 to 175 deaths per 1,000 live births.

Percentage decline in administrative level 1 U5MR 2000-2021 in Angola

The percentage decline in under-five mortality at administrative level 1 ranged from a low of 56 per cent to a high of 78 per cent.

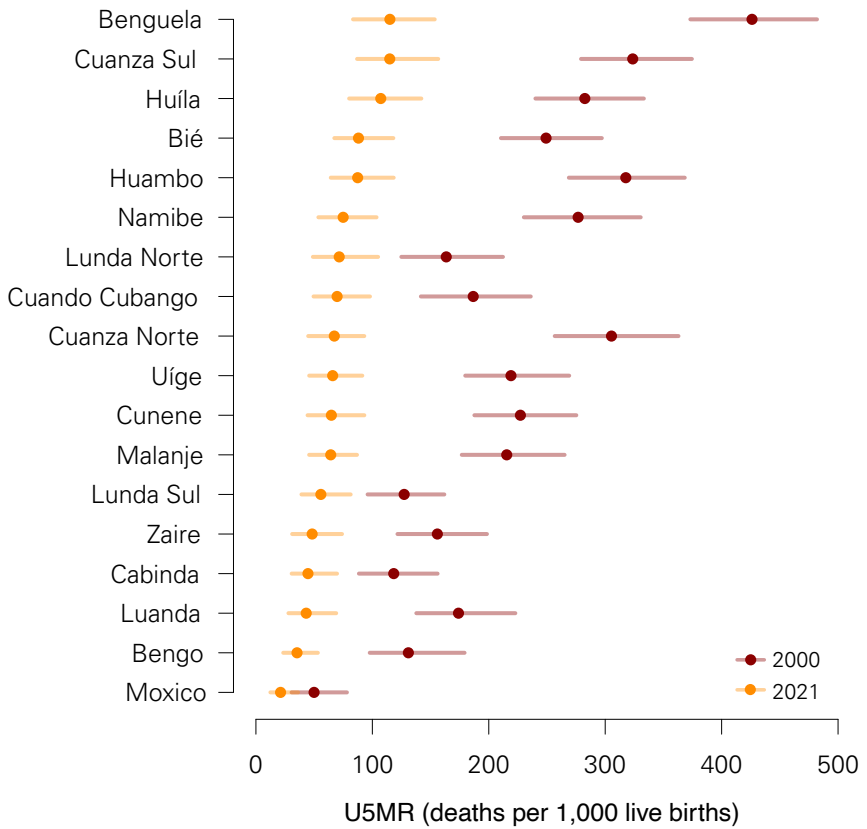
Percentage decline in administrative level 2 U5MR 2000-2021 in Angola

The percentage decline in under-five mortality at administrative level 2 ranged from a low of 55 per cent to a high of 78 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Angola, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Benguela, the highest mortality administrative level 1 area, was 8.5 times higher than in Moxico, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Benguela, was 5.4 times higher than in the lowest mortality area, Moxico.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Angola: Demographic and Health Survey 2015-2016.

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ANGOLA

NMR

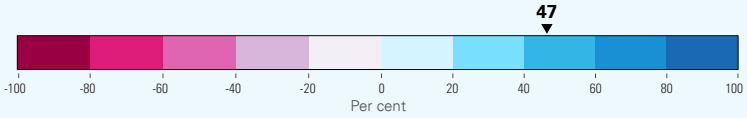
Administrative level 1 (Province): **18**

Administrative level 2 (Communes): **163**

National level

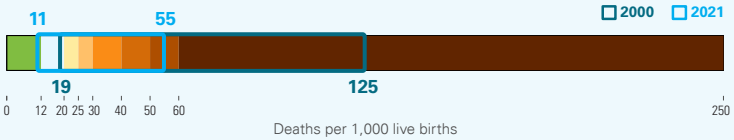
Neonatal mortality rate, 2000 and 2021

Percentage decline in neonatal mortality rate, 2000–2021

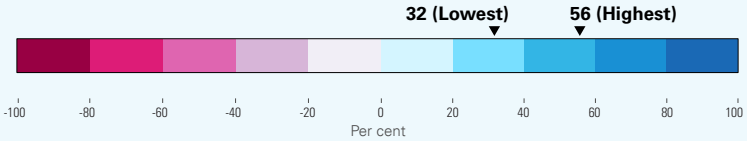


Administrative level 1

Neonatal mortality rate, 2000 and 2021 (range)



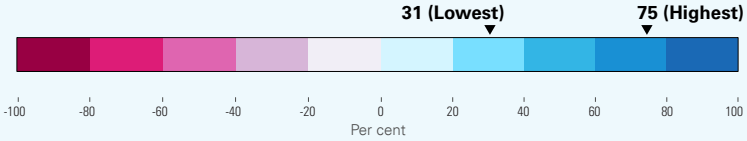
Percentage decline in neonatal mortality rate, 2000–2021 (range)



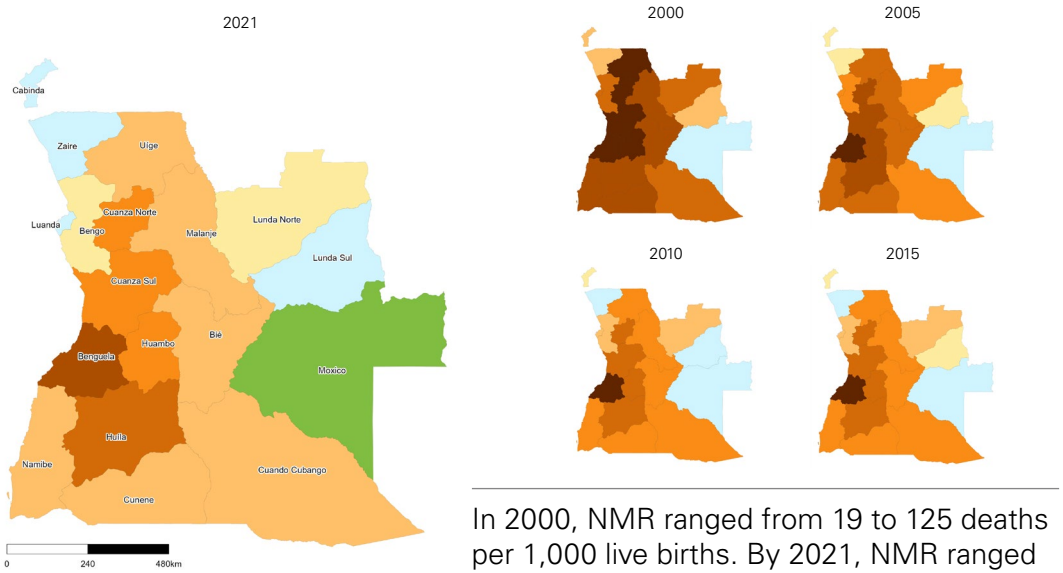
Administrative level 2

Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)

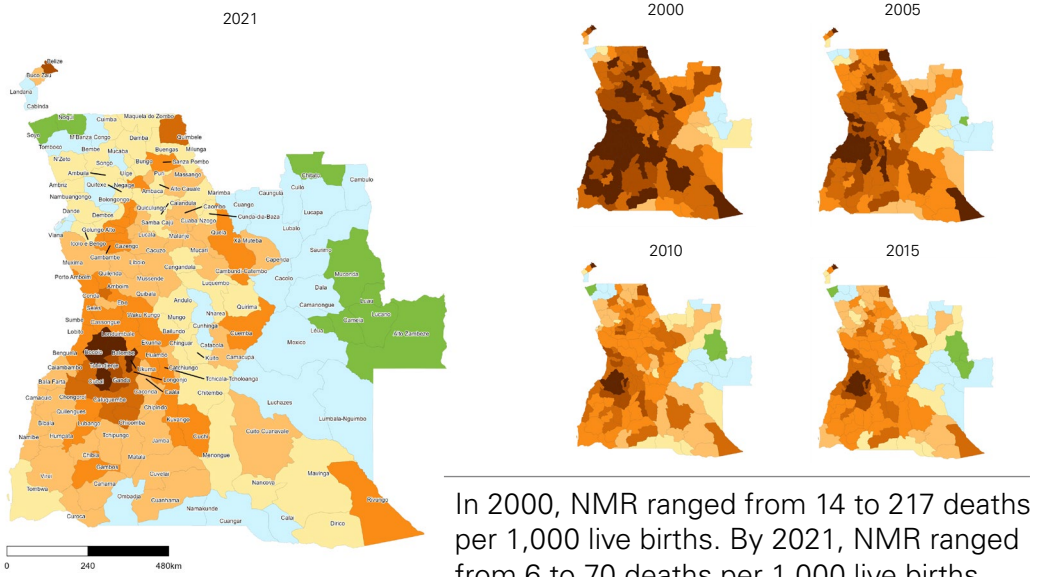


NMR by administrative 1 area in Angola, 2000-2021



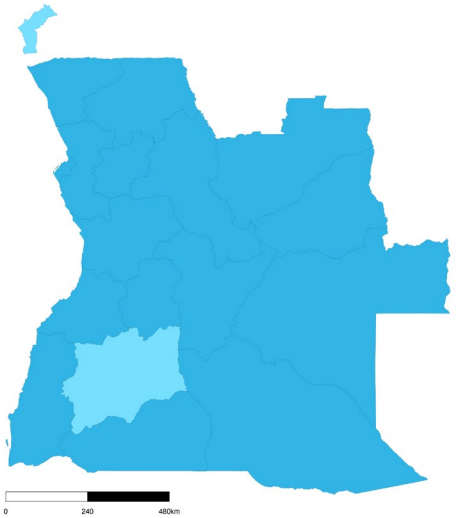
In 2000, NMR ranged from 19 to 125 deaths per 1,000 live births. By 2021, NMR ranged from 11 to 55 deaths per 1,000 live births.

NMR by administrative 2 area in Angola, 2000-2021



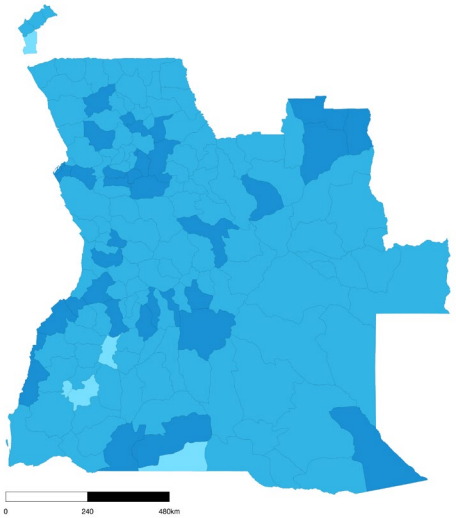
In 2000, NMR ranged from 14 to 217 deaths per 1,000 live births. By 2021, NMR ranged from 6 to 70 deaths per 1,000 live births.

Percentage decline in administrative level 1 NMR 2000-2021 in Angola

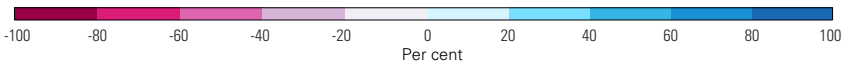


The percentage decline in neonatal mortality at administrative level 1 ranged from a low of 32 per cent to a high of 56 per cent.

Percentage decline in administrative level 2 NMR 2000-2021 in Angola

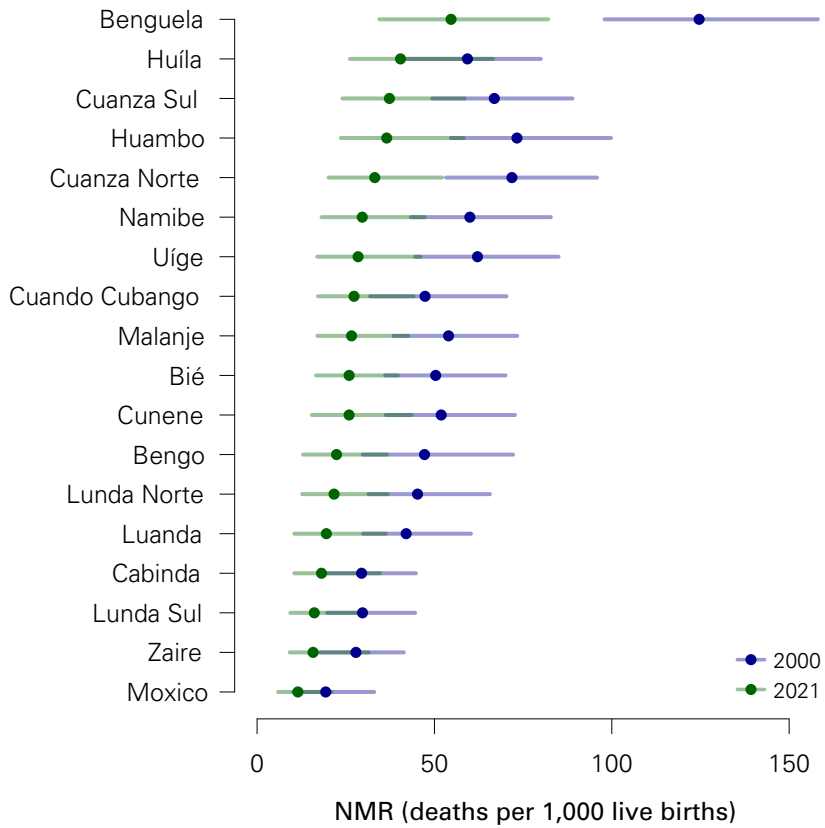


The percentage decline in neonatal mortality at administrative level 2 ranged from a low of 31 per cent to a high of 75 per cent.



NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Angola, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Benguela, the highest mortality administrative level 1 area, was 6.4 times higher than in Moxico, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, Benguela, was 4.8 times higher than in the lowest mortality area, Moxico.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

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Data sources for Angola: Demographic and Health Survey 2015-2016.

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BANGLADESH

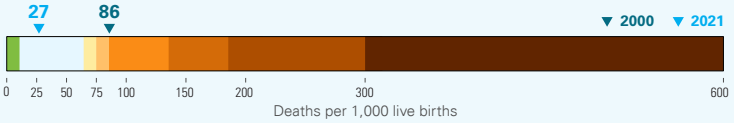
U5MR

Administrative level 1 (Division): **8**

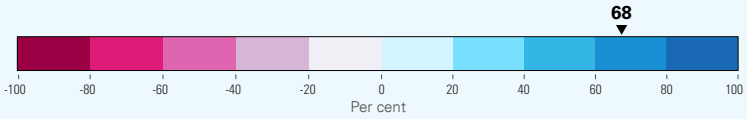
Administrative level 2 (Distict): **64**

National level

Under-five mortality rate, 2000 and 2021

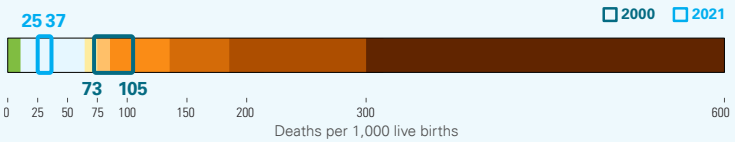


Percentage decline in under-five mortality rate, 2000–2021

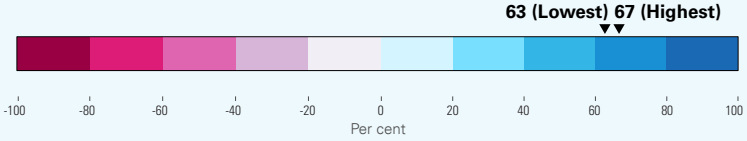


Administrative level 1

Under-five mortality rate, 2000 and 2021 (range)

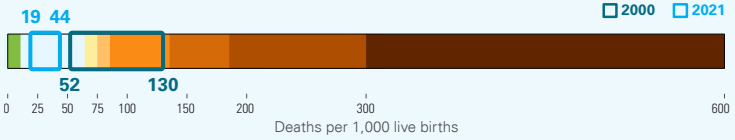


Percentage decline in under-five mortality rate, 2000–2021 (range)

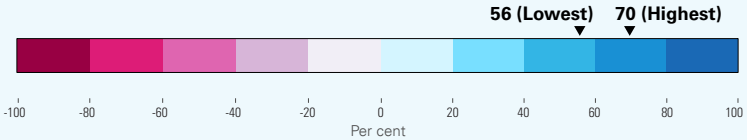


Administrative level 2

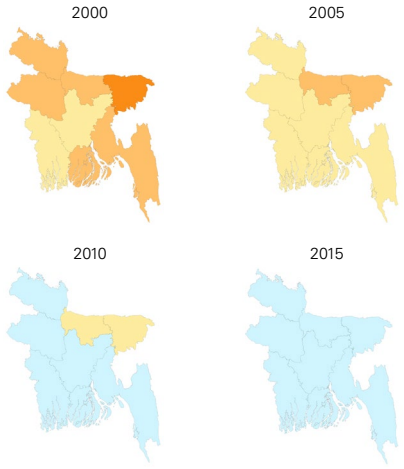
Under-five mortality rate, 2000 and 2021 (range)



Percentage decline in under-five mortality rate, 2000–2021 (range)

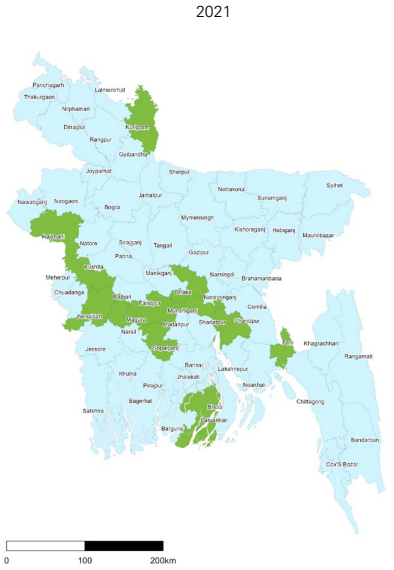


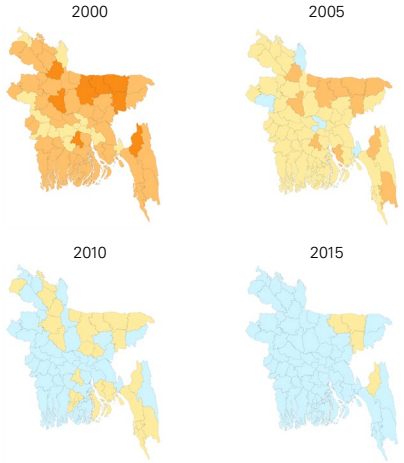
U5MR by administrative 1 area in Bangladesh, 2000-2021



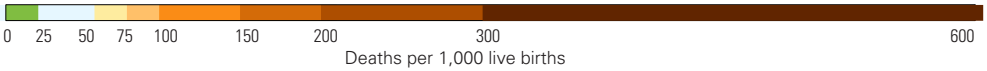
In 2000, U5MR ranged from 73 to 105 deaths per 1,000 live births. By 2021, U5MR ranged from 25 to 37 deaths per 1,000 live births.

U5MR by administrative 2 area in Bangladesh, 2000-2021





In 2000, U5MR ranged from 52 to 130 deaths per 1,000 live births. By 2021, U5MR ranged from 19 to 44 deaths per 1,000 live births.

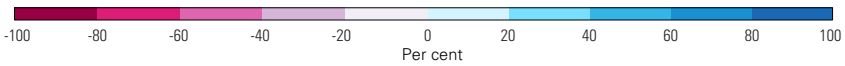


Percentage decline in administrative level 1 U5MR 2000-2021 in Bangladesh

The percentage decline in under-five mortality at administrative level 1 ranged from a low of 63 per cent to a high of 67 per cent.

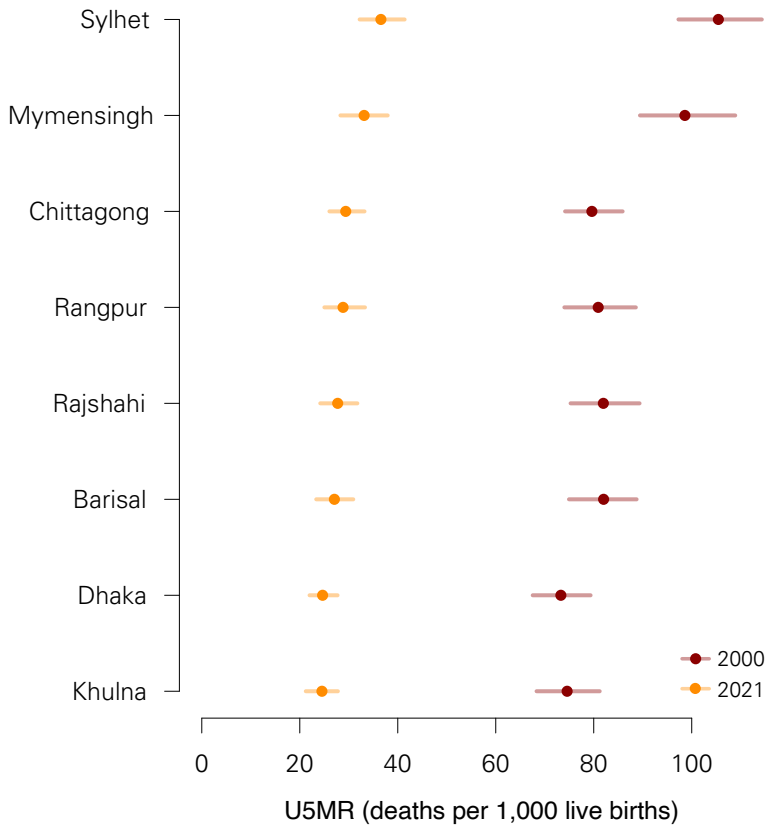
Percentage decline in administrative level 2 U5MR 2000-2021 in Bangladesh

The percentage decline in under-five mortality at administrative level 2 ranged from a low of 56 per cent to a high of 70 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Bangladesh, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Sylhet, the highest mortality administrative level 1 area, was 1.4 times higher than in Dhaka, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Sylhet, was 1.5 times higher than in the lowest mortality area, Khulna.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Bangladesh: Demographic and Health Survey 2011; Demographic and Health Survey 2014; Multiple Indicator Cluster Survey 2019.

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BANGLADESH

NMR

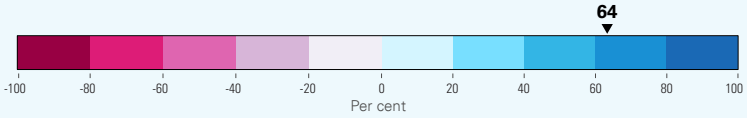
Administrative level 1 (Division): **8**

Administrative level 2 (Distict): **64**

National level

Neonatal mortality rate, 2000 and 2021

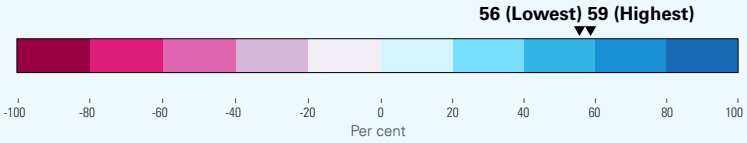
Percentage decline in neonatal mortality rate, 2000–2021



Administrative level 1

Neonatal mortality rate, 2000 and 2021 (range)

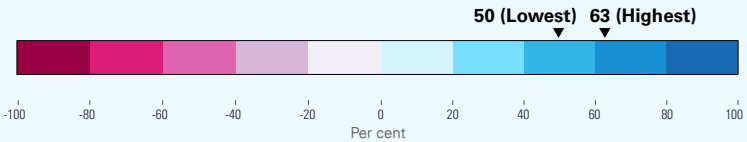
Percentage decline in neonatal mortality rate, 2000–2021 (range)



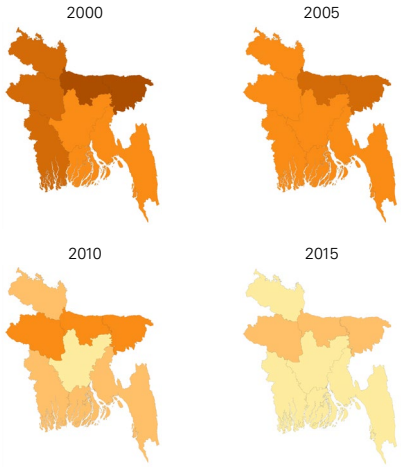
Administrative level 2

Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)

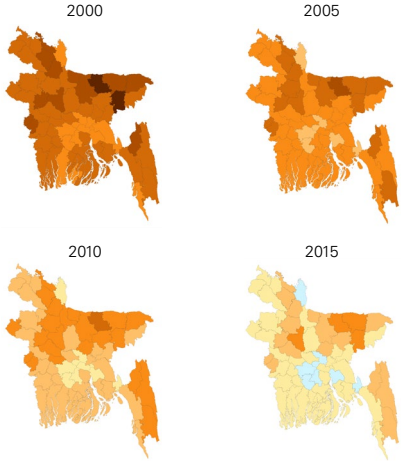


NMR by administrative 1 area in Bangladesh, 2000-2021



In 2000, NMR ranged from 37 to 53 deaths per 1,000 live births. By 2021, NMR ranged from 16 to 22 deaths per 1,000 live births.

NMR by administrative 2 area in Bangladesh, 2000-2021

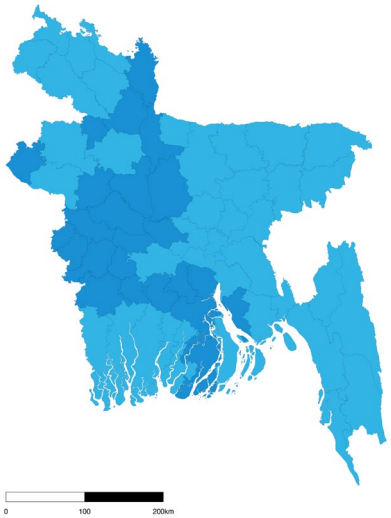


In 2000, NMR ranged from 32 to 63 deaths per 1,000 live births. By 2021, NMR ranged from 14 to 26 deaths per 1,000 live births.

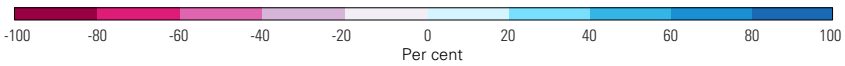
Percentage decline in administrative level 1 NMR 2000-2021 in Bangladesh

The percentage decline in neonatal mortality at administrative level 1 ranged from a low of 56 per cent to a high of 59 per cent.

Percentage decline in administrative level 2 NMR 2000-2021 in Bangladesh

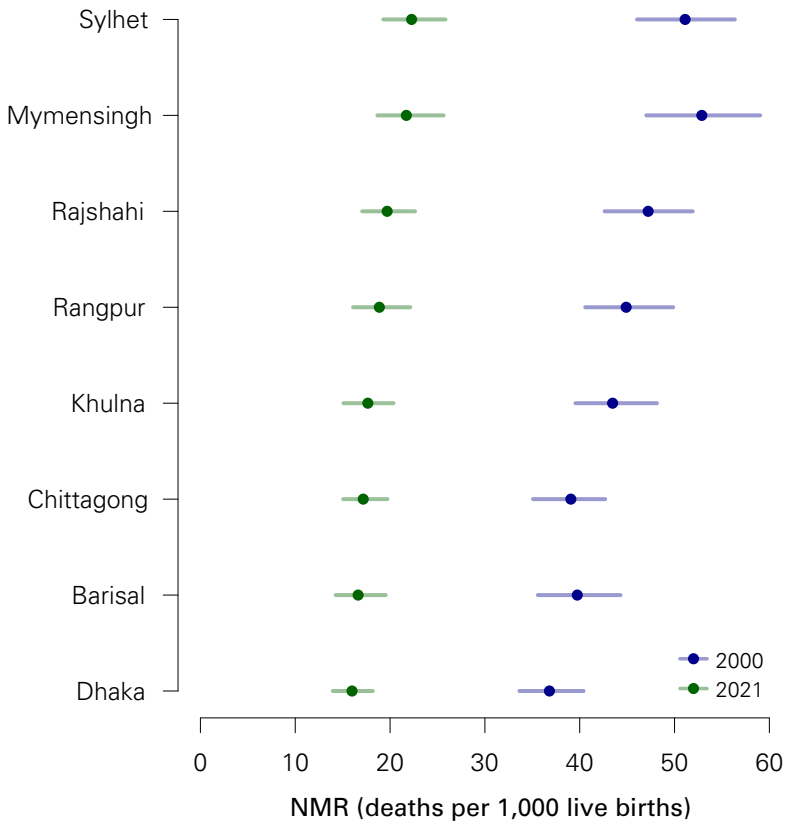


The percentage decline in neonatal mortality at administrative level 2 ranged from a low of 50 per cent to a high of 63 per cent.



NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Bangladesh, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Mymensingh, the highest mortality administrative level 1 area, was 1.4 times higher than in Dhaka, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, Sylhet, was 1.4 times higher than in the lowest mortality area, Dhaka.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Bangladesh: Demographic and Health Survey 2011; Demographic and Health Survey 2014; Multiple Indicator Cluster Survey 2019.

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BENIN

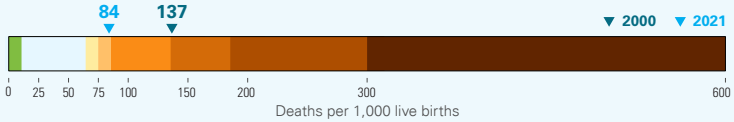
U5MR

Administrative level 1 (Department): **12**

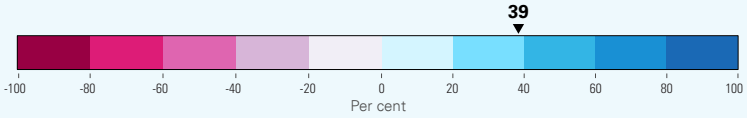
Administrative level 2 (Commune): **78**

National level

Under-five mortality rate, 2000 and 2021

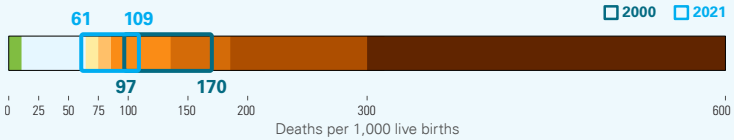


Percentage decline in under-five mortality rate, 2000-2021

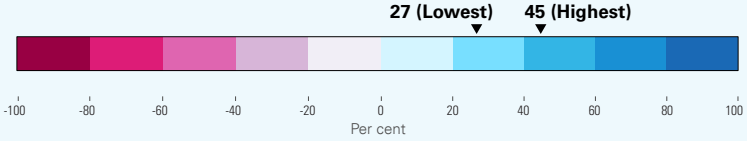


Administrative level 1

Under-five mortality rate, 2000 and 2021 (range)

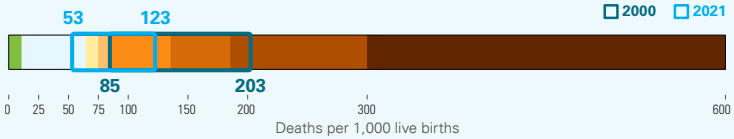


Percentage decline in under-five mortality rate, 2000–2021 (range)

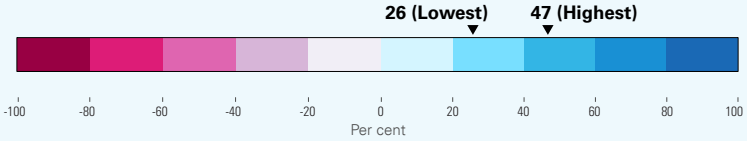


Administrative level 2

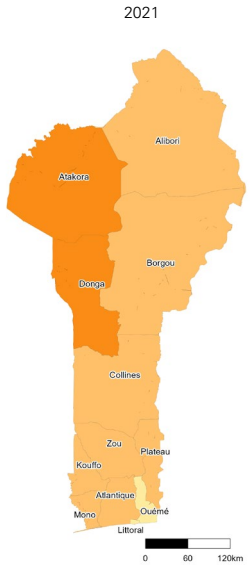
Under-five mortality rate, 2000 and 2021 (range)

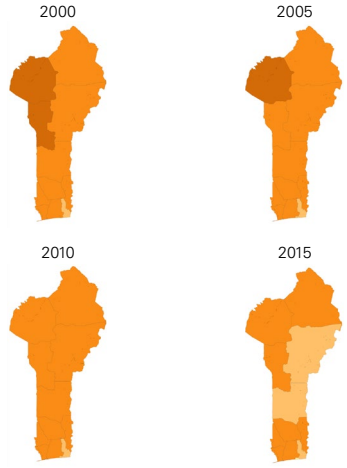


Percentage decline in under-five mortality rate, 2000–2021 (range)



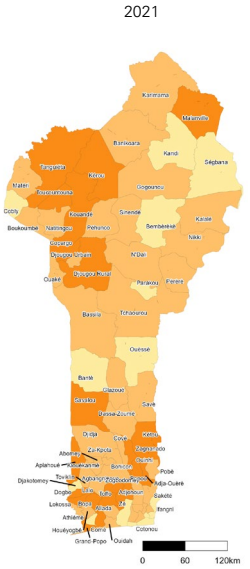
U5MR by administrative 1 area in Benin, 2000-2021

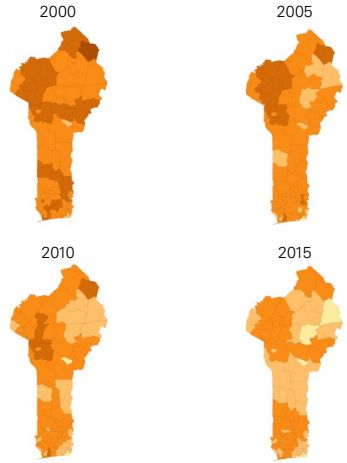




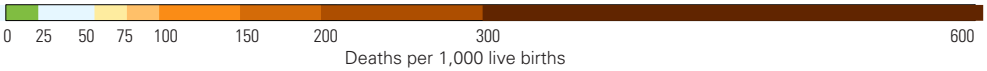
In 2000, U5MR ranged from 97 to 170 deaths per 1,000 live births. By 2021, U5MR ranged from 61 to 109 deaths per 1,000 live births.

U5MR by administrative 2 area in Benin, 2000-2021

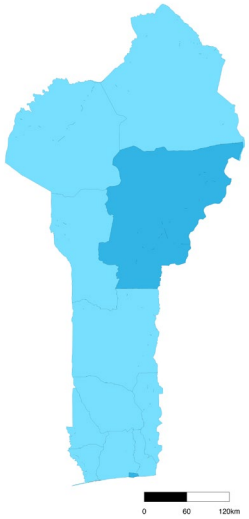




In 2000, U5MR ranged from 85 to 203 deaths per 1,000 live births. By 2021, U5MR ranged from 53 to 123 deaths per 1,000 live births.

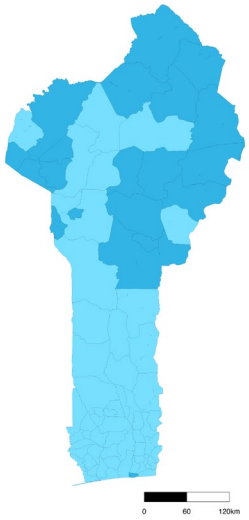


Percentage decline in administrative level 1 U5MR 2000-2021 in Benin

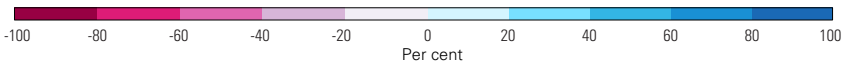


The percentage decline in under-five mortality at administrative level 1 ranged from a low of 27 per cent to a high of 45 per cent.

Percentage decline in administrative level 2 U5MR 2000-2021 in Benin

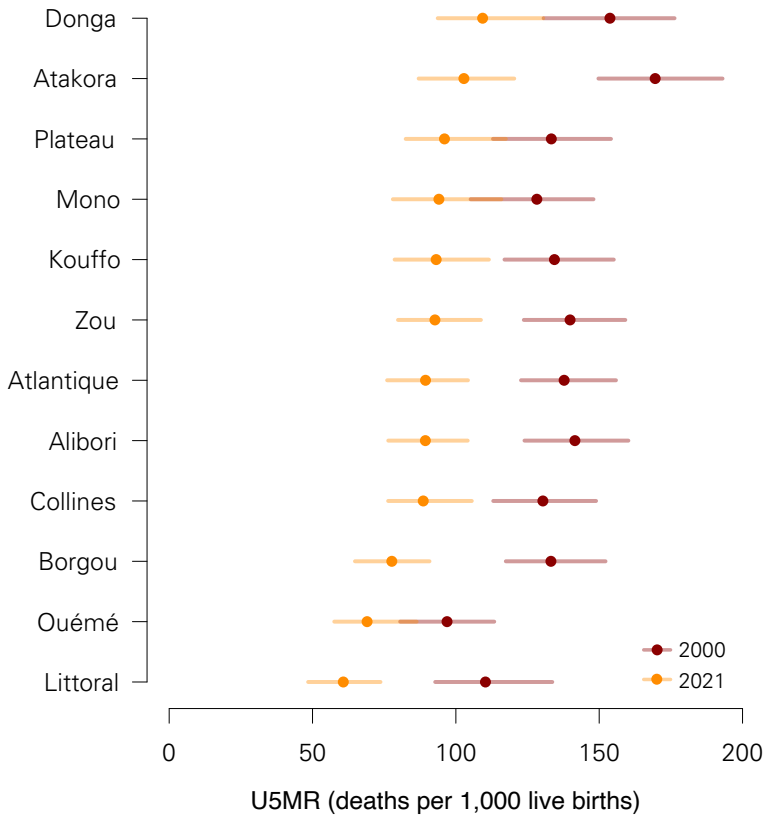


The percentage decline in under-five mortality at administrative level 2 ranged from a low of 26 per cent to a high of 47 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Benin, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Atakora, the highest mortality administrative level 1 area, was 1.7 times higher than in Ouémé, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Donga, was 1.8 times higher than in the lowest mortality area, Littoral.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

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Data sources for Benin: Demographic and Health Survey 2017-2018.

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BENIN

NMR

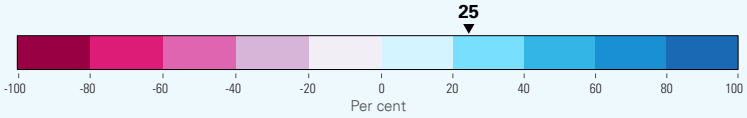
Administrative level 1 (Department): **12**

Administrative level 2 (Commune): **78**

National level

Neonatal mortality rate, 2000 and 2021

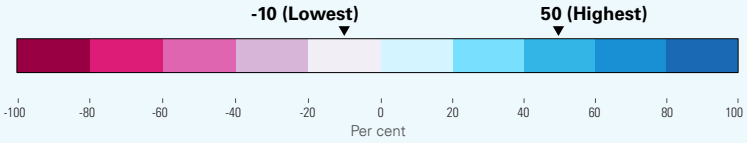
Percentage decline in neonatal mortality rate, 2000–2021



Administrative level 1

Neonatal mortality rate, 2000 and 2021 (range)

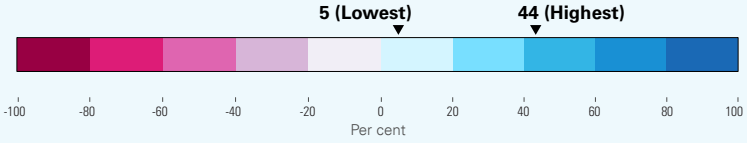
Percentage decline in neonatal mortality rate, 2000–2021 (range)



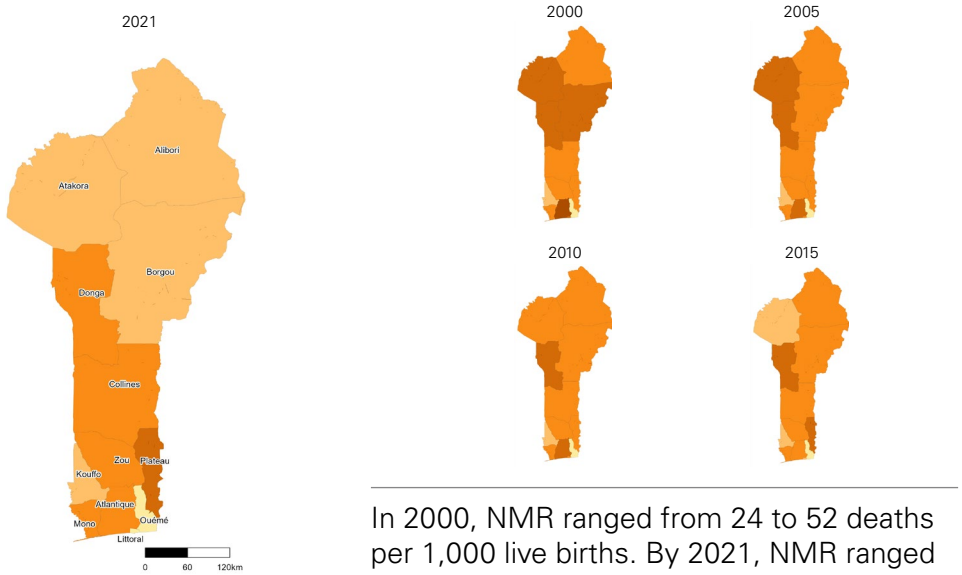
Administrative level 2

Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)

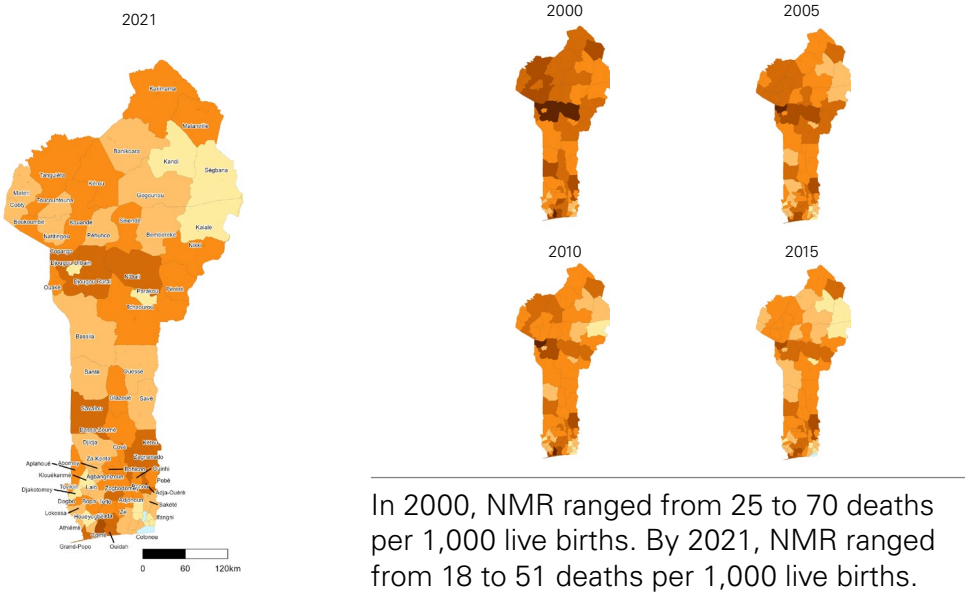


NMR by administrative 1 area in Benin, 2000-2021



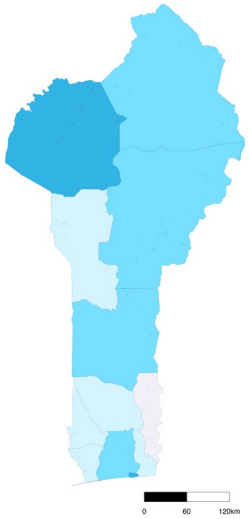
In 2000, NMR ranged from 24 to 52 deaths per 1,000 live births. By 2021, NMR ranged from 20 to 42 deaths per 1,000 live births.

NMR by administrative 2 area in Benin, 2000-2021



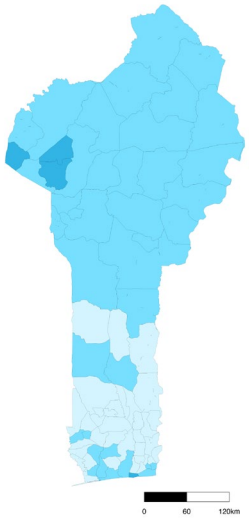
In 2000, NMR ranged from 25 to 70 deaths per 1,000 live births. By 2021, NMR ranged from 18 to 51 deaths per 1,000 live births.

Percentage decline in administrative level 1 NMR 2000-2021 in Benin

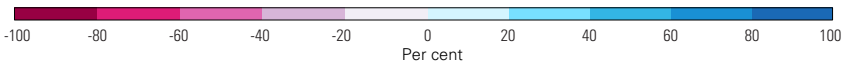


The percentage decline in neonatal mortality at administrative level 1 ranged from a low of -10 per cent to a high of 50 per cent.

Percentage decline in administrative level 2 NMR 2000-2021 in Benin

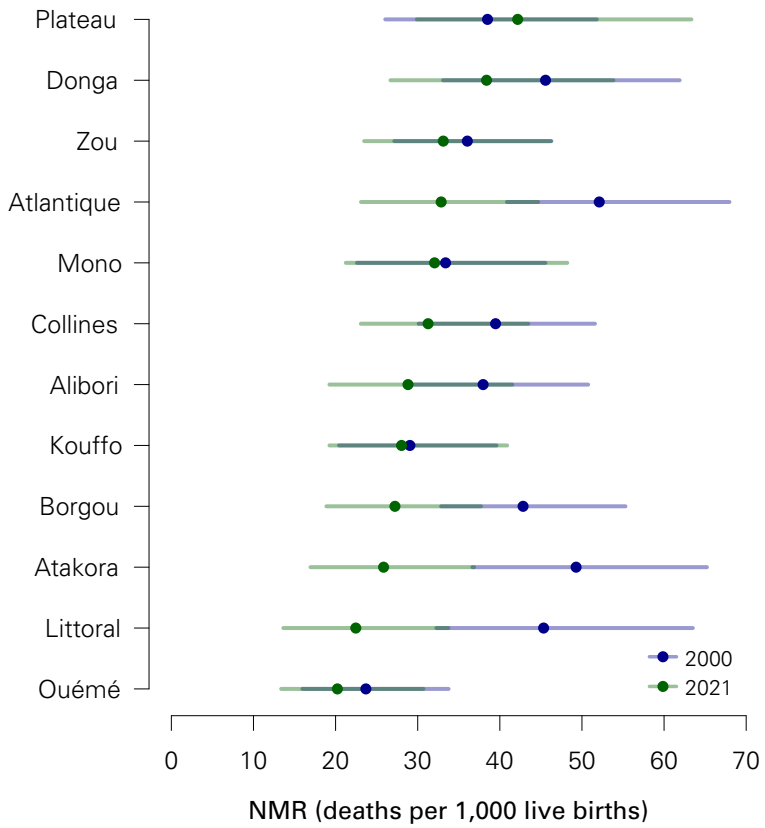


The percentage decline in neonatal mortality at administrative level 2 ranged from a low of 5 per cent to a high of 44 per cent.



NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Benin, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Atlantique, the highest mortality administrative level 1 area, was 2.2 times higher than in Ouémé, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, Plateau, was 2.1 times higher than in the lowest mortality area, Ouémé.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

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BURUNDI

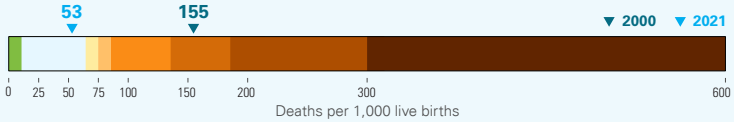
U5MR

Administrative level 1 (Province): **18**

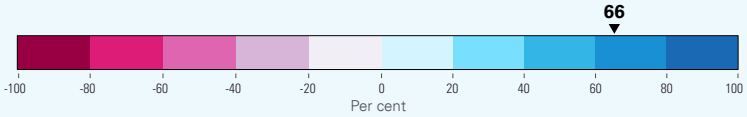
Administrative level 2 (Commune): **119**

National level

Under-five mortality rate, 2000 and 2021

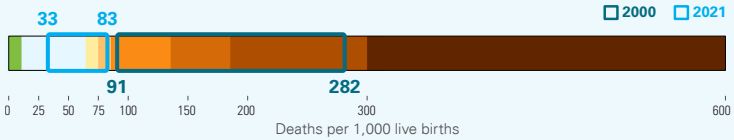


Percentage decline in under-five mortality rate, 2000–2021

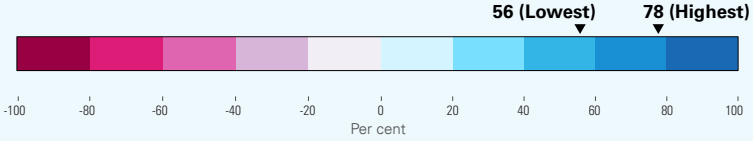


Administrative level 1

Under-five mortality rate, 2000 and 2021 (range)

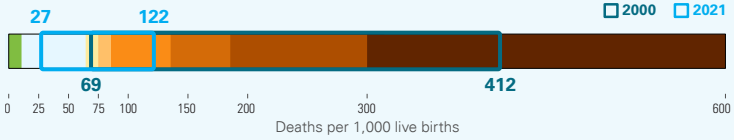


Percentage decline in under-five mortality rate, 2000–2021 (range)

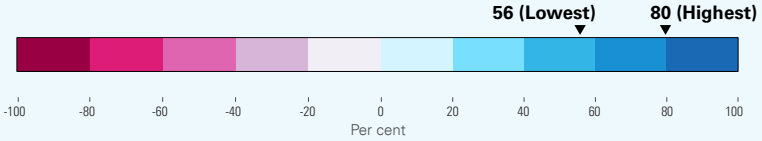


Administrative level 2

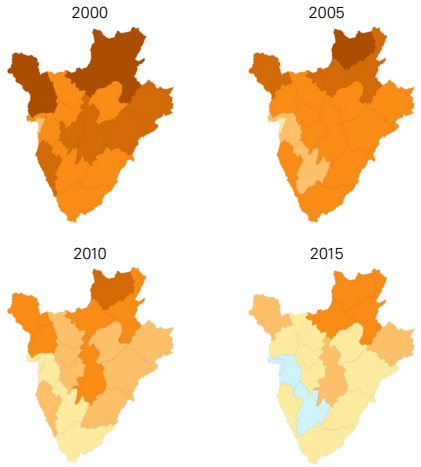
Under-five mortality rate, 2000 and 2021 (range)



Percentage decline in under-five mortality rate, 2000–2021 (range)

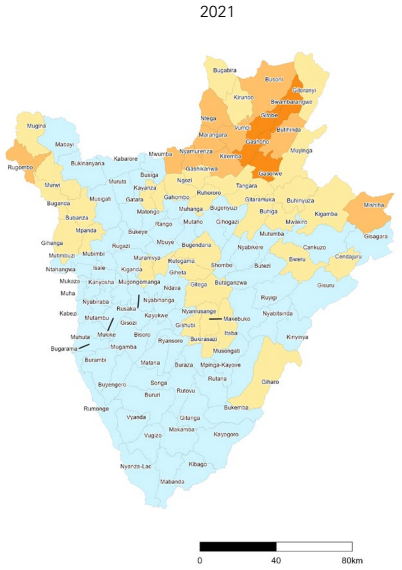


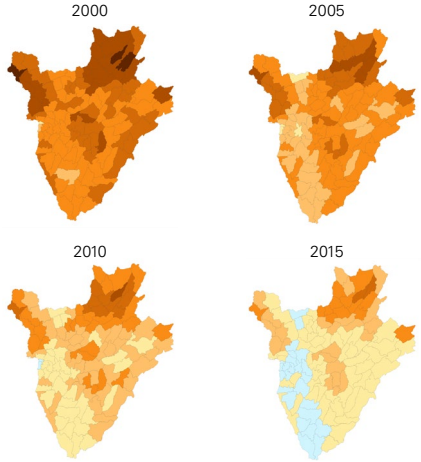
U5MR by administrative 1 area in Burundi, 2000-2021



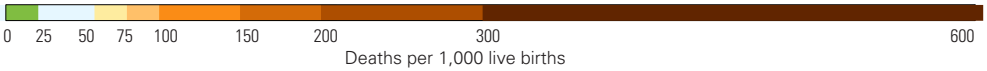
In 2000, U5MR ranged from 91 to 282 deaths per 1,000 live births. By 2021, U5MR ranged from 33 to 83 deaths per 1,000 live births.

U5MR by administrative 2 area in Burundi, 2000-2021





In 2000, U5MR ranged from 69 to 412 deaths per 1,000 live births. By 2021, U5MR ranged from 27 to 122 deaths per 1,000 live births.

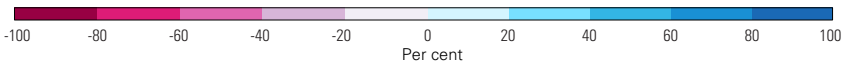


Percentage decline in administrative level 1 U5MR 2000-2021 in Burundi

The percentage decline in under-five mortality at administrative level 1 ranged from a low of 56 per cent to a high of 78 per cent.

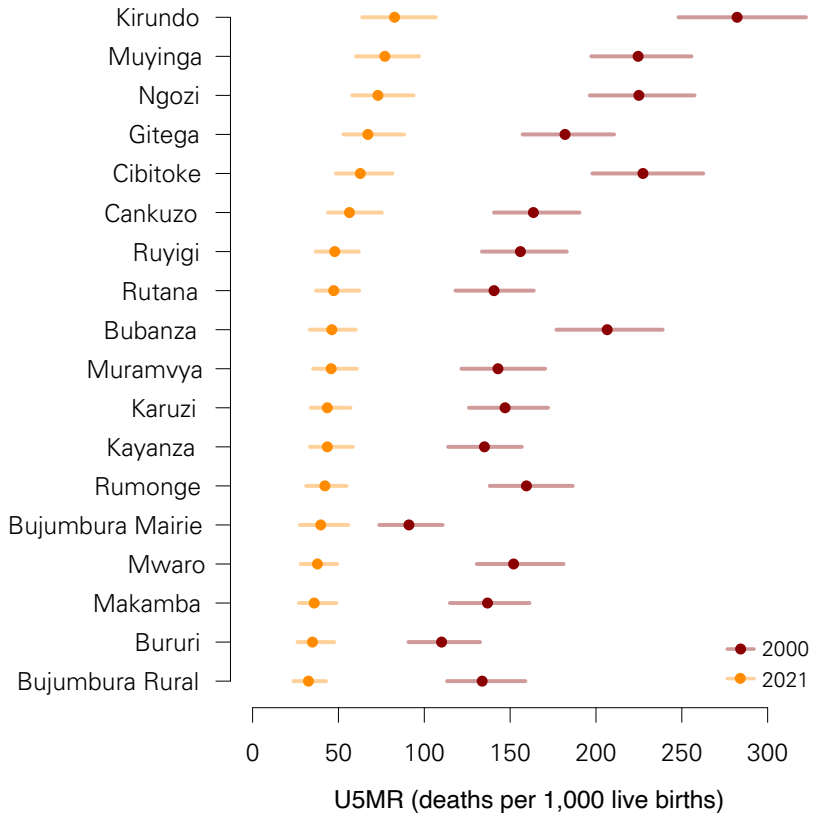
Percentage decline in administrative level 2 U5MR 2000-2021 in Burundi

The percentage decline in under-five mortality at administrative level 2 ranged from a low of 56 per cent to a high of 80 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Burundi, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Kirundo, the highest mortality administrative level 1 area, was 3.1 times higher than in Bujumbura Mairie, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Kirundo, was 2.5 times higher than in the lowest mortality area, Bujumbura Rural.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on shapefiles from the UN Office for the Coordination of Humanitarian Affairs.

Data sources for Burundi: Demographic and Health Survey 2010-2011; Demographic and Health Survey 2016-2017.

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BURUNDI

NMR

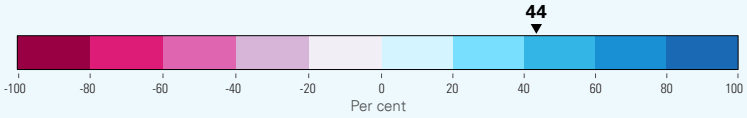
Administrative level 1 (Province): **18**

Administrative level 2 (Commune): **119**

National level

Neonatal mortality rate, 2000 and 2021

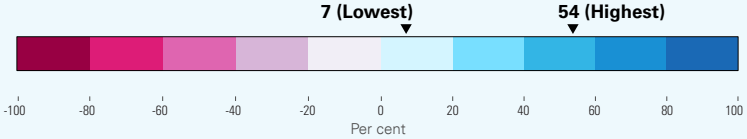
Percentage decline in neonatal mortality rate, 2000–2021



Administrative level 1

Neonatal mortality rate, 2000 and 2021 (range)

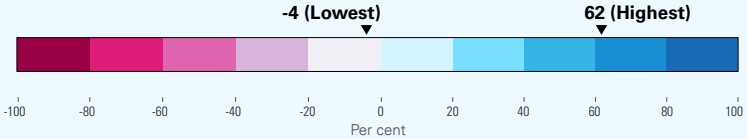
Percentage decline in neonatal mortality rate, 2000–2021 (range)



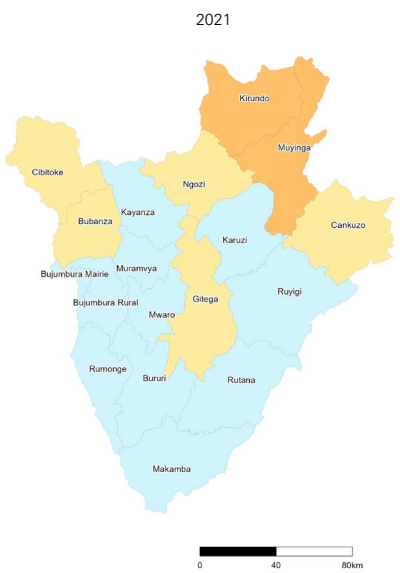
Administrative level 2

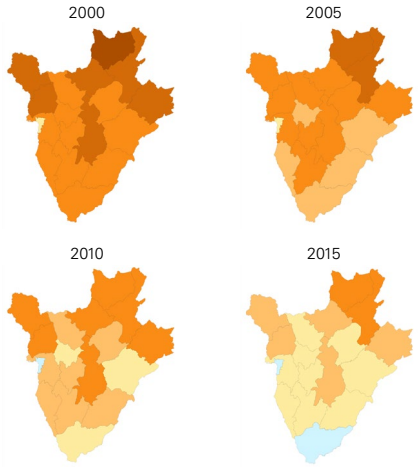
Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)



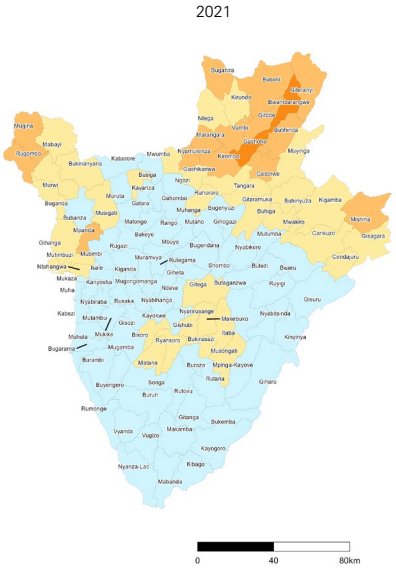
NMR by administrative 1 area in Burundi, 2000-2021

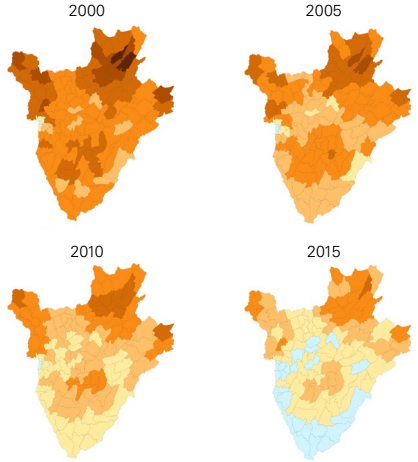




In 2000, NMR ranged from 21 to 52 deaths per 1,000 live births. By 2021, NMR ranged from 16 to 27 deaths per 1,000 live births.

NMR by administrative 2 area in Burundi, 2000-2021



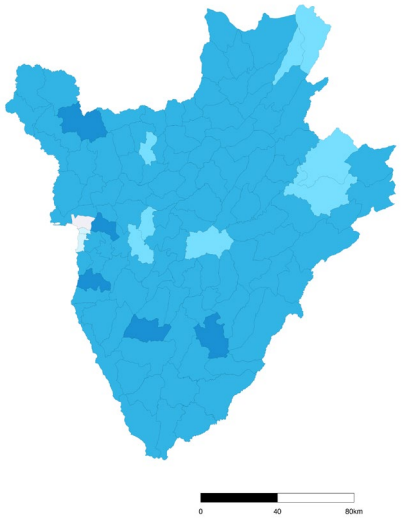


In 2000, NMR ranged from 18 to 71 deaths per 1,000 live births. By 2021, NMR ranged from 14 to 34 deaths per 1,000 live births.

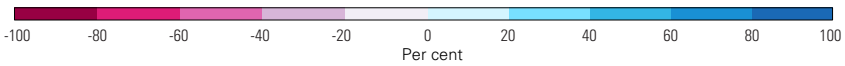
Percentage decline in administrative level 1 NMR 2000-2021 in Burundi

The percentage decline in neonatal mortality at administrative level 1 ranged from a low of 7 per cent to a high of 54 per cent.

Percentage decline in administrative level 2 NMR 2000-2021 in Burundi

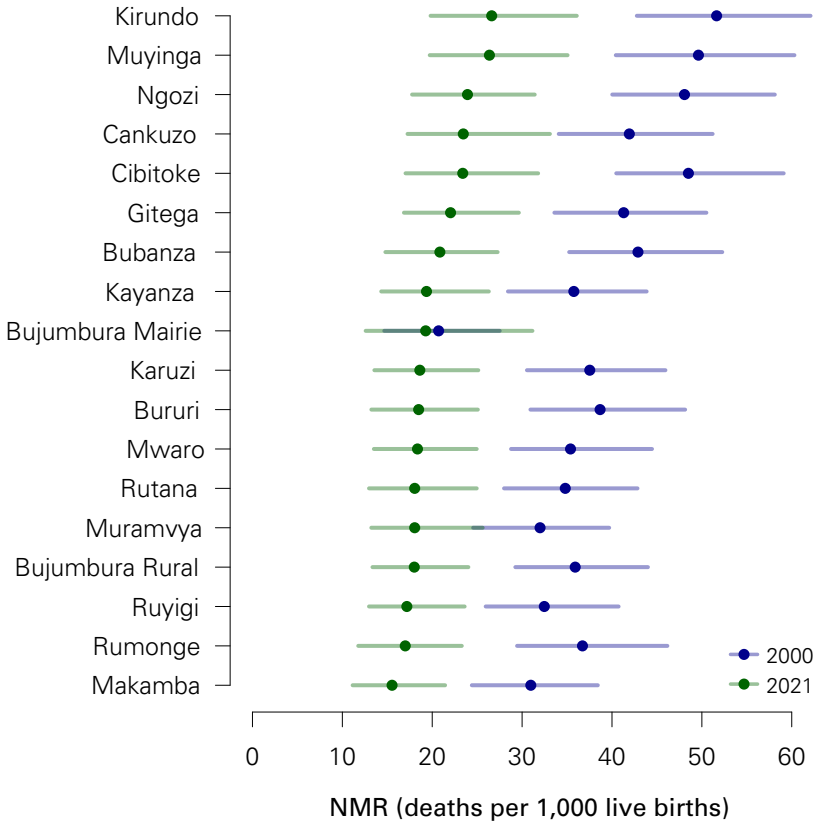


The percentage decline in neonatal mortality at administrative level 2 ranged from a low of -4 per cent to a high of 62 per cent.



NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Burundi, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Kirundo, the highest mortality administrative level 1 area, was 2.5 times higher than in Bujumbura Mairie, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, Kirundo, was 1.7 times higher than in the lowest mortality area, Makamba.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on shapefiles from the UN Office for the Coordination of Humanitarian Affairs.

Data sources for Burundi: Demographic and Health Survey 2010-2011; Demographic and Health Survey 2016-2017.

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CAMEROON

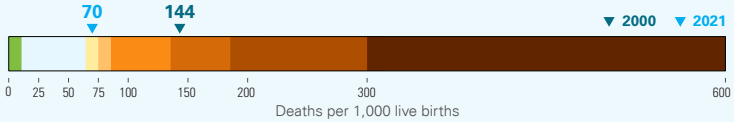
U5MR

Administrative level 1 (Region): **10**

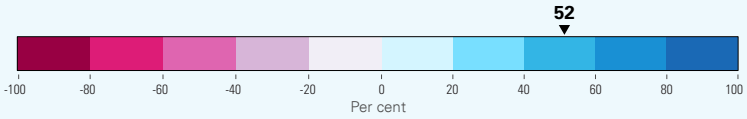
Administrative level 2 (Department): **58**

National level

Under-five mortality rate, 2000 and 2021

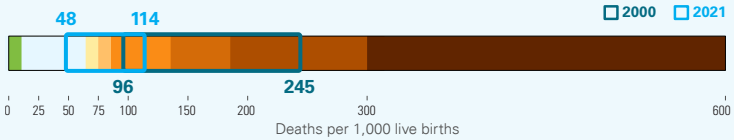


Percentage decline in under-five mortality rate, 2000–2021

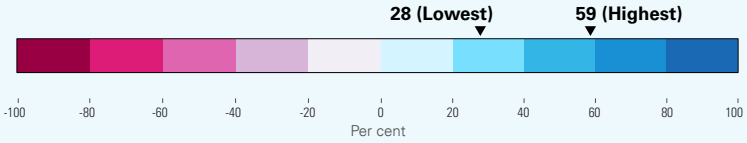


Administrative level 1

Under-five mortality rate, 2000 and 2021 (range)

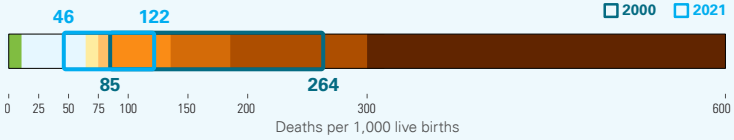


Percentage decline in under-five mortality rate, 2000–2021 (range)

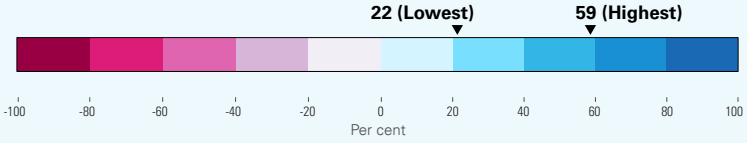


Administrative level 2

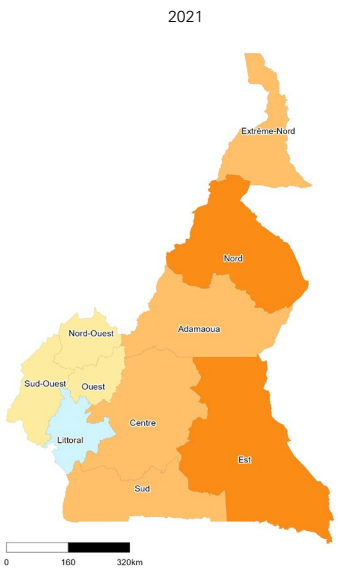
Under-five mortality rate, 2000 and 2021 (range)

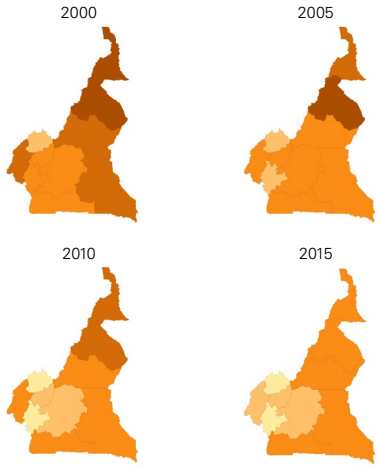


Percentage decline in under-five mortality rate, 2000–2021 (range)



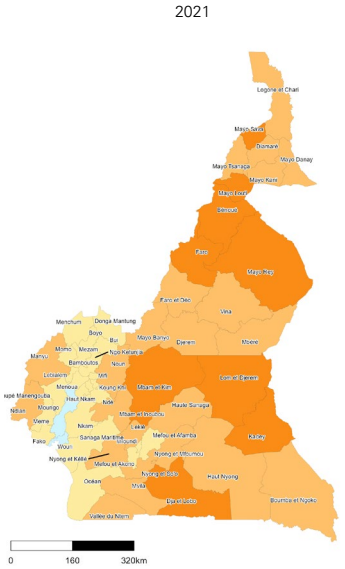
U5MR by administrative 1 area in Cameroon, 2000-2021

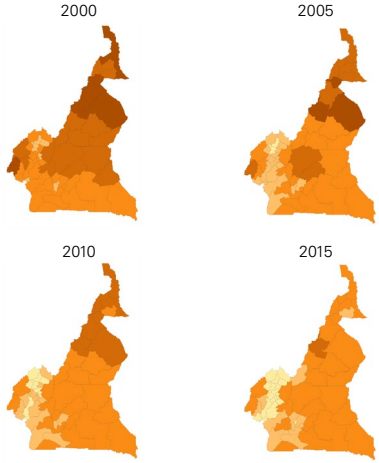




In 2000, U5MR ranged from 96 to 245 deaths per 1,000 live births. By 2021, U5MR ranged from 48 to 114 deaths per 1,000 live births.

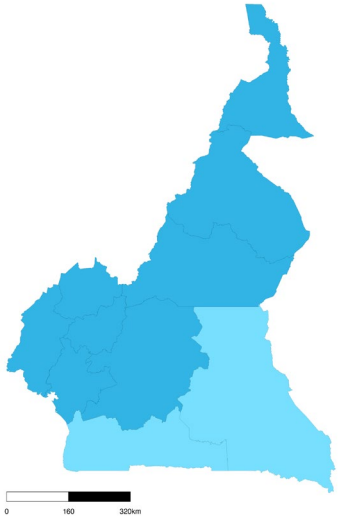
U5MR by administrative 2 area in Cameroon, 2000-2021





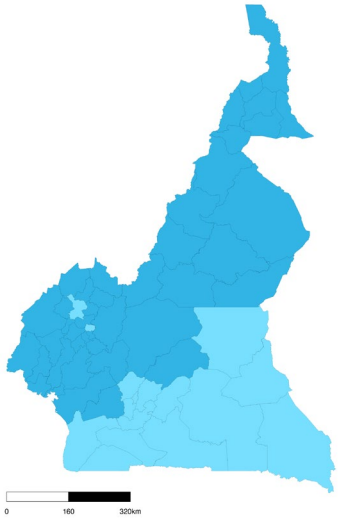
In 2000, U5MR ranged from 85 to 264 deaths per 1,000 live births. By 2021, U5MR ranged from 46 to 122 deaths per 1,000 live births.

Percentage decline in administrative level 1 U5MR 2000-2021 in Cameroon

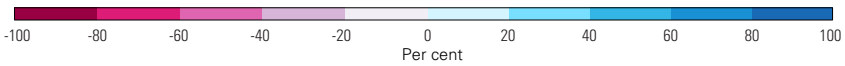


The percentage decline in under-five mortality at administrative level 1 ranged from a low of 28 per cent to a high of 59 per cent.

Percentage decline in administrative level 2 U5MR 2000-2021 in Cameroon

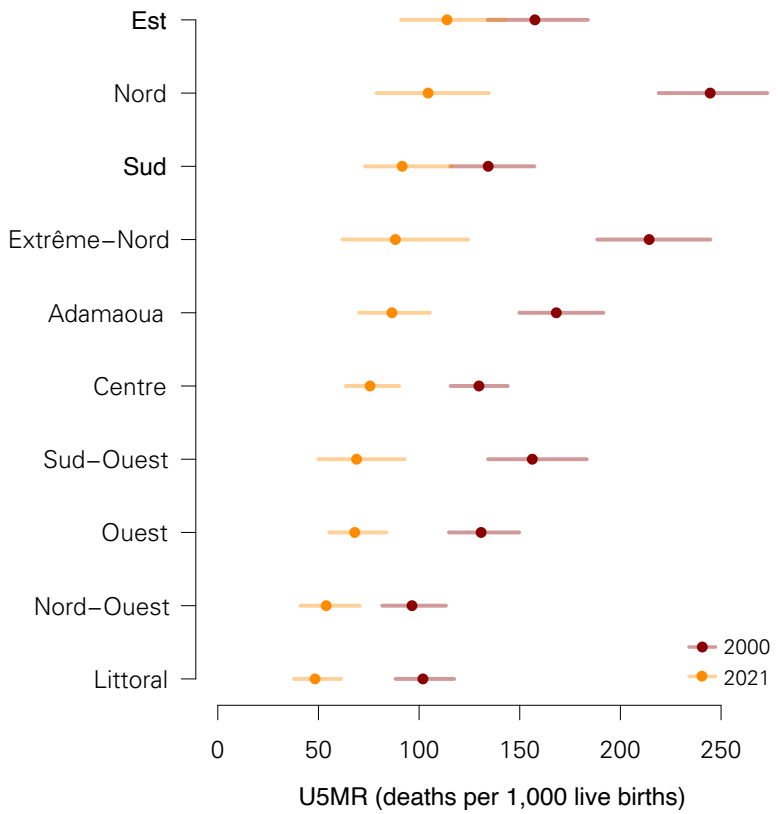


The percentage decline in under-five mortality at administrative level 2 ranged from a low of 22 per cent to a high of 59 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Cameroon, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Nord, the highest mortality administrative level 1 area, was 2.5 times higher than in Nord-Ouest, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Est, was 2.4 times higher than in the lowest mortality area, Littoral.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

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CAMEROON

NMR

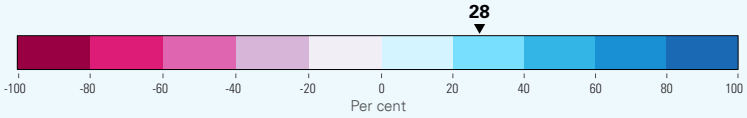
Administrative level 1 (Region): **10**

Administrative level 2 (Department): **58**

National level

Neonatal mortality rate, 2000 and 2021

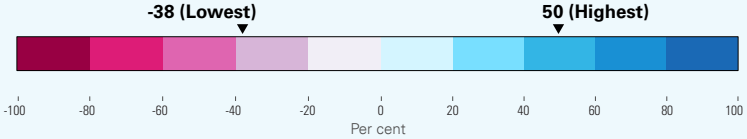
Percentage decline in neonatal mortality rate, 2000–2021



Administrative level 1

Neonatal mortality rate, 2000 and 2021 (range)

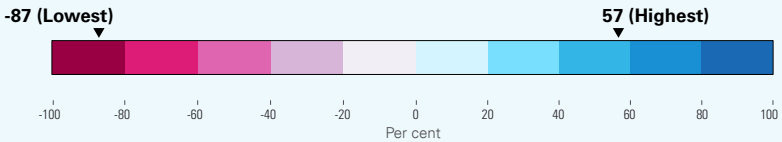
Percentage decline in neonatal mortality rate, 2000–2021 (range)



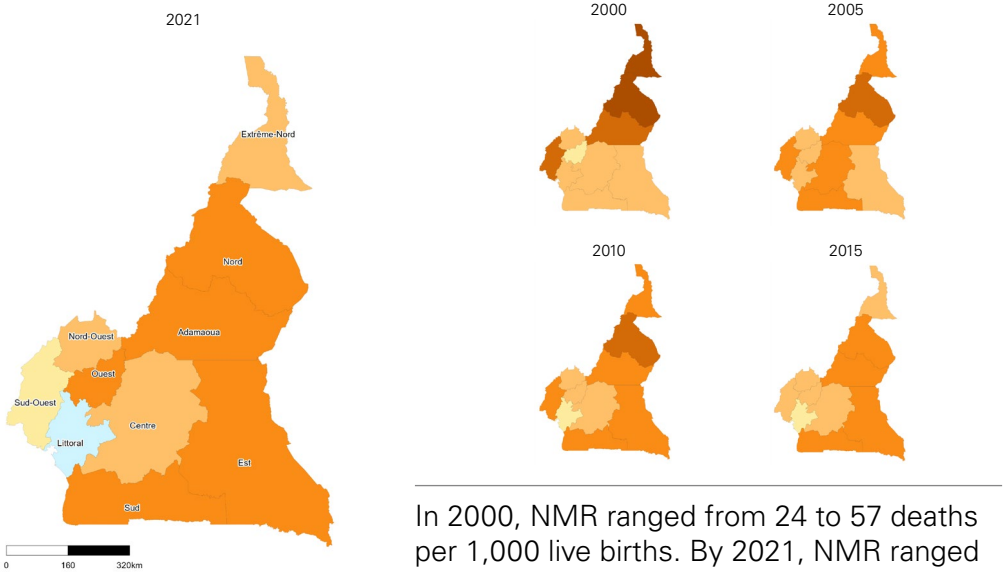
Administrative level 2

Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)

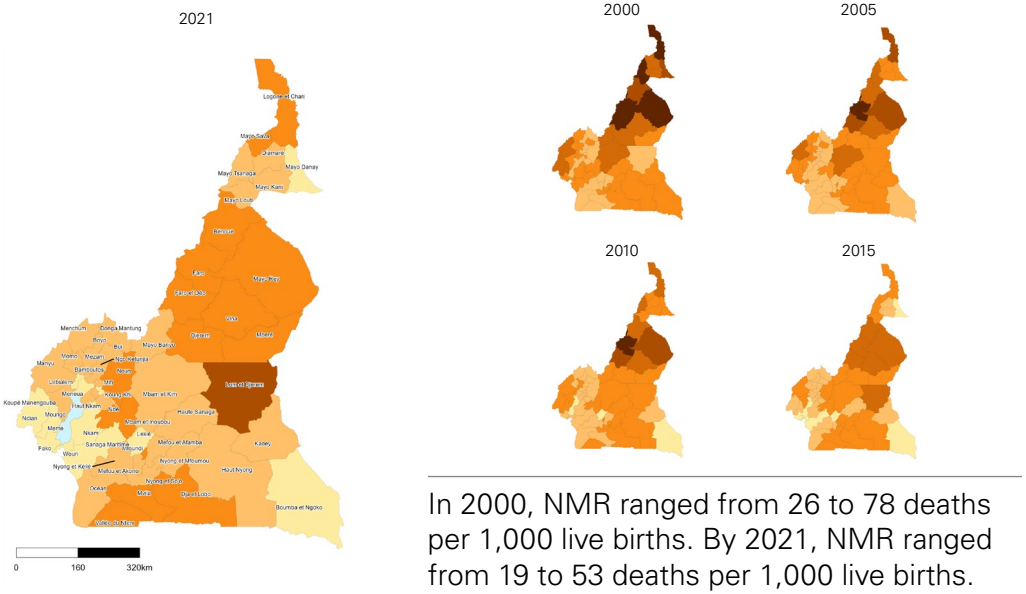


NMR by administrative 1 area in Cameroon, 2000-2021



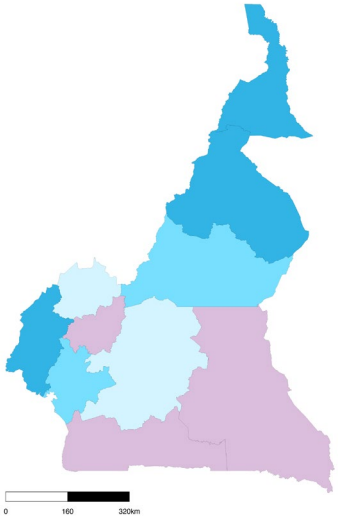
In 2000, NMR ranged from 24 to 57 deaths per 1,000 live births. By 2021, NMR ranged from 19 to 38 deaths per 1,000 live births.

NMR by administrative 2 area in Cameroon, 2000-2021



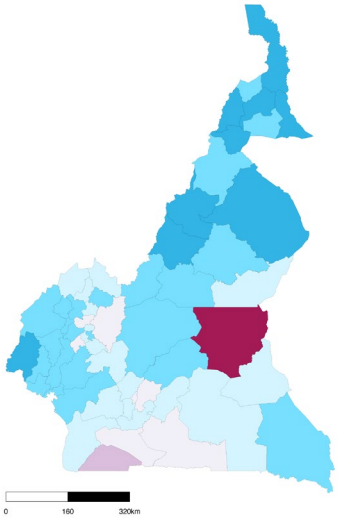
In 2000, NMR ranged from 26 to 78 deaths per 1,000 live births. By 2021, NMR ranged from 19 to 53 deaths per 1,000 live births.

Percentage decline in administrative level 1 NMR 2000-2021 in Cameroon

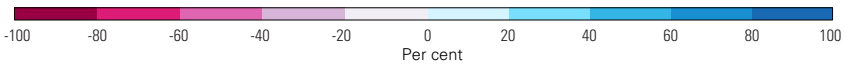


The percentage decline in neonatal mortality at administrative level 1 ranged from a low of -38 per cent to a high of 50 per cent.

Percentage decline in administrative level 2 NMR 2000-2021 in Cameroon

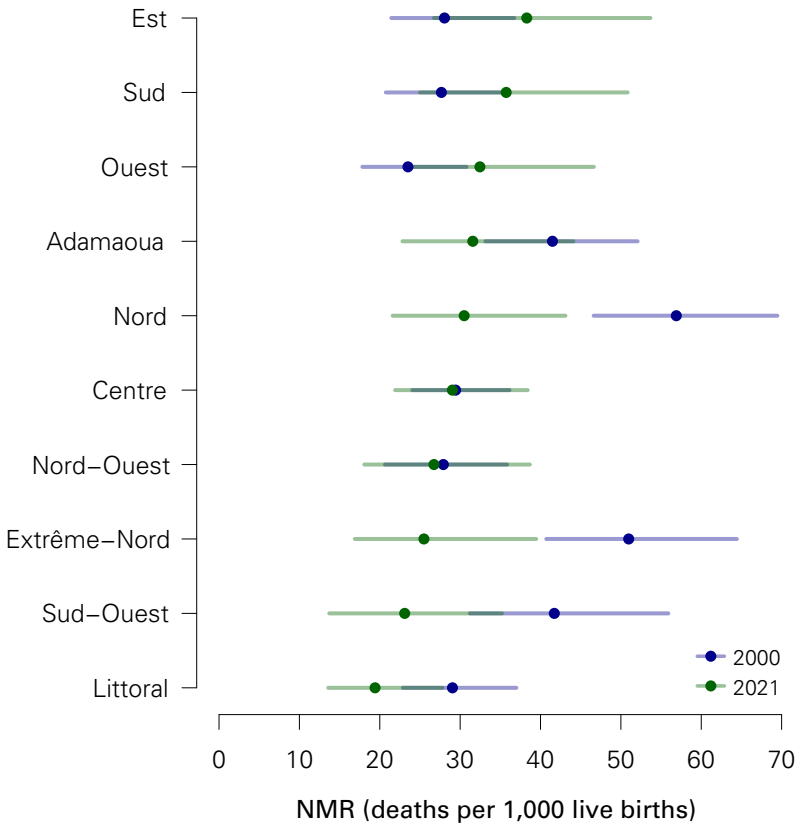


The percentage decline in neonatal mortality at administrative level 2 ranged from a low of -87 per cent to a high of 57 per cent.



NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Cameroon, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Nord, the highest mortality administrative level 1 area, was 2.4 times higher than in Ouest, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, Est, was 2 times higher than in the lowest mortality area, Littoral.



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CHAD

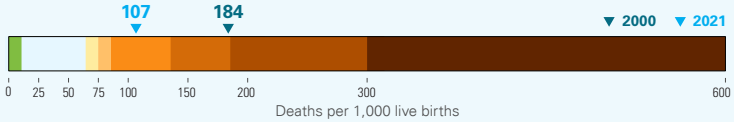
U5MR

Administrative level 1 (Region): **23**

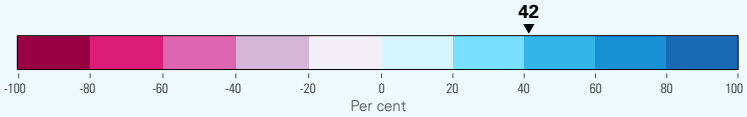
Administrative level 2: -

National level

Under-five mortality rate, 2000 and 2021

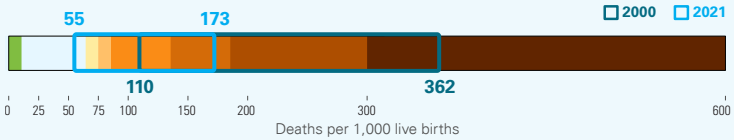


Percentage decline in under-five mortality rate, 2000–2021

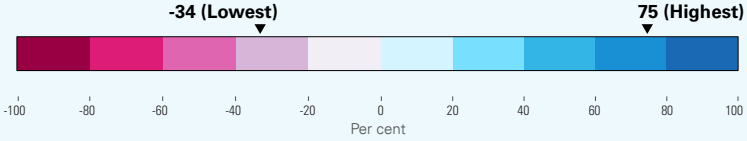


Administrative level 1

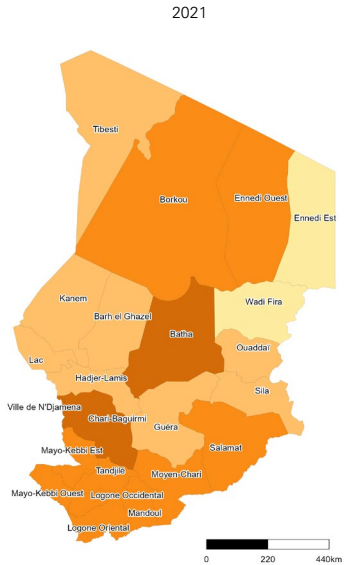
Under-five mortality rate, 2000 and 2021 (range)

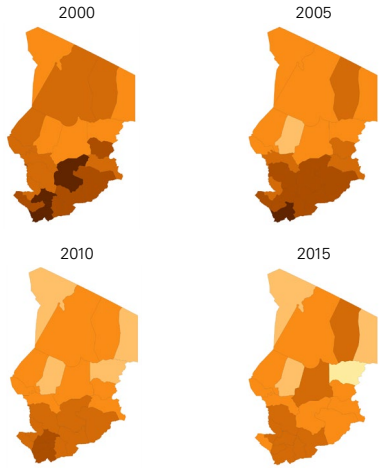


Percentage decline in under-five mortality rate, 2000–2021 (range)

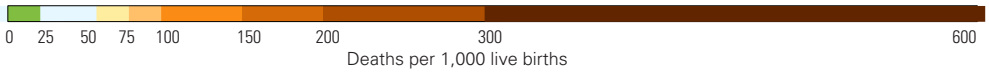


U5MR by administrative 1 area in Chad, 2000-2021

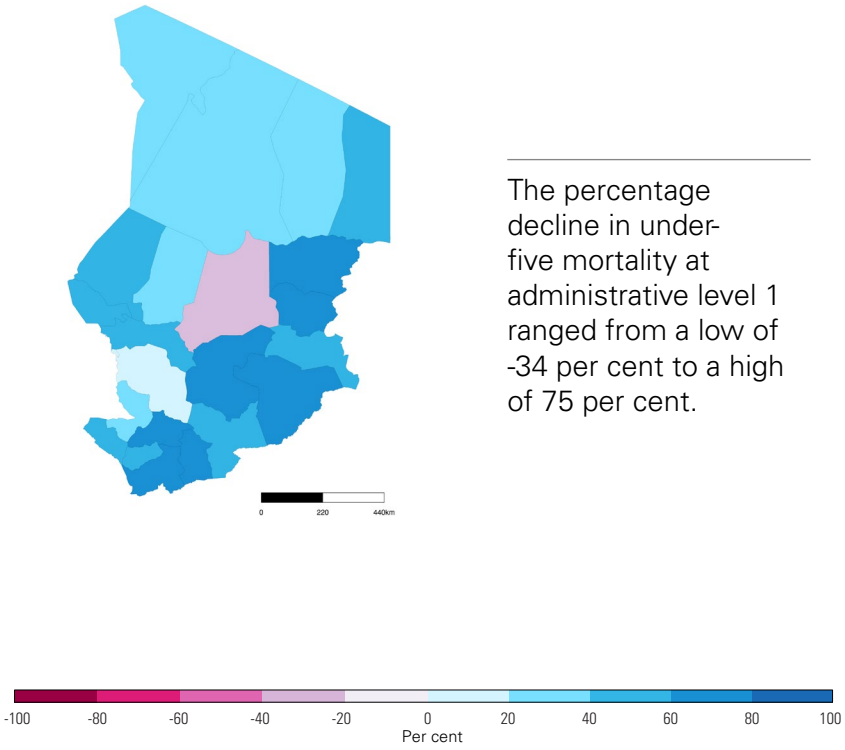




In 2000, U5MR ranged from 110 to 362 deaths per 1,000 live births. By 2021, U5MR ranged from 55 to 173 deaths per 1,000 live births.



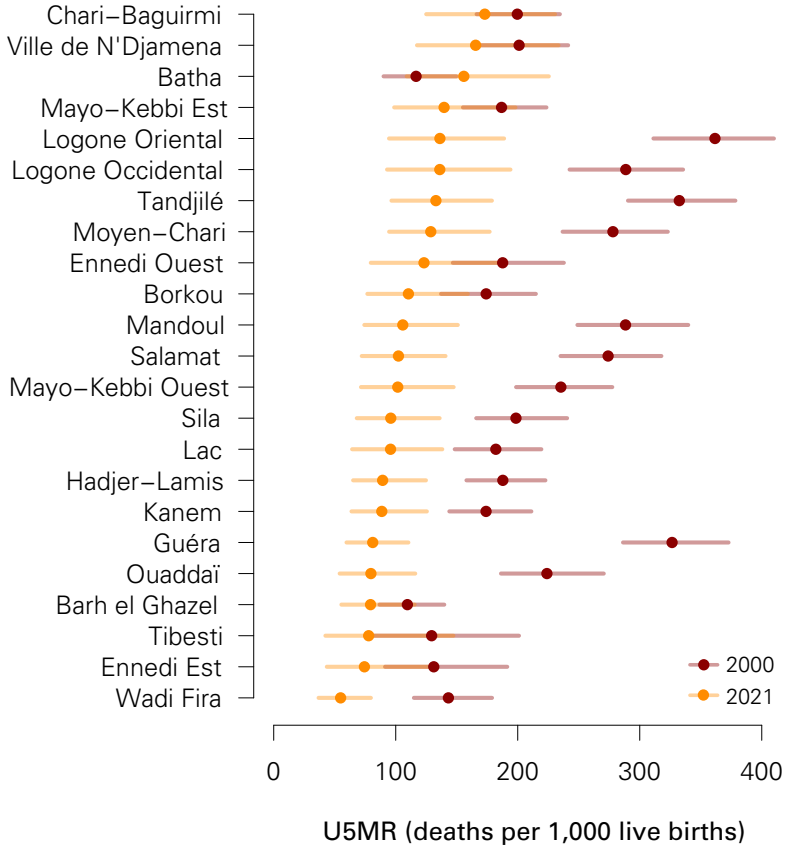
Percentage decline in administrative level 1 U5MR 2000-2021 in Chad



The percentage decline in under-five mortality at administrative level 1 ranged from a low of -34 per cent to a high of 75 per cent.

U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Chad, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Logone Oriental, the highest mortality administrative level 1 area, was 3.3 times higher than in Barh el Ghazel, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Chari-Baguirmi, was 3.2 times higher than in the lowest mortality area, Wadi Fira.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Chad: Demographic and Health Survey 2014-2015.

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CHAD

NMR

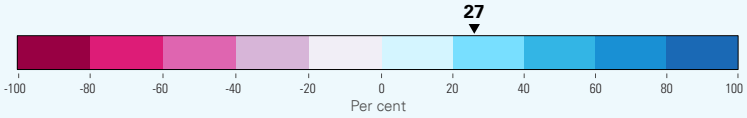
Administrative level 1 (Region): **23**

Administrative level 2: -

National level

Neonatal mortality rate, 2000 and 2021

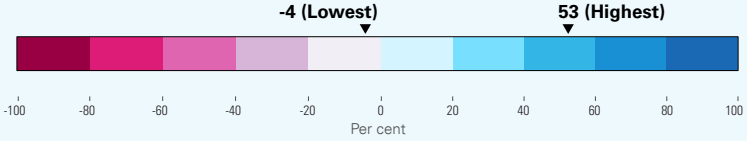
Percentage decline in neonatal mortality rate, 2000–2021



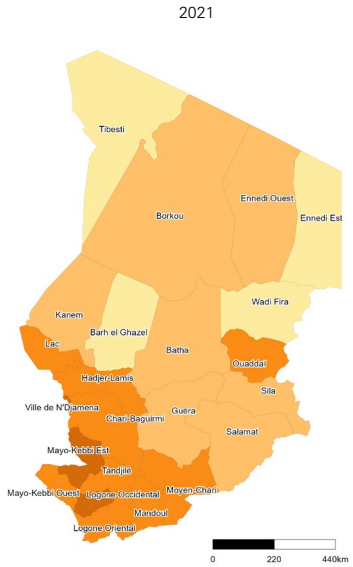
Administrative level 1

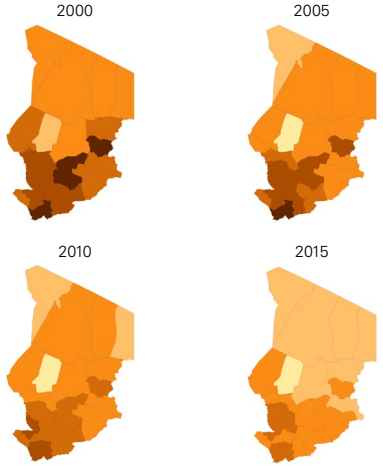
Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)



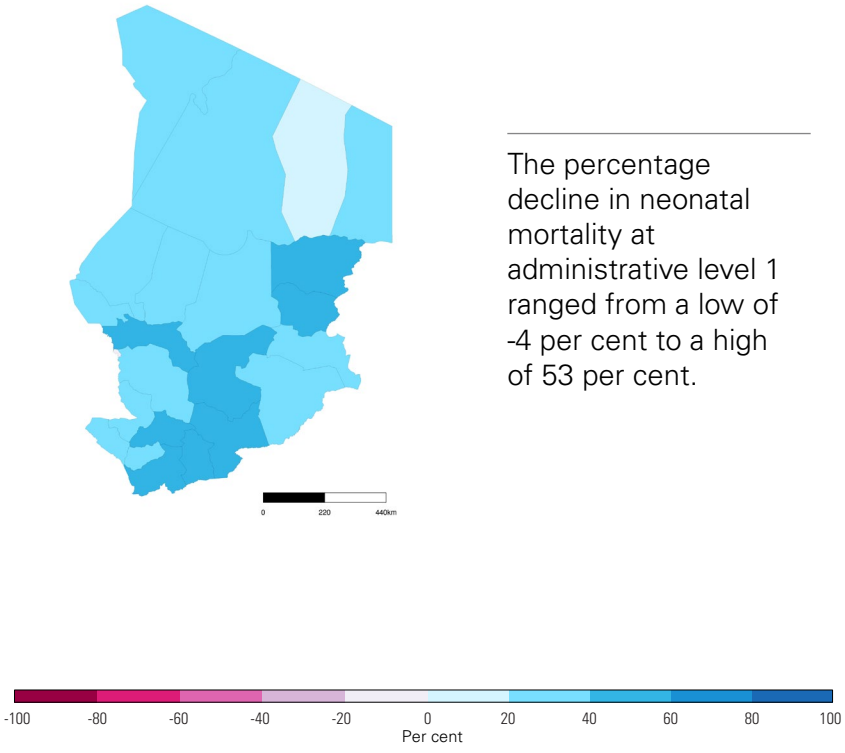
NMR by administrative 1 area in Chad, 2000-2021





In 2000, NMR ranged from 27 to 69 deaths per 1,000 live births. By 2021, NMR ranged from 22 to 45 deaths per 1,000 live births.

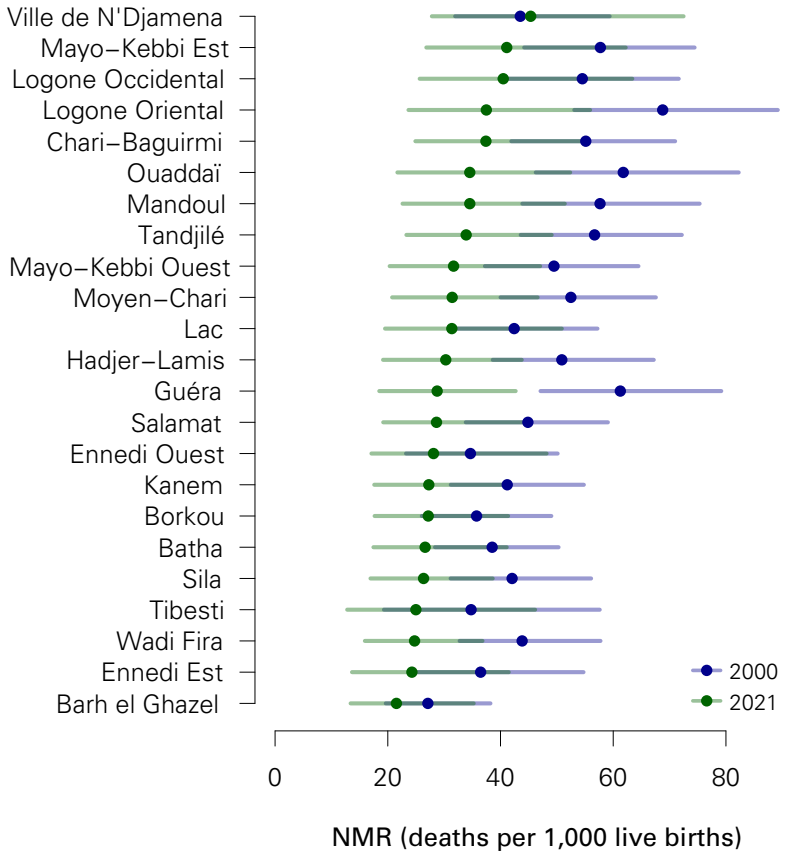
Percentage decline in administrative level 1 NMR 2000-2021 in Chad



The percentage decline in neonatal mortality at administrative level 1 ranged from a low of -4 per cent to a high of 53 per cent.

NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Chad, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Logone Oriental, the highest mortality administrative level 1 area, was 2.5 times higher than in Barh el Ghazel, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, Ville de N'Djamena, was 2.1 times higher than in the lowest mortality area, Barh el Ghazel.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Chad: Demographic and Health Survey 2014-2015.

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ETHIOPIA

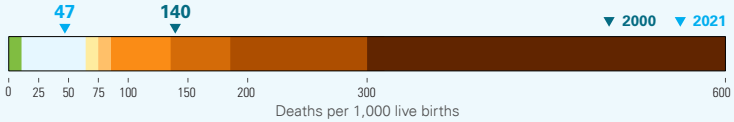
U5MR

Administrative level 1 (City, State): **11**

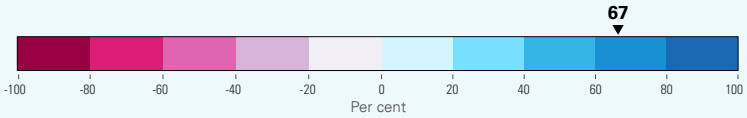
Administrative level 2 (Zone, Special Woreda): **79**

National level

Under-five mortality rate, 2000 and 2021

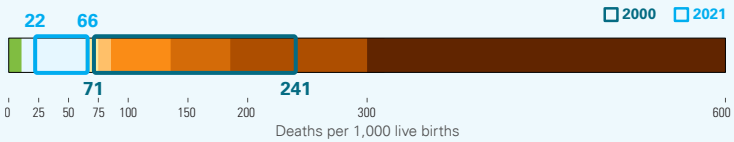


Percentage decline in under-five mortality rate, 2000–2021

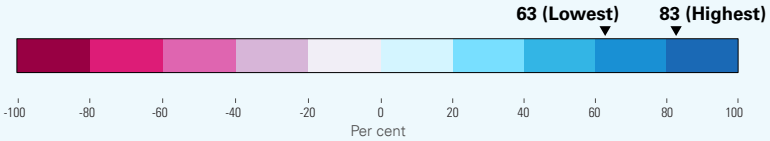


Administrative level 1

Under-five mortality rate, 2000 and 2021 (range)

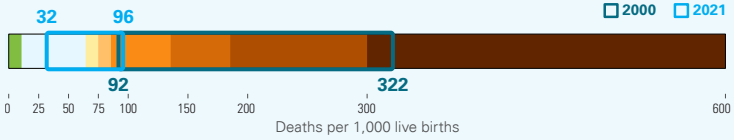


Percentage decline in under-five mortality rate, 2000–2021 (range)

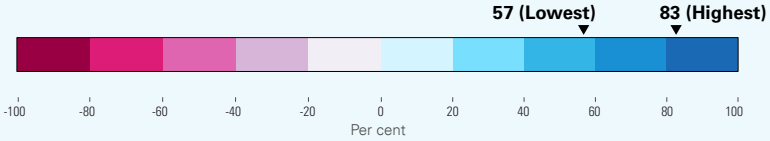


Administrative level 2

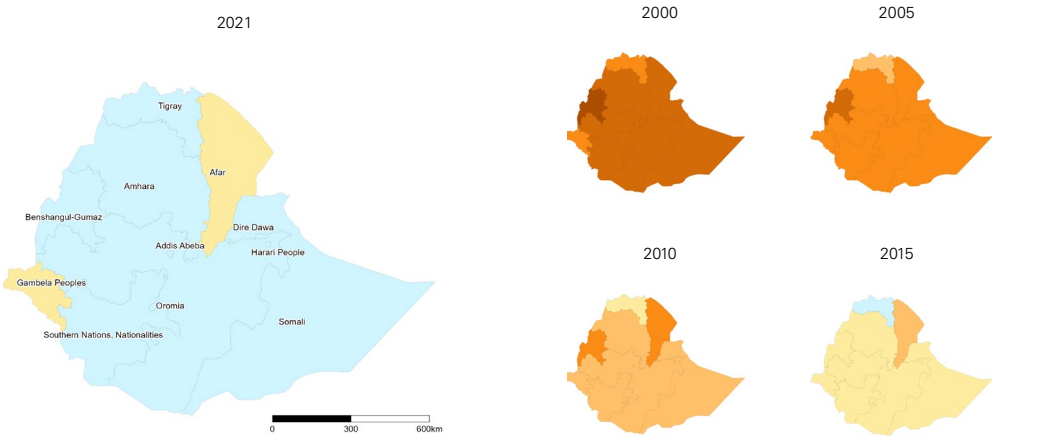
Under-five mortality rate, 2000 and 2021 (range)



Percentage decline in under-five mortality rate, 2000–2021 (range)

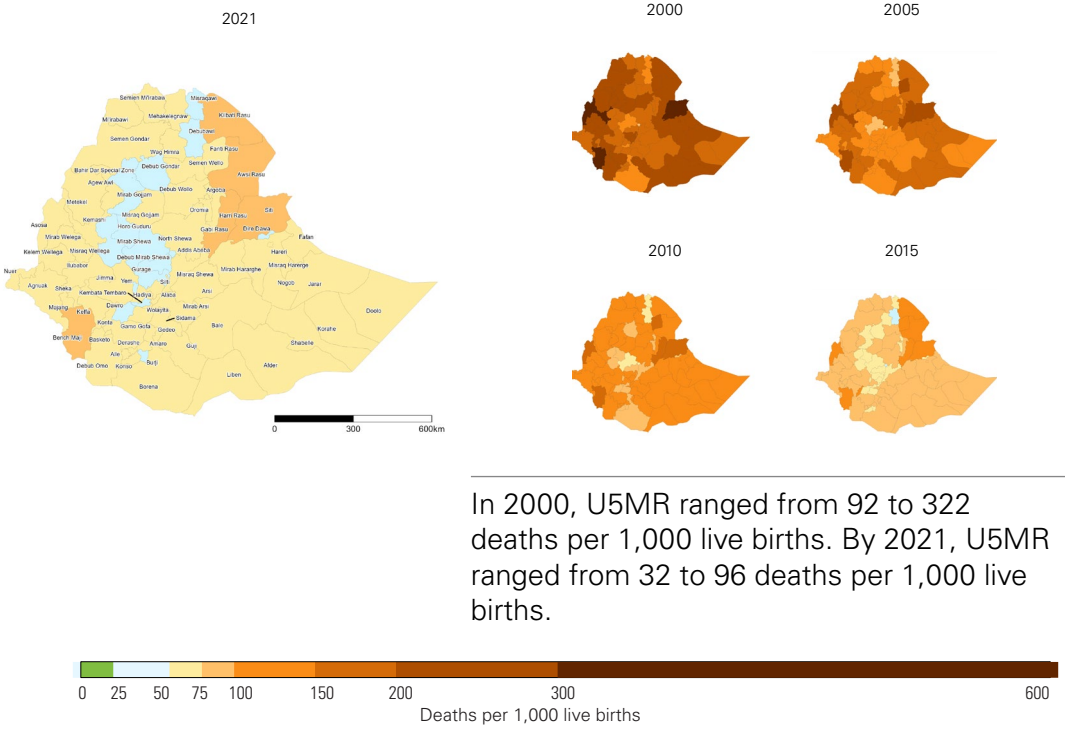


U5MR by administrative 1 area in Ethiopia, 2000-2021



In 2000, U5MR ranged from 71 to 241 deaths per 1,000 live births. By 2021, U5MR ranged from 22 to 66 deaths per 1,000 live births.

U5MR by administrative 2 area in Ethiopia, 2000-2021

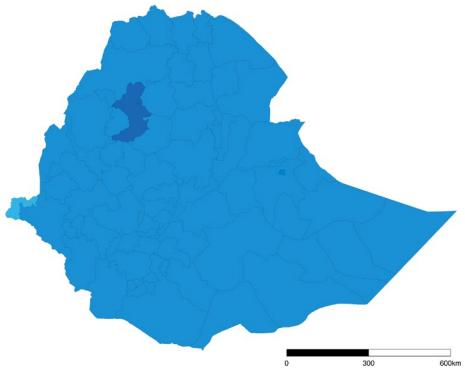


In 2000, U5MR ranged from 92 to 322 deaths per 1,000 live births. By 2021, U5MR ranged from 32 to 96 deaths per 1,000 live births.

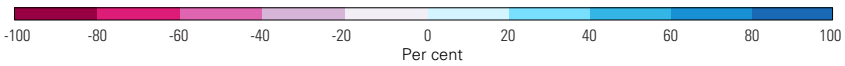
Percentage decline in administrative level 1 U5MR 2000-2021 in Ethiopia

The percentage decline in under-five mortality at administrative level 1 ranged from a low of 63 per cent to a high of 83 per cent.

Percentage decline in administrative level 2 U5MR 2000-2021 in Ethiopia

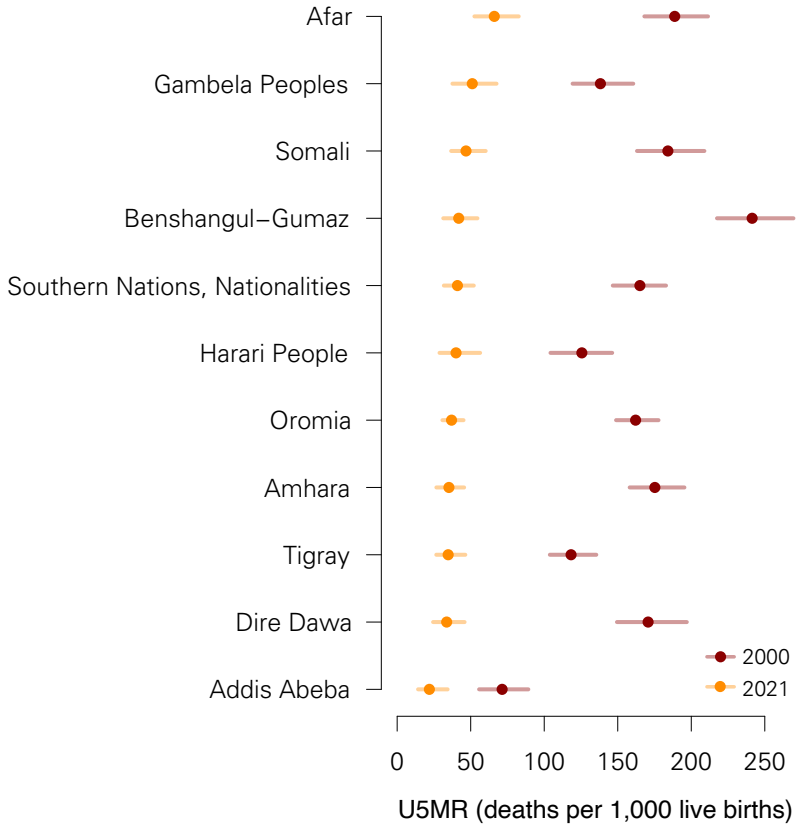


The percentage decline in under-five mortality at administrative level 2 ranged from a low of 57 per cent to a high of 83 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Ethiopia, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Benshangul-Gumaz, the highest mortality administrative level 1 area, was 3.4 times higher than in Addis Abeba, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Afar, was 3 times higher than in the lowest mortality area, Addis Abeba.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Ethiopia: Demographic and Health Survey 2011; Demographic and Health Survey 2016.

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ETHIOPIA

NMR

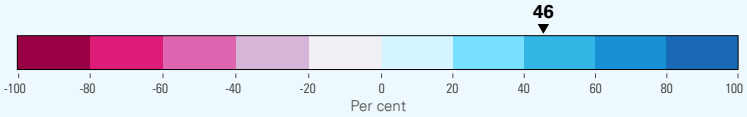
Administrative level 1 (City, State): **11**

Administrative level 2 (Zone, Special Woreda): **79**

National level

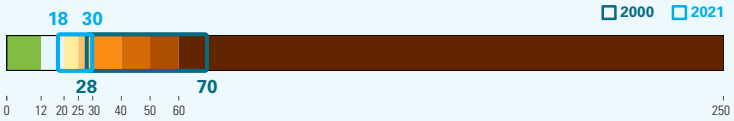
Neonatal mortality rate, 2000 and 2021

Percentage decline in neonatal mortality rate, 2000–2021

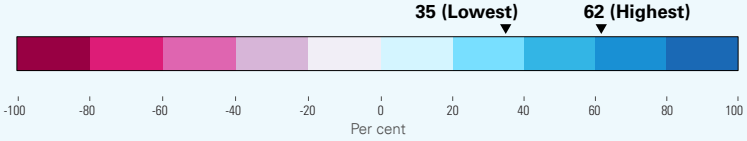


Administrative level 1

Neonatal mortality rate, 2000 and 2021 (range)



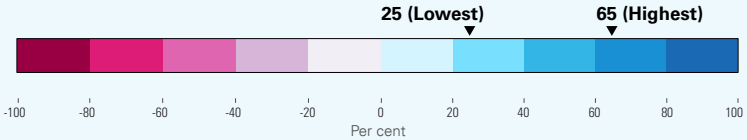
Percentage decline in neonatal mortality rate, 2000–2021 (range)



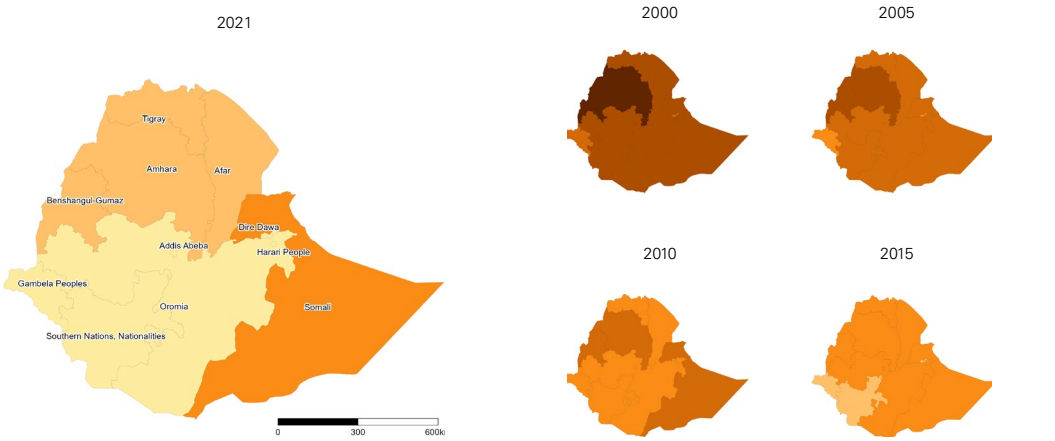
Administrative level 2

Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)

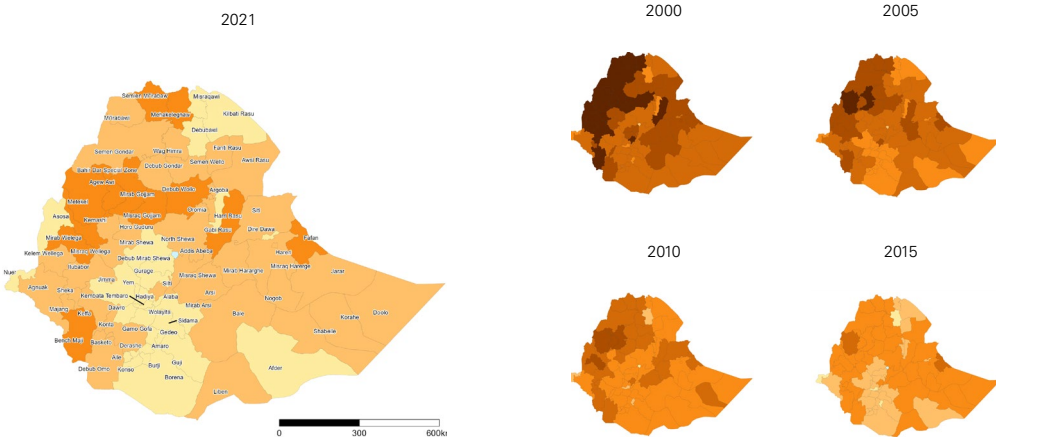


NMR by administrative 1 area in Ethiopia, 2000-2021



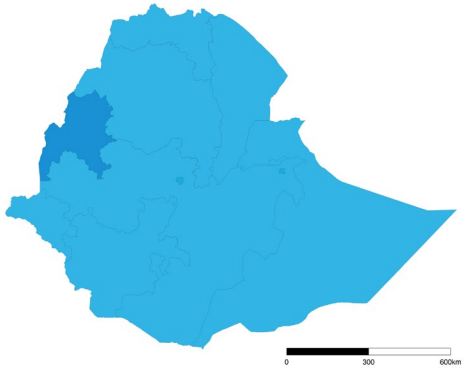
In 2000, NMR ranged from 28 to 70 deaths per 1,000 live births. By 2021, NMR ranged from 18 to 30 deaths per 1,000 live births.

NMR by administrative 2 area in Ethiopia, 2000-2021



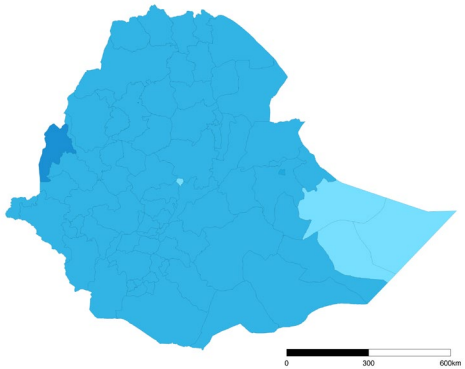
In 2000, NMR ranged from 28 to 76 deaths per 1,000 live births. By 2021, NMR ranged from 17 to 35 deaths per 1,000 live births.

Percentage decline in administrative level 1 NMR 2000-2021 in Ethiopia

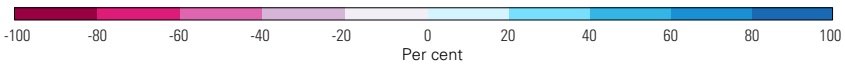


The percentage decline in neonatal mortality at administrative level 1 ranged from a low of 35 per cent to a high of 62 per cent.

Percentage decline in administrative level 2 NMR 2000-2021 in Ethiopia

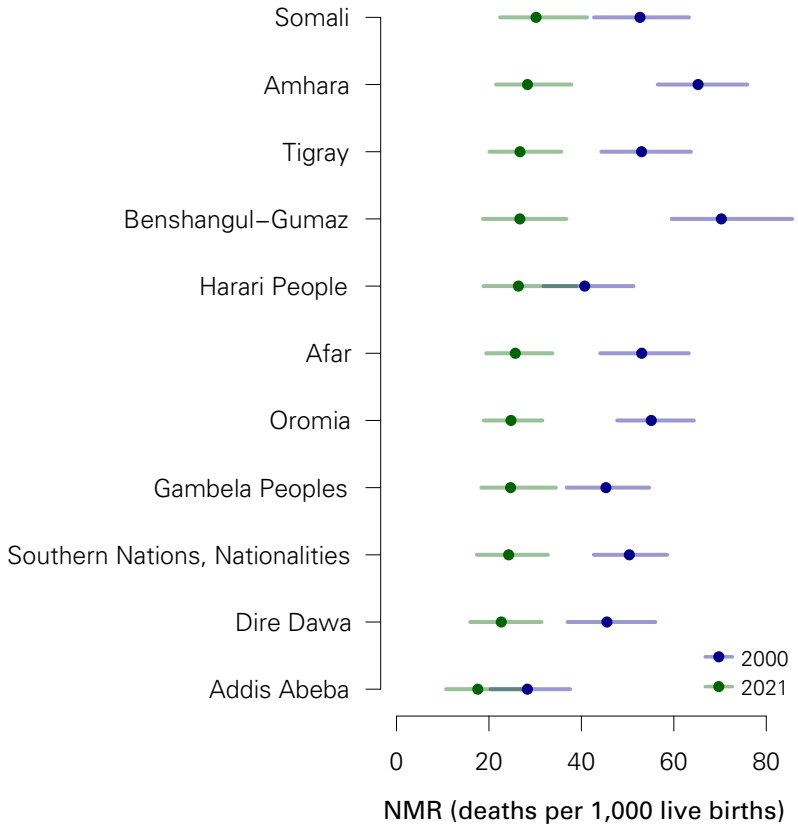


The percentage decline in neonatal mortality at administrative level 2 ranged from a low of 25 per cent to a high of 65 per cent.



NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Ethiopia, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Benshangul-Gumaz, the highest mortality administrative level 1 area, was 2.5 times higher than in Addis Abeba, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, Somali, was 1.7 times higher than in the lowest mortality area, Addis Abeba.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

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GHANA

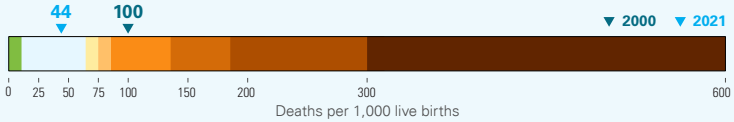
U5MR

Administrative level 1 (Region): **10**

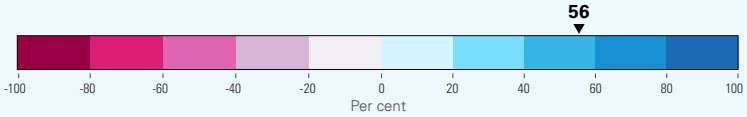
Administrative level 2: -

National level

Under-five mortality rate, 2000 and 2021

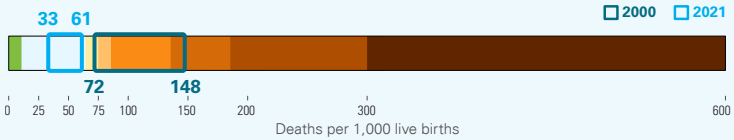


Percentage decline in under-five mortality rate, 2000–2021

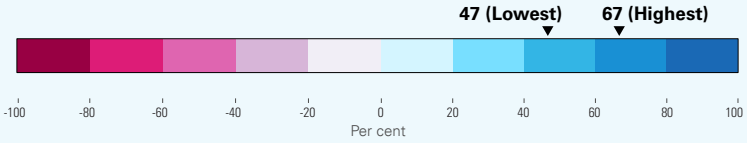


Administrative level 1

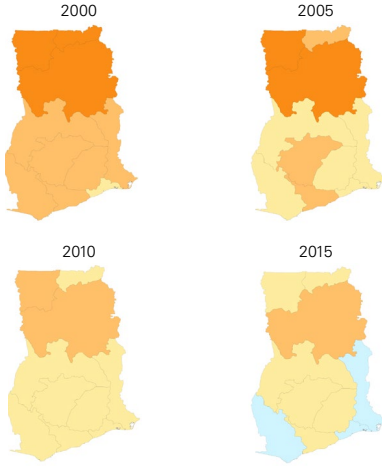
Under-five mortality rate, 2000 and 2021 (range)



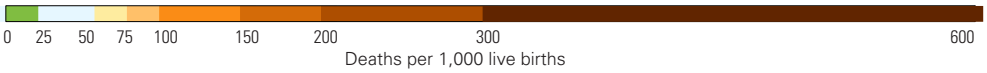
Percentage decline in under-five mortality rate, 2000–2021 (range)



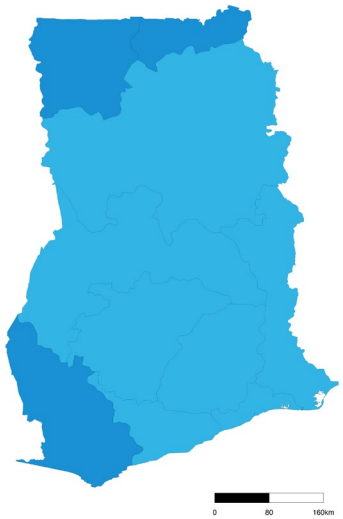
U5MR by administrative 1 area in Ghana, 2000-2021



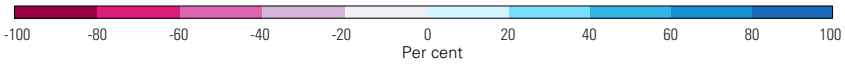
In 2000, U5MR ranged from 72 to 148 deaths per 1,000 live births. By 2021, U5MR ranged from 33 to 61 deaths per 1,000 live births.



Percentage decline in administrative level 1 U5MR 2000-2021 in Ghana

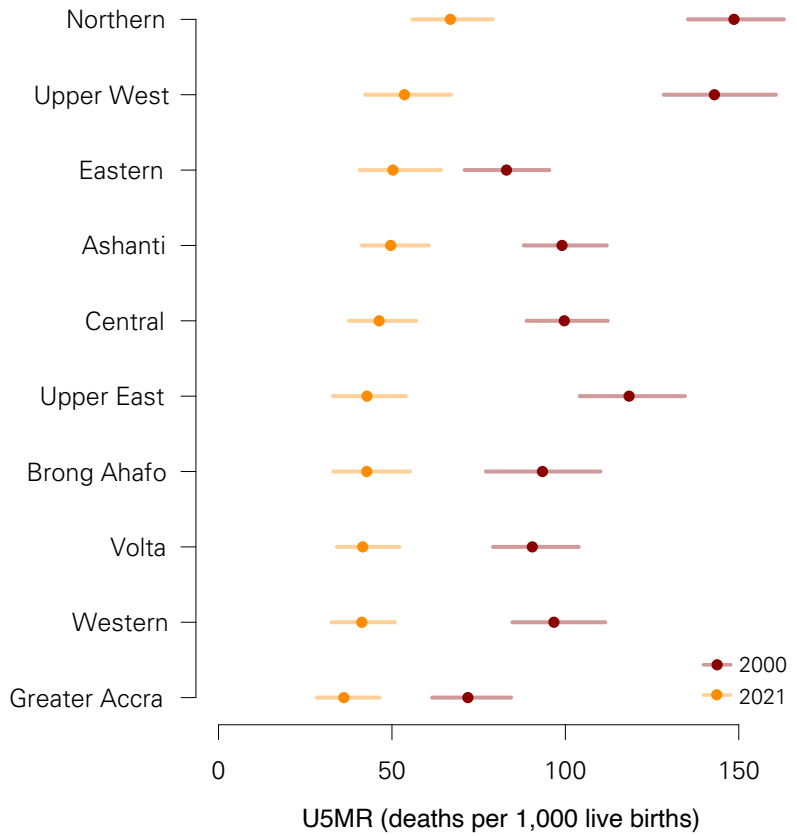


The percentage decline in under-five mortality at administrative level 1 ranged from a low of 47 per cent to a high of 67 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Ghana, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Northern, the highest mortality administrative level 1 area, was 2.1 times higher than in Greater Accra, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Northern, was 1.8 times higher than in the lowest mortality area, Greater Accra.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Ghana: Demographic and Health Survey 2014; Multiple Indicator Cluster Survey 2011; Multiple Indicator Cluster Survey 2017-2018.

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GHANA

NMR

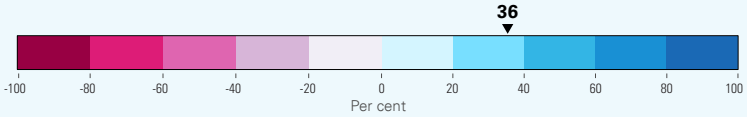
Administrative level 1 (Region): **10**

Administrative level 2: -

National level

Neonatal mortality rate, 2000 and 2021

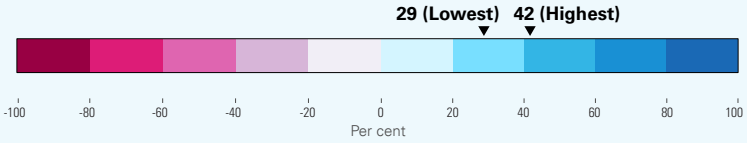
Percentage decline in neonatal mortality rate, 2000–2021



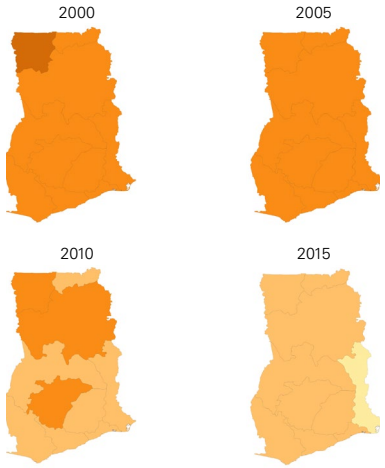
Administrative level 1

Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)

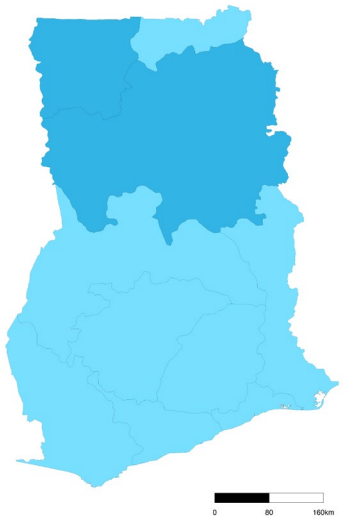


NMR by administrative 1 area in Ghana, 2000-2021

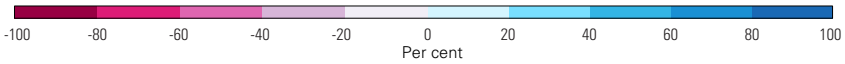


In 2000, NMR ranged from 33 to 40 deaths per 1,000 live births. By 2021, NMR ranged from 21 to 24 deaths per 1,000 live births.

Percentage decline in administrative level 1 NMR 2000-2021 in Ghana

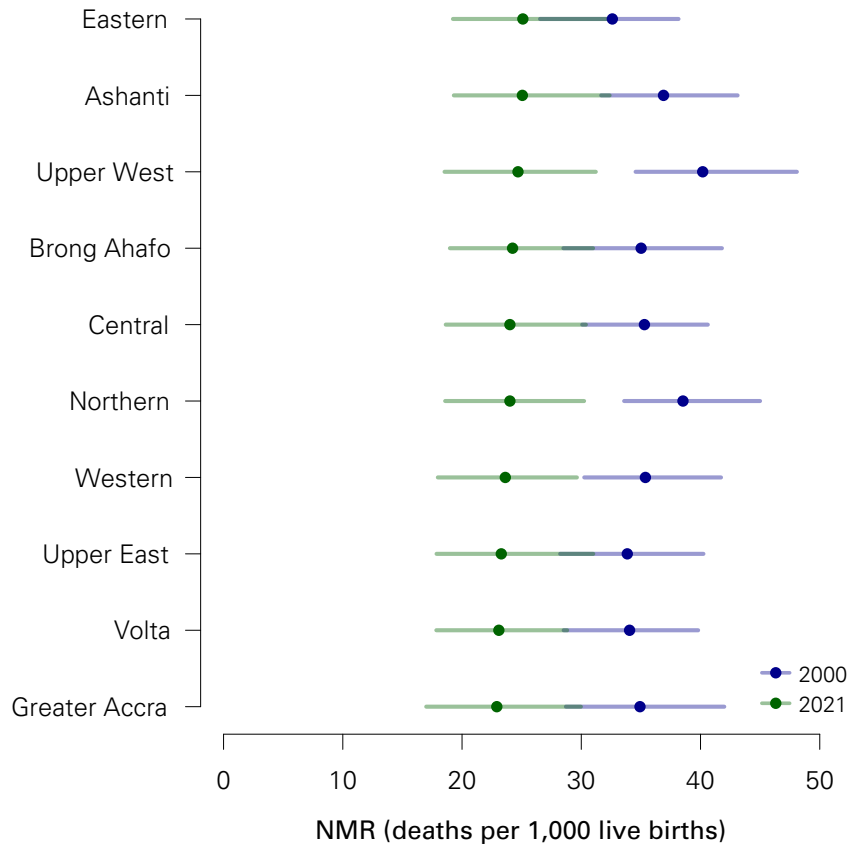


The percentage decline in neonatal mortality at administrative level 1 ranged from a low of 29 per cent to a high of 42 per cent.



NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Ghana, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Upper West, the highest mortality administrative level 1 area, was 1.2 times higher than in Eastern, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, Ashanti, was 1.1 times higher than in the lowest mortality area, Volta.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Ghana: Demographic and Health Survey 2014; Multiple Indicator Cluster Survey 2011; Multiple Indicator Cluster Survey 2017-2018.

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GUINEA

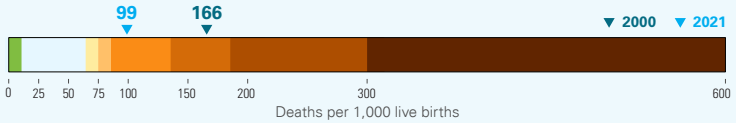
U5MR

Administrative level 1 (Region): **8**

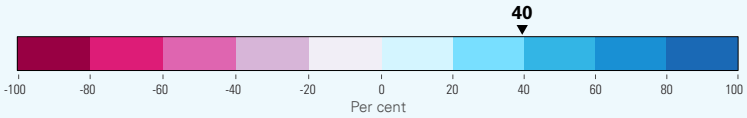
Administrative level 2 (Prefecture): **34**

National level

Under-five mortality rate, 2000 and 2021

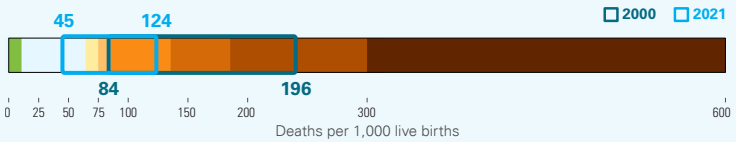


Percentage decline in under-five mortality rate, 2000–2021

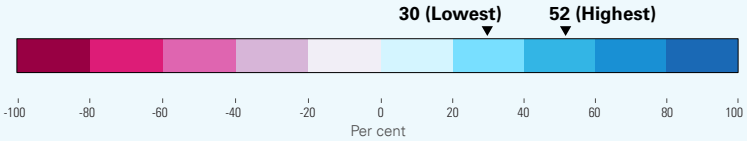


Administrative level 1

Under-five mortality rate, 2000 and 2021 (range)

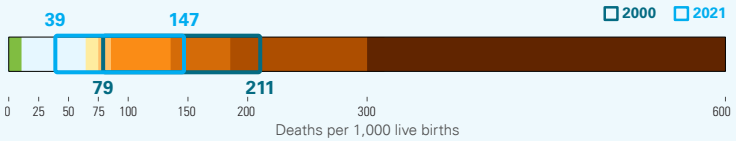


Percentage decline in under-five mortality rate, 2000–2021 (range)

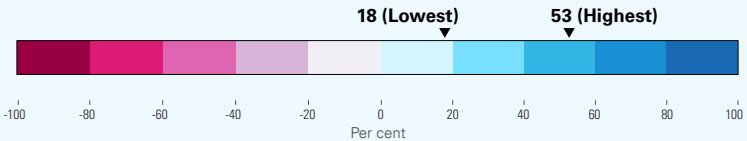


Administrative level 2

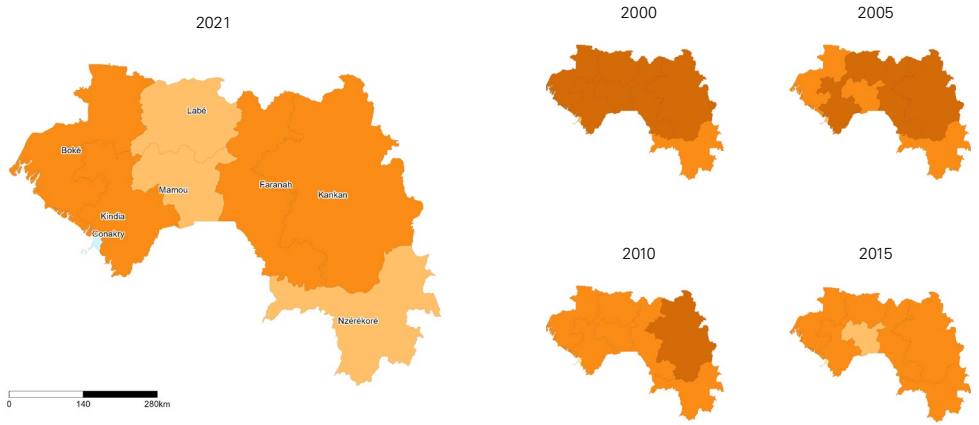
Under-five mortality rate, 2000 and 2021 (range)



Percentage decline in under-five mortality rate, 2000–2021 (range)

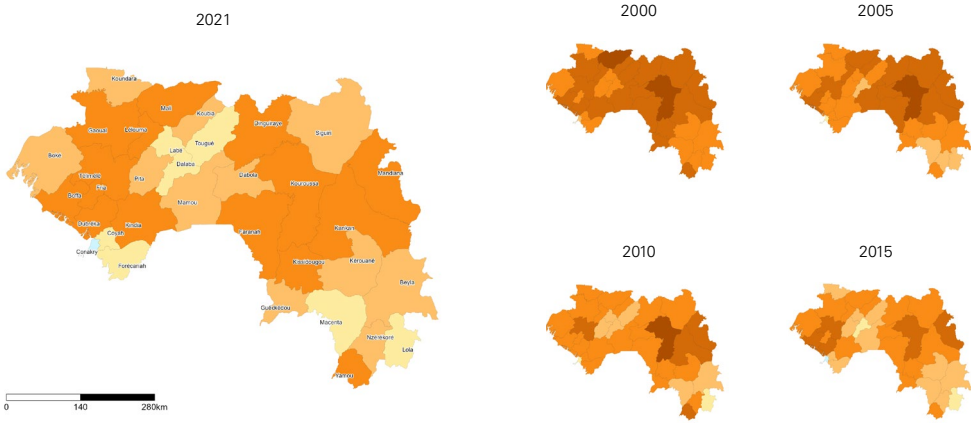


U5MR by administrative 1 area in Guinea, 2000-2021



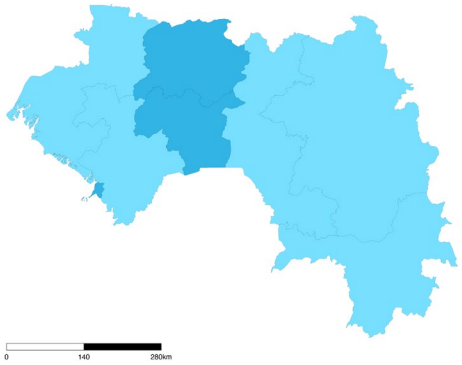
In 2000, U5MR ranged from 84 to 196 deaths per 1,000 live births. By 2021, U5MR ranged from 45 to 124 deaths per 1,000 live births.

U5MR by administrative 2 area in Guinea, 2000-2021



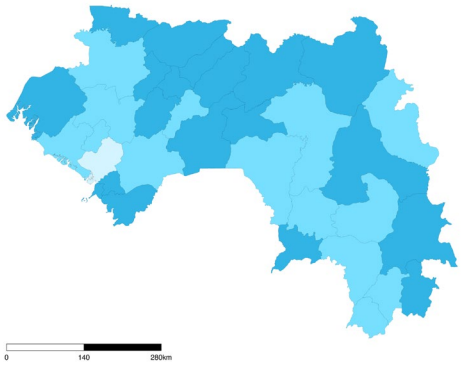
In 2000, U5MR ranged from 79 to 211 deaths per 1,000 live births. By 2021, U5MR ranged from 39 to 147 deaths per 1,000 live births.

Percentage decline in administrative level 1 U5MR 2000-2021 in Guinea

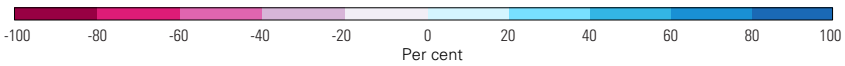


The percentage decline in under-five mortality at administrative level 1 ranged from a low of 30 per cent to a high of 52 per cent.

Percentage decline in administrative level 2 U5MR 2000-2021 in Guinea

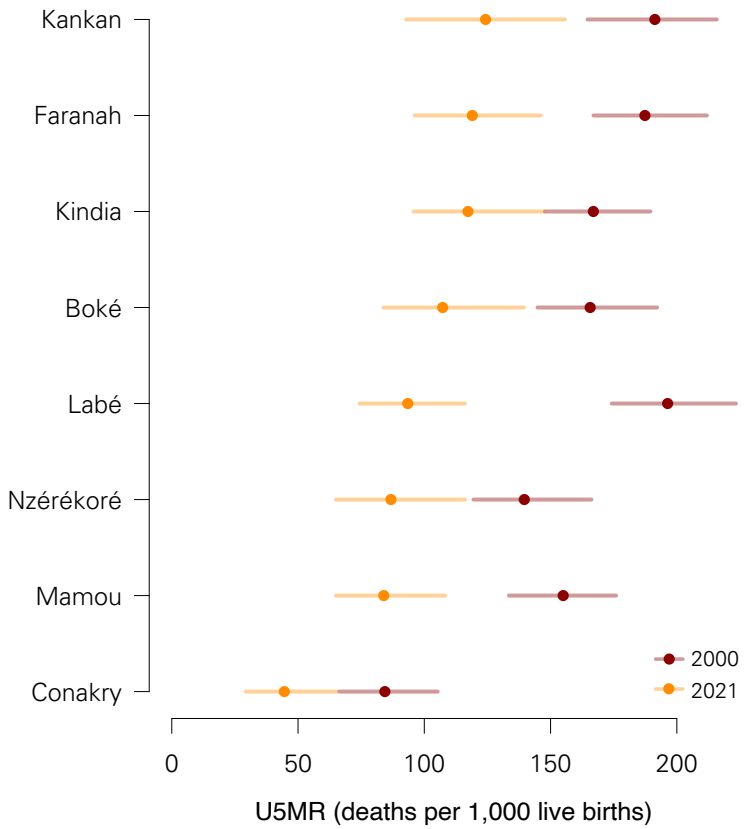


The percentage decline in under-five mortality at administrative level 2 ranged from a low of 18 per cent to a high of 53 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Guinea, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Labé, the highest mortality administrative level 1 area, was 2.3 times higher than in Conakry, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Kankan, was 2.8 times higher than in the lowest mortality area, Conakry.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Guinea: Demographic and Health Survey 2012; Demographic and Health Survey 2018.

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GUINEA

NMR

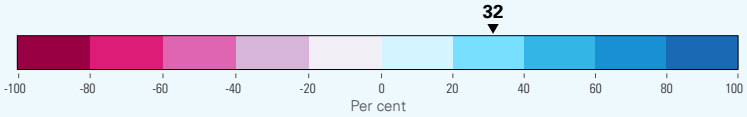
Administrative level 1 (Region): **8**

Administrative level 2 (Prefecture): **34**

National level

Neonatal mortality rate, 2000 and 2021

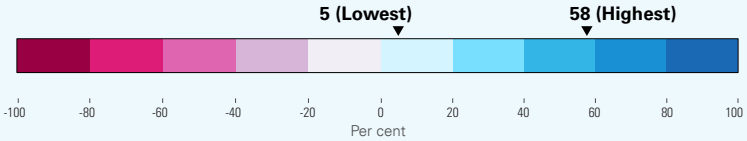
Percentage decline in neonatal mortality rate, 2000–2021



Administrative level 1

Neonatal mortality rate, 2000 and 2021 (range)

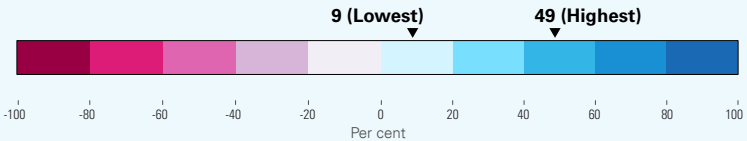
Percentage decline in neonatal mortality rate, 2000–2021 (range)



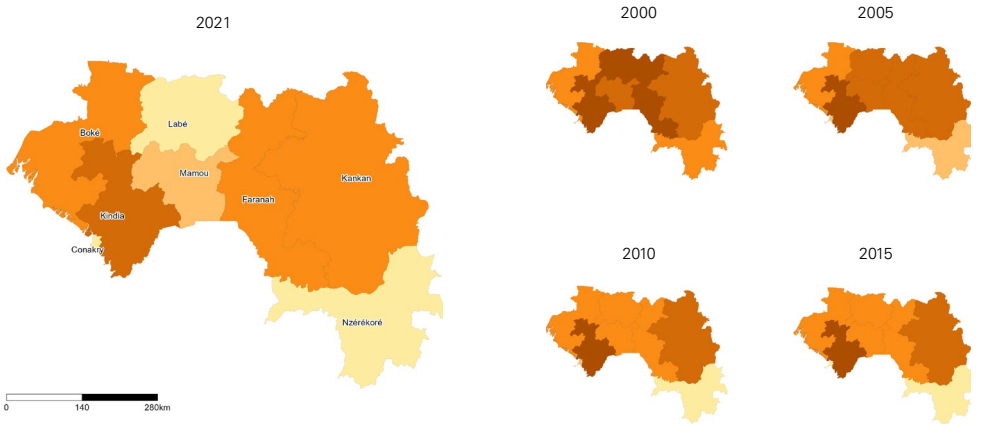
Administrative level 2

Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)

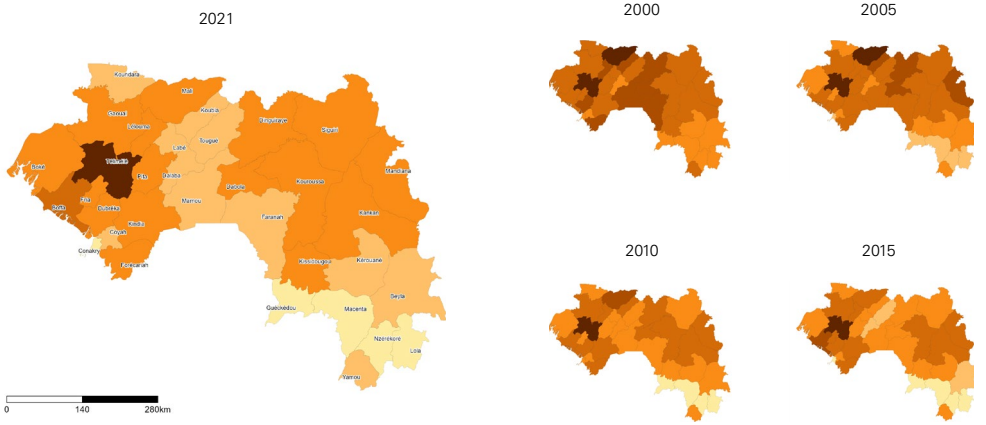


NMR by administrative 1 area in Guinea, 2000-2021



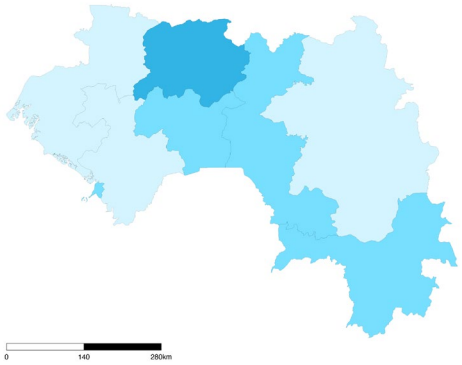
In 2000, NMR ranged from 31 to 60 deaths per 1,000 live births. By 2021, NMR ranged from 21 to 46 deaths per 1,000 live births.

NMR by administrative 2 area in Guinea, 2000-2021



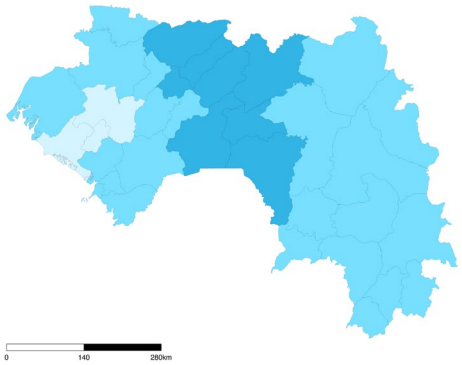
In 2000, NMR ranged from 31 to 77 deaths per 1,000 live births. By 2021, NMR ranged from 21 to 64 deaths per 1,000 live births.

Percentage decline in administrative level 1 NMR 2000-2021 in Guinea

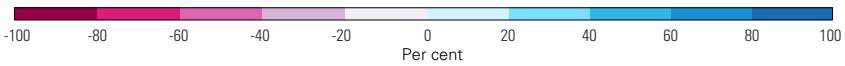


The percentage decline in neonatal mortality at administrative level 1 ranged from a low of 5 per cent to a high of 58 per cent.

Percentage decline in administrative level 2 NMR 2000-2021 in Guinea

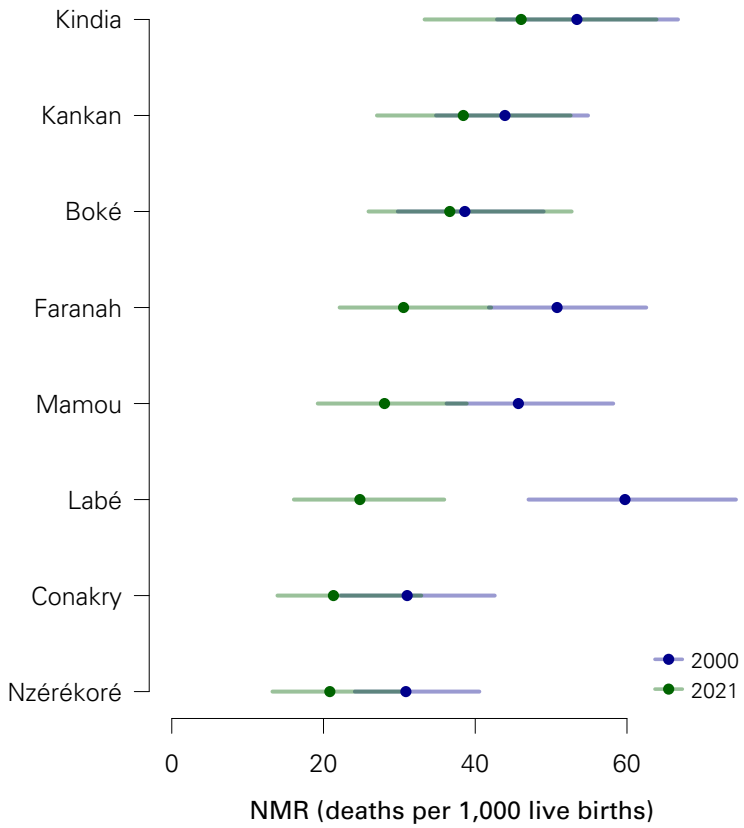


The percentage decline in neonatal mortality at administrative level 2 ranged from a low of 9 per cent to a high of 49 per cent.



NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Guinea, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Labé, the highest mortality administrative level 1 area, was 1.9 times higher than in Nzérékoré, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, Kindia, was 2.2 times higher than in the lowest mortality area, Nzérékoré.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

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Data sources for Guinea: Demographic and Health Survey 2012; Demographic and Health Survey 2018.

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HAITI

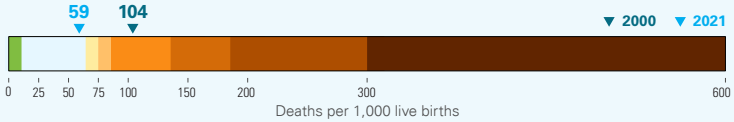
U5MR

Administrative level 1 (Department): **10**

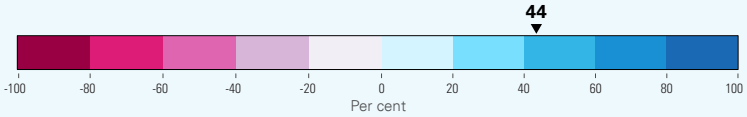
Administrative level 2 (Arrondissement): **41**

National level

Under-five mortality rate, 2000 and 2021

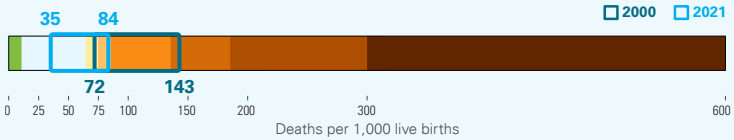


Percentage decline in under-five mortality rate, 2000–2021

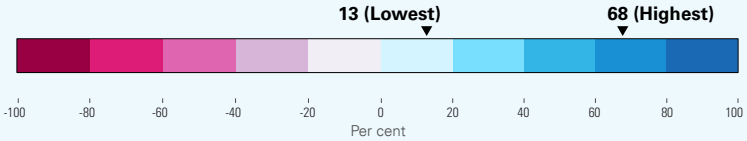


Administrative level 1

Under-five mortality rate, 2000 and 2021 (range)

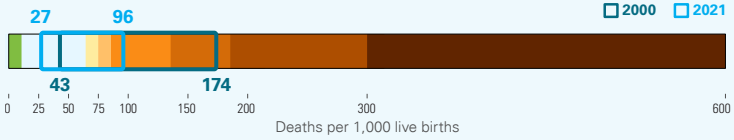


Percentage decline in under-five mortality rate, 2000–2021 (range)

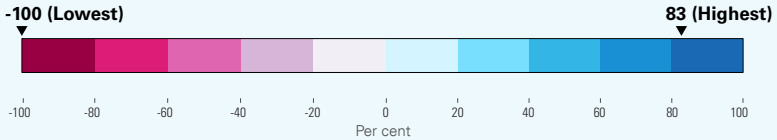


Administrative level 2

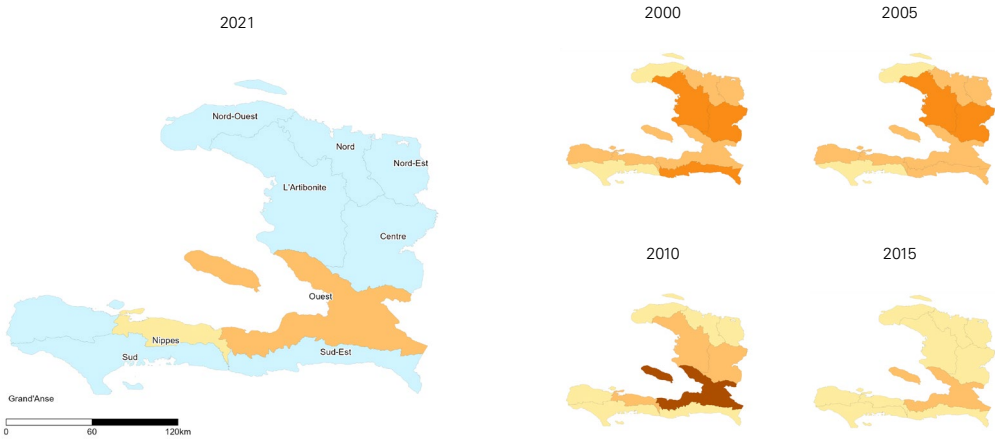
Under-five mortality rate, 2000 and 2021 (range)



Percentage decline in under-five mortality rate, 2000–2021 (range)

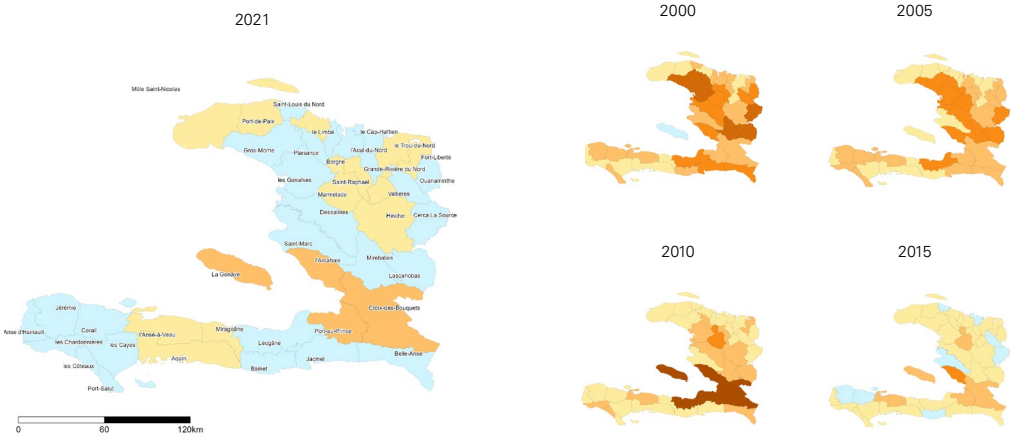


U5MR by administrative 1 area in Haiti, 2000-2021

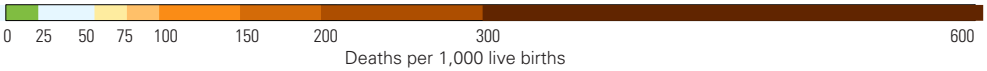


In 2000, U5MR ranged from 72 to 143 deaths per 1,000 live births. By 2021, U5MR ranged from 35 to 84 deaths per 1,000 live births.

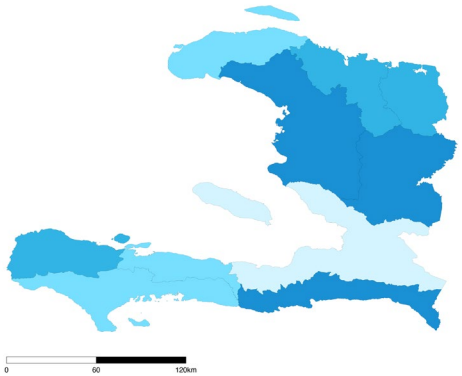
U5MR by administrative 2 area in Haiti, 2000-2021



In 2000, U5MR ranged from 43 to 174 deaths per 1,000 live births. By 2021, U5MR ranged from 27 to 96 deaths per 1,000 live births.

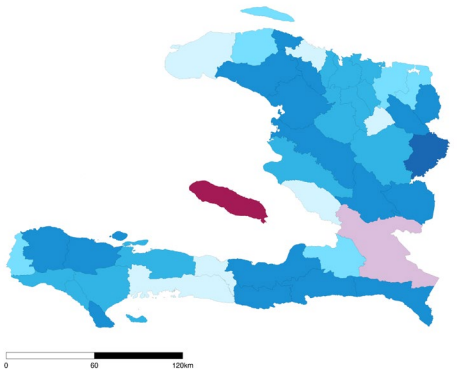


Percentage decline in administrative level 1 U5MR 2000-2021 in Haiti

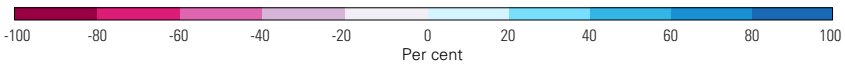


The percentage decline in under-five mortality at administrative level 1 ranged from a low of 13 per cent to a high of 68 per cent.

Percentage decline in administrative level 2 U5MR 2000-2021 in Haiti

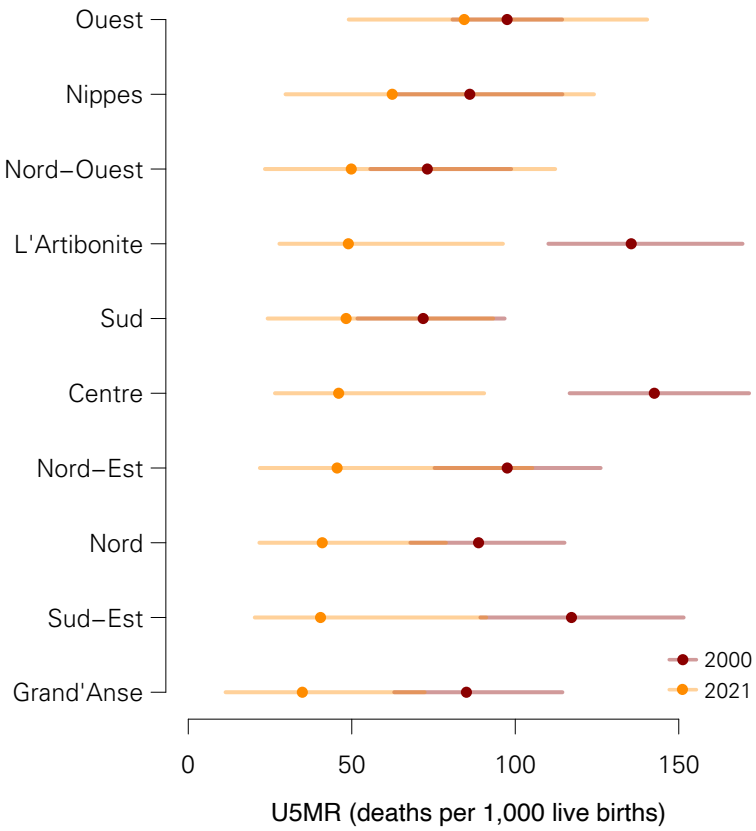


The percentage decline in under-five mortality at administrative level 2 ranged from a low of -100 per cent to a high of 83 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Haiti, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Centre, the highest mortality administrative level 1 area, was 2 times higher than in Sud, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Ouest, was 2.4 times higher than in the lowest mortality area, Grand'Anse.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Haiti: Demographic and Health Survey 2012; Demographic and Health Survey 2016-2017.

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HAITI

NMR

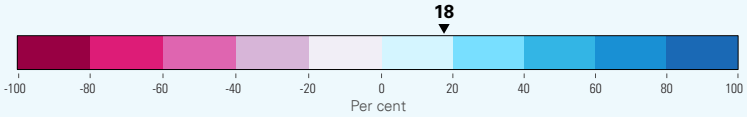
Administrative level 1 (Department): **10**

Administrative level 2 (Arrondissement): **41**

National level

Neonatal mortality rate, 2000 and 2021

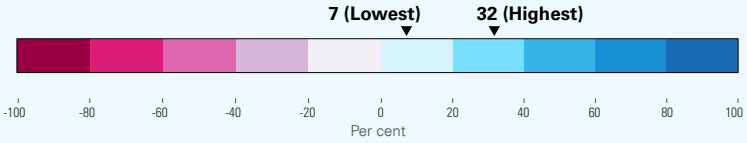
Percentage decline in neonatal mortality rate, 2000–2021



Administrative level 1

Neonatal mortality rate, 2000 and 2021 (range)

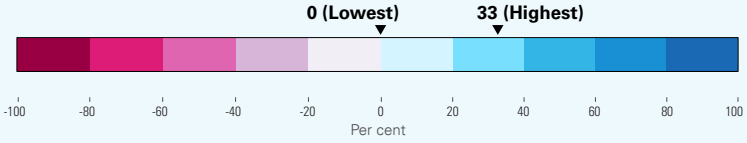
Percentage decline in neonatal mortality rate, 2000–2021 (range)



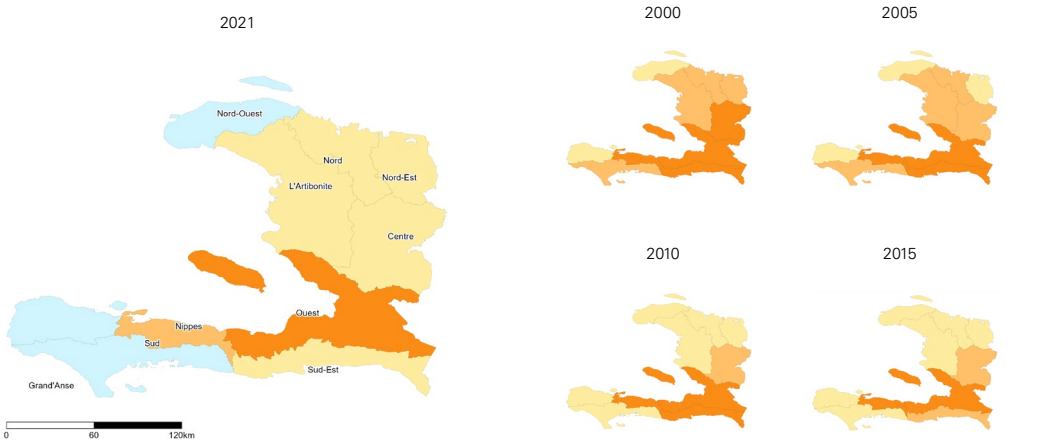
Administrative level 2

Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)

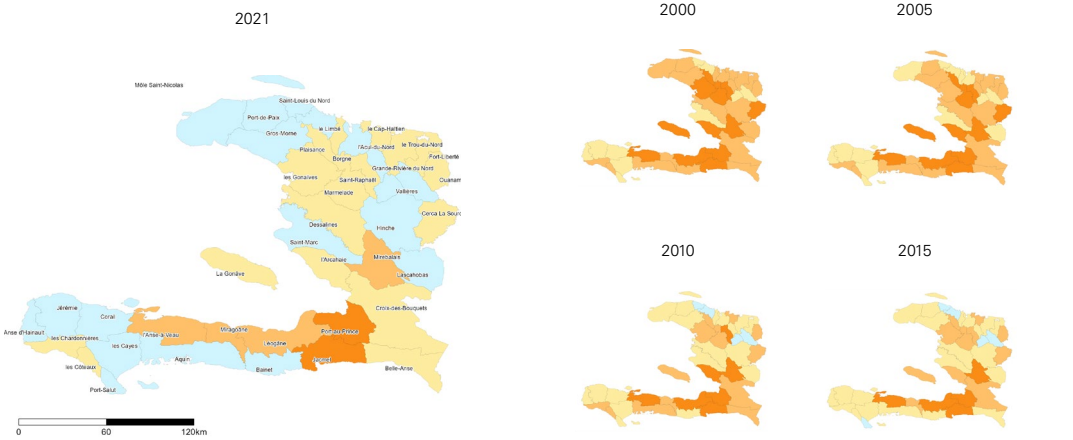


NMR by administrative 1 area in Haiti, 2000-2021



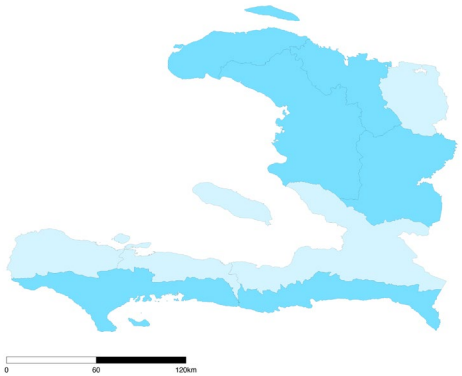
In 2000, NMR ranged from 23 to 33 deaths per 1,000 live births. By 2021, NMR ranged from 18 to 30 deaths per 1,000 live births.

NMR by administrative 2 area in Haiti, 2000-2021



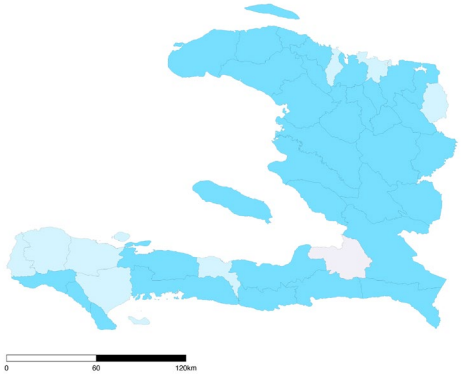
In 2000, NMR ranged from 21 to 39 deaths per 1,000 live births. By 2021, NMR ranged from 14 to 32 deaths per 1,000 live births.

Percentage decline in administrative level 1 NMR 2000-2021 in Haiti

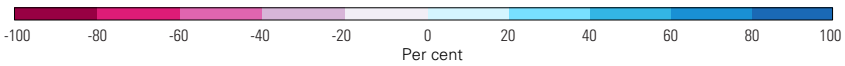


The percentage decline in neonatal mortality at administrative level 1 ranged from a low of 7 per cent to a high of 32 per cent.

Percentage decline in administrative level 2 NMR 2000-2021 in Haiti

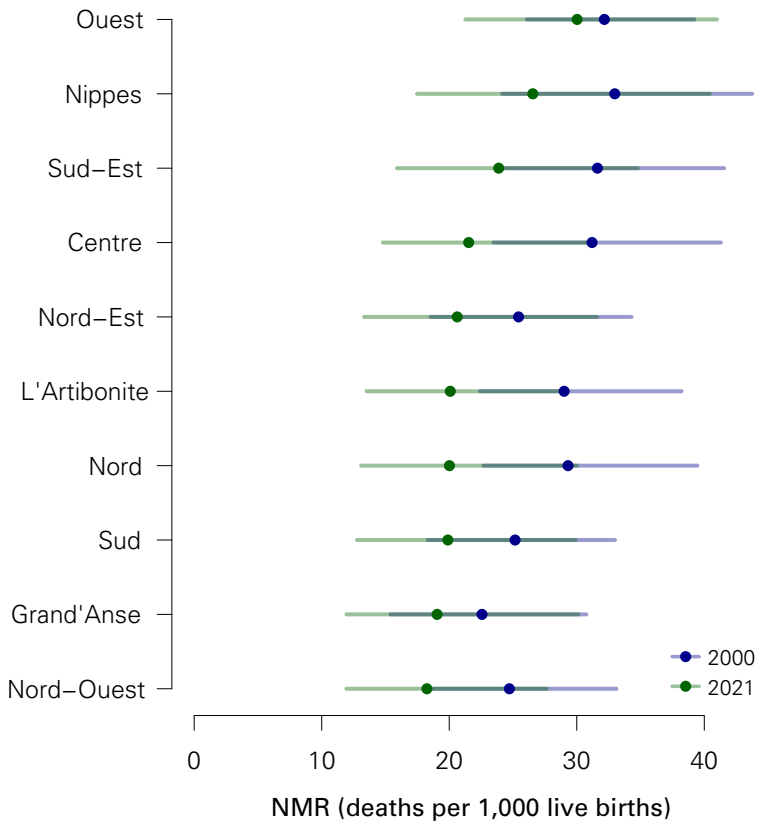


The percentage decline in neonatal mortality at administrative level 2 ranged from a low of 0 per cent to a high of 33 per cent.



NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Haiti, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Nippes, the highest mortality administrative level 1 area, was 1.5 times higher than in Grand'Anse, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, Ouest, was 1.6 times higher than in the lowest mortality area, Nord-Ouest.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Haiti: Demographic and Health Survey 2012; Demographic and Health Survey 2016-2017.

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KENYA

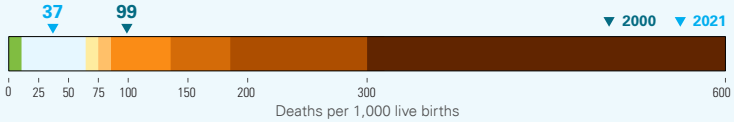
U5MR

Administrative level 1 (County): **47**

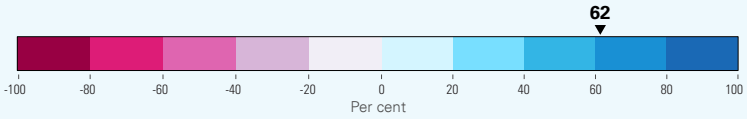
Administrative level 2: -

National level

Under-five mortality rate, 2000 and 2021

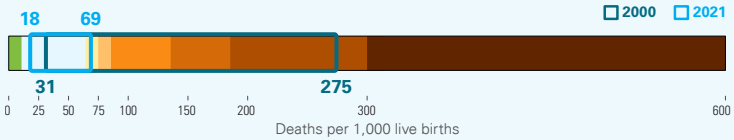


Percentage decline in under-five mortality rate, 2000–2021

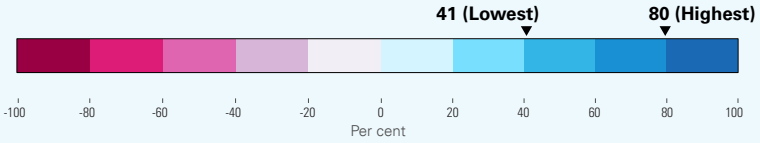


Administrative level 1

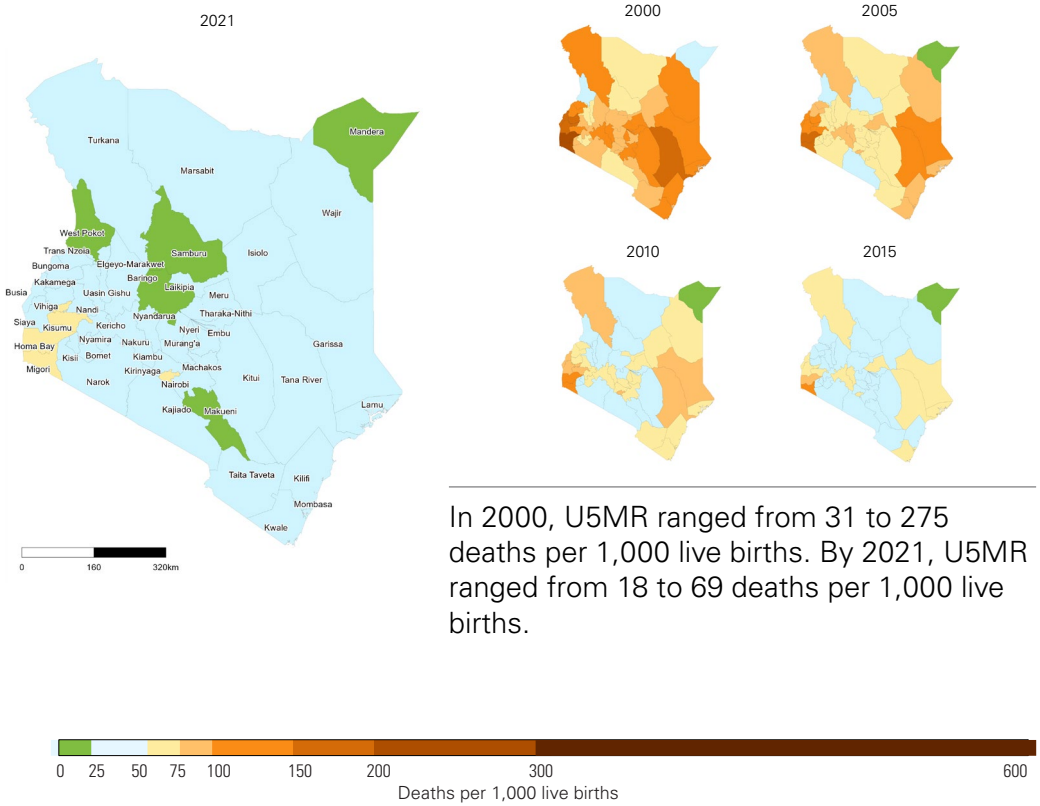
Under-five mortality rate, 2000 and 2021 (range)



Percentage decline in under-five mortality rate, 2000–2021 (range)

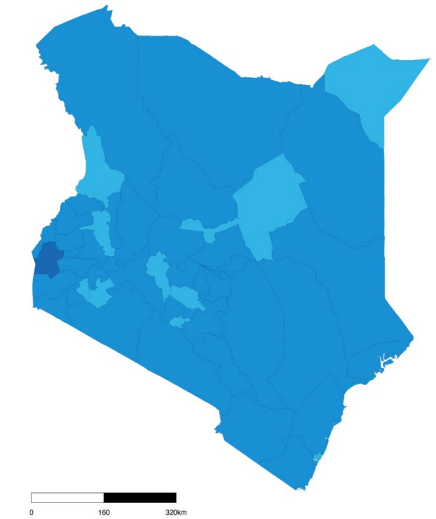


U5MR by administrative 1 area in Kenya, 2000-2021

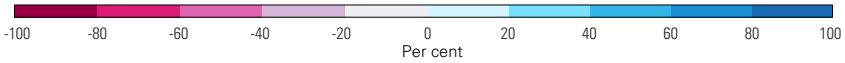


In 2000, U5MR ranged from 31 to 275 deaths per 1,000 live births. By 2021, U5MR ranged from 18 to 69 deaths per 1,000 live births.

Percentage decline in administrative level 1 U5MR 2000-2021 in Kenya

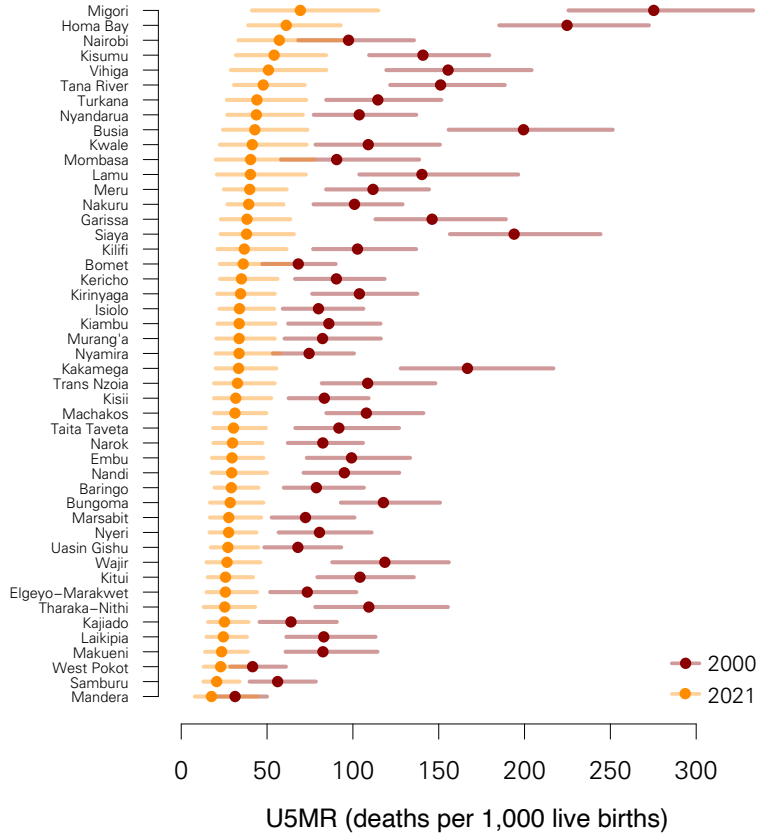


The percentage decline in under-five mortality at administrative level 1 ranged from a low of 41 per cent to a high of 80 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Kenya, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Migori, the highest mortality administrative level 1 area, was 8.8 times higher than in Mandera, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Migori, was 3.9 times higher than in the lowest mortality area, Mandera.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Kenya: Demographic and Health Survey 2014.

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KENYA

NMR

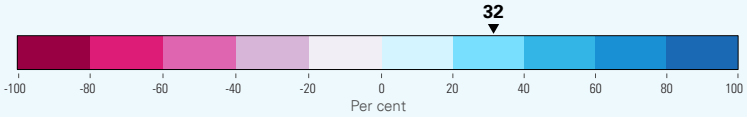
Administrative level 1 (County): **47**

Administrative level 2: -

National level

Neonatal mortality rate, 2000 and 2021

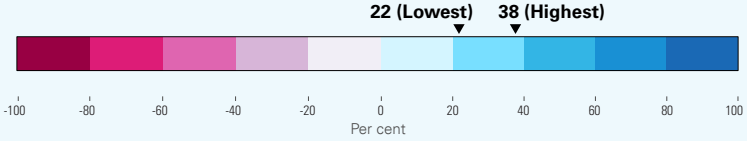
Percentage decline in neonatal mortality rate, 2000–2021



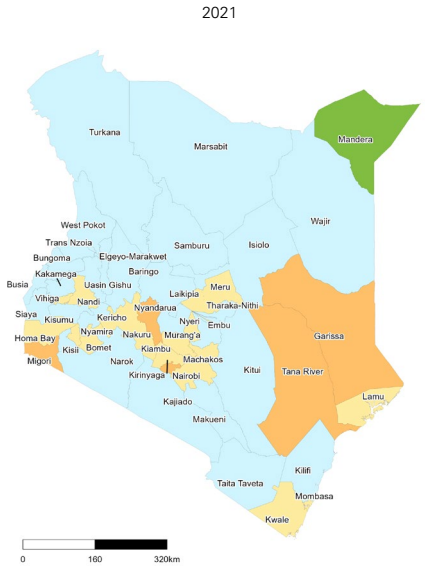
Administrative level 1

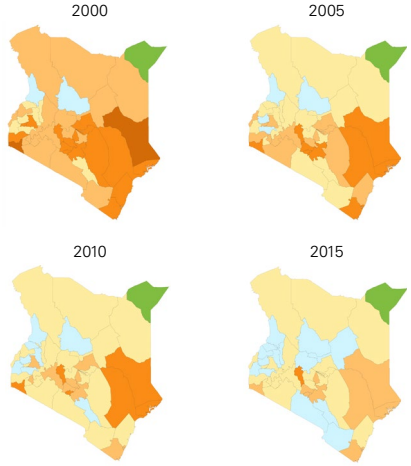
Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)



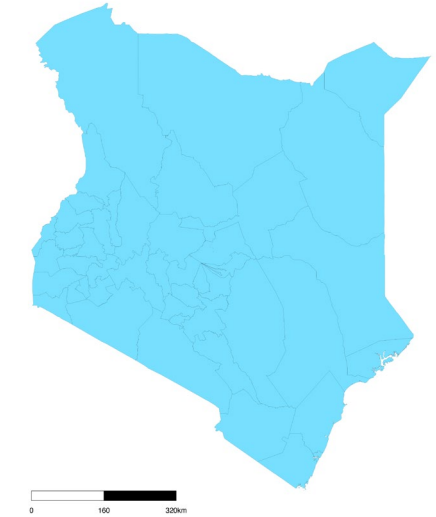
NMR by administrative 1 area in Kenya, 2000-2021



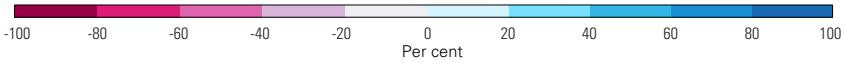


In 2000, NMR ranged from 10 to 42 deaths per 1,000 live births. By 2021, NMR ranged from 7 to 27 deaths per 1,000 live births.

Percentage decline in administrative level 1 NMR 2000-2021 in Kenya

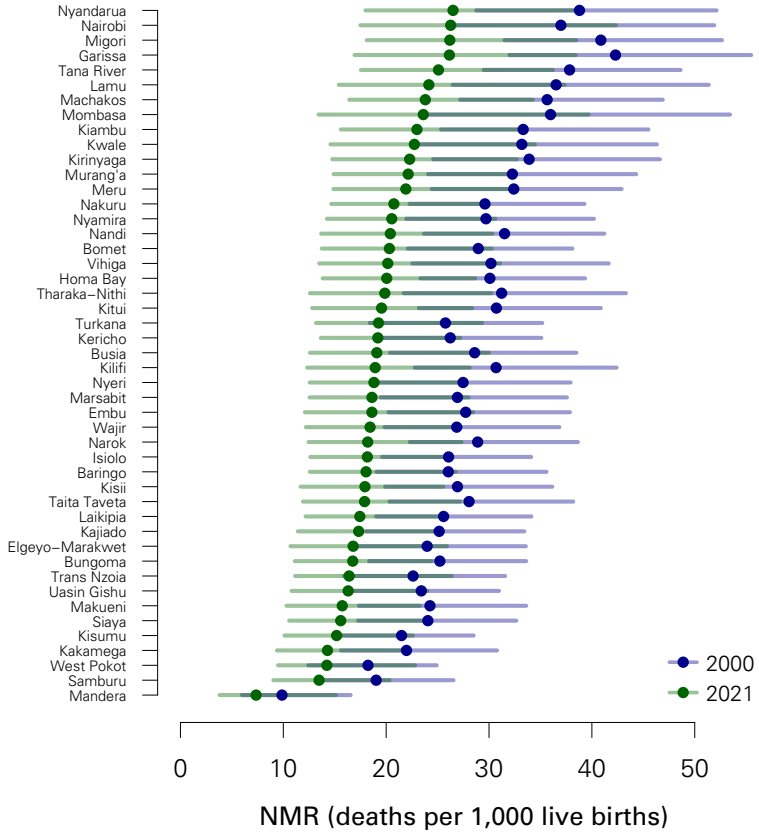


The percentage decline in neonatal mortality at administrative level 1 ranged from a low of 22 per cent to a high of 38 per cent.



NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Kenya, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Garissa, the highest mortality administrative level 1 area, was 4.3 times higher than in Mandera, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, Nyandarua, was 3.6 times higher than in the lowest mortality area, Mandera.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

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Data sources for Kenya: Demographic and Health Survey 2014.

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LAO PEOPLE'S DEMOCRATIC REPUBLIC

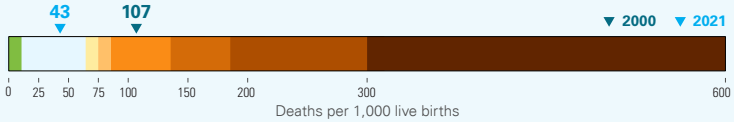
U5MR

Administrative level 1 (Province, Prefecture): **18**

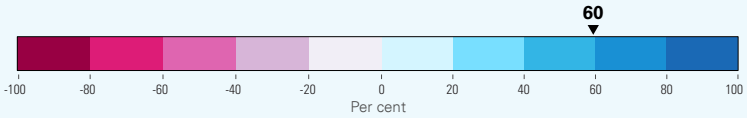
Administrative level 2: -

National level

Under-five mortality rate, 2000 and 2021

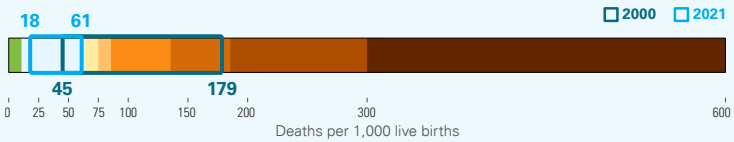


Percentage decline in under-five mortality rate, 2000–2021

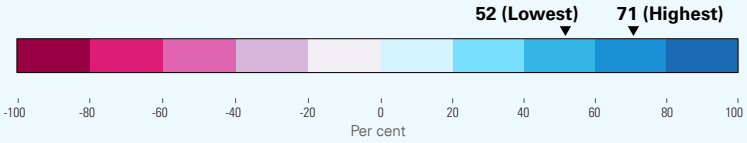


Administrative level 1

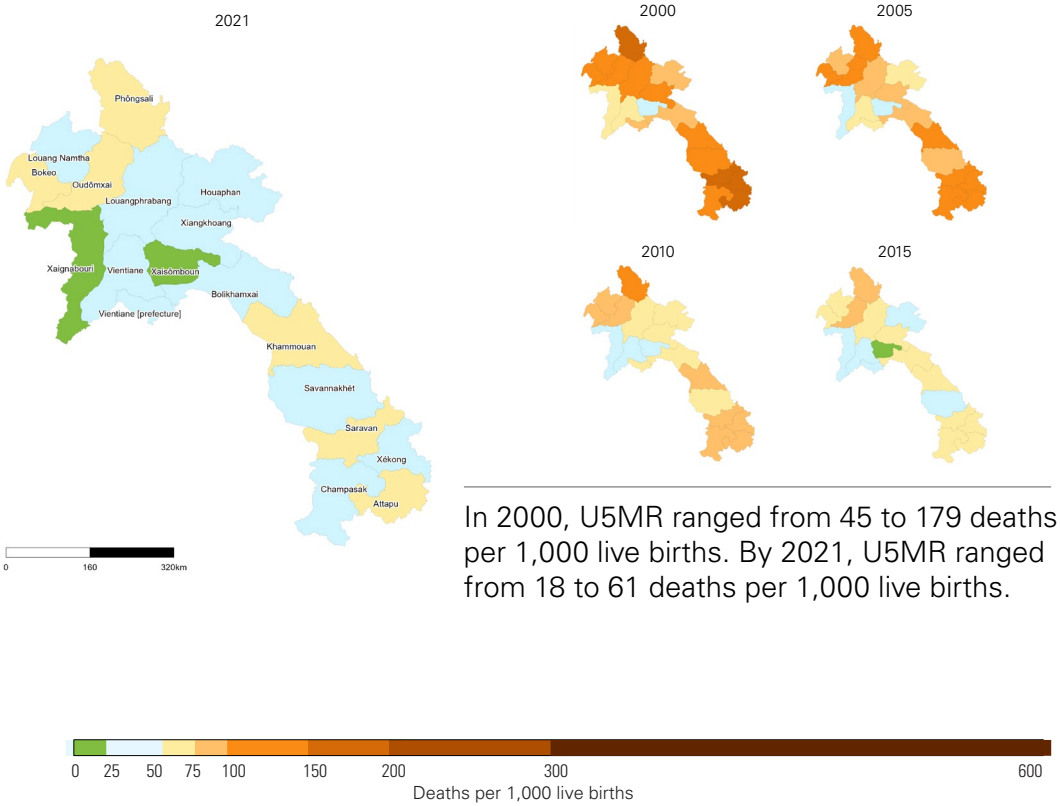
Under-five mortality rate, 2000 and 2021 (range)



Percentage decline in under-five mortality rate, 2000–2021 (range)

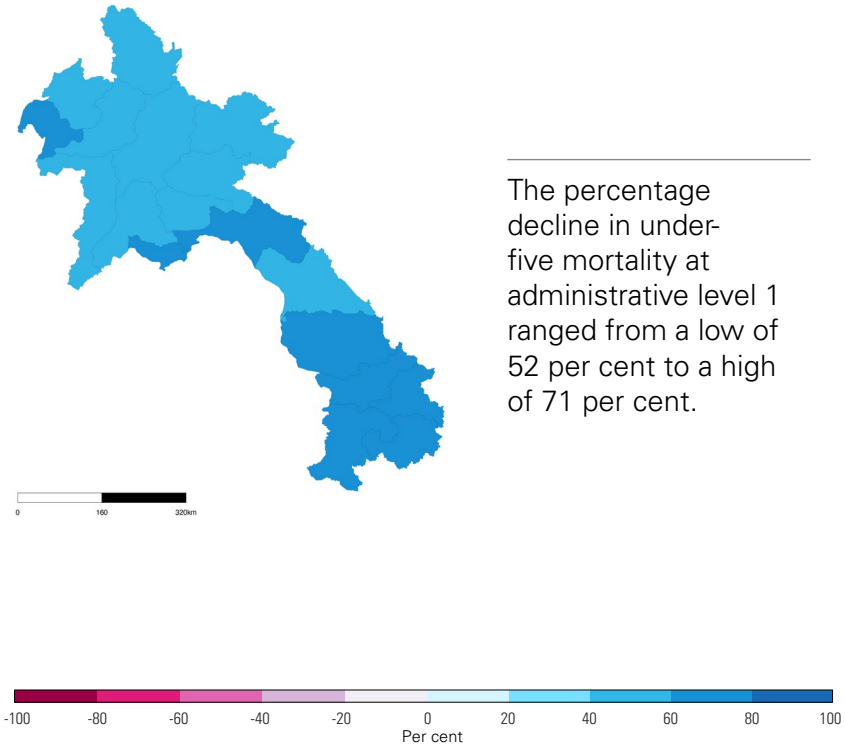


U5MR by administrative 1 area in Lao People's Democratic Republic, 2000-2021



In 2000, U5MR ranged from 45 to 179 deaths per 1,000 live births. By 2021, U5MR ranged from 18 to 61 deaths per 1,000 live births.

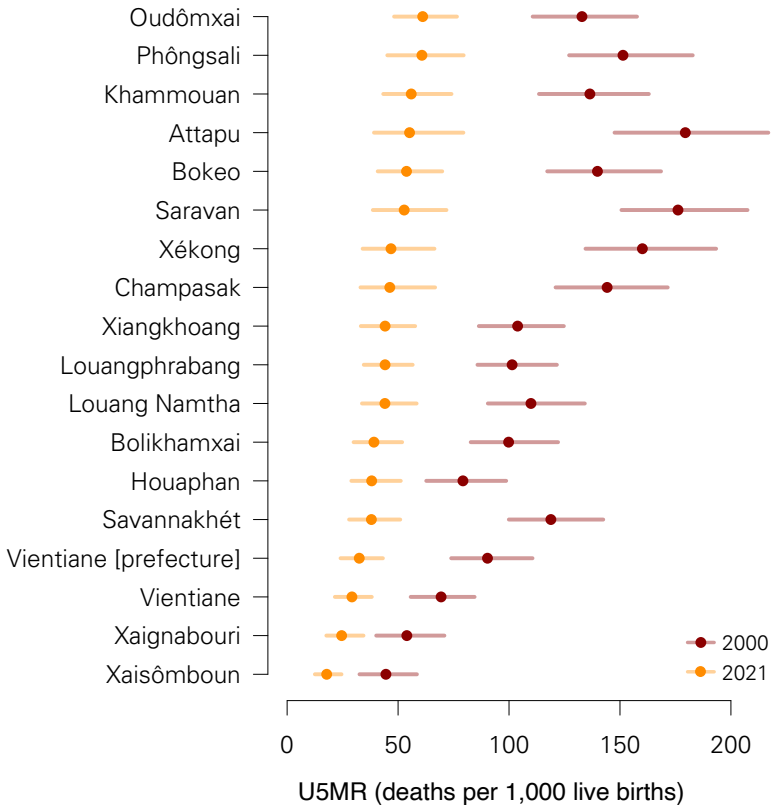
Percentage decline in administrative level 1 U5MR 2000-2021 in Lao People's Democratic Republic



The percentage decline in under-five mortality at administrative level 1 ranged from a low of 52 per cent to a high of 71 per cent.

U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Lao People's Democratic Republic, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Attapu, the highest mortality administrative level 1 area, was 4 times higher than in Xaisômboun, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Oudômxai, was 3.4 times higher than in the lowest mortality area, Xaisômboun.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

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Data sources for Lao People's Democratic Republic: Lao Social Indicator Survey II 2017.

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LAO PEOPLE'S DEMOCRATIC REPUBLIC

NMR

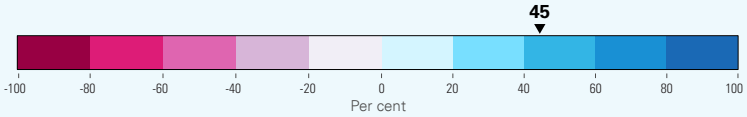
Administrative level 1 (Province, Prefecture): **18**

Administrative level 2: -

National level

Neonatal mortality rate, 2000 and 2021

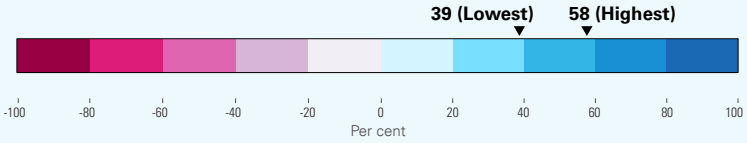
Percentage decline in neonatal mortality rate, 2000–2021



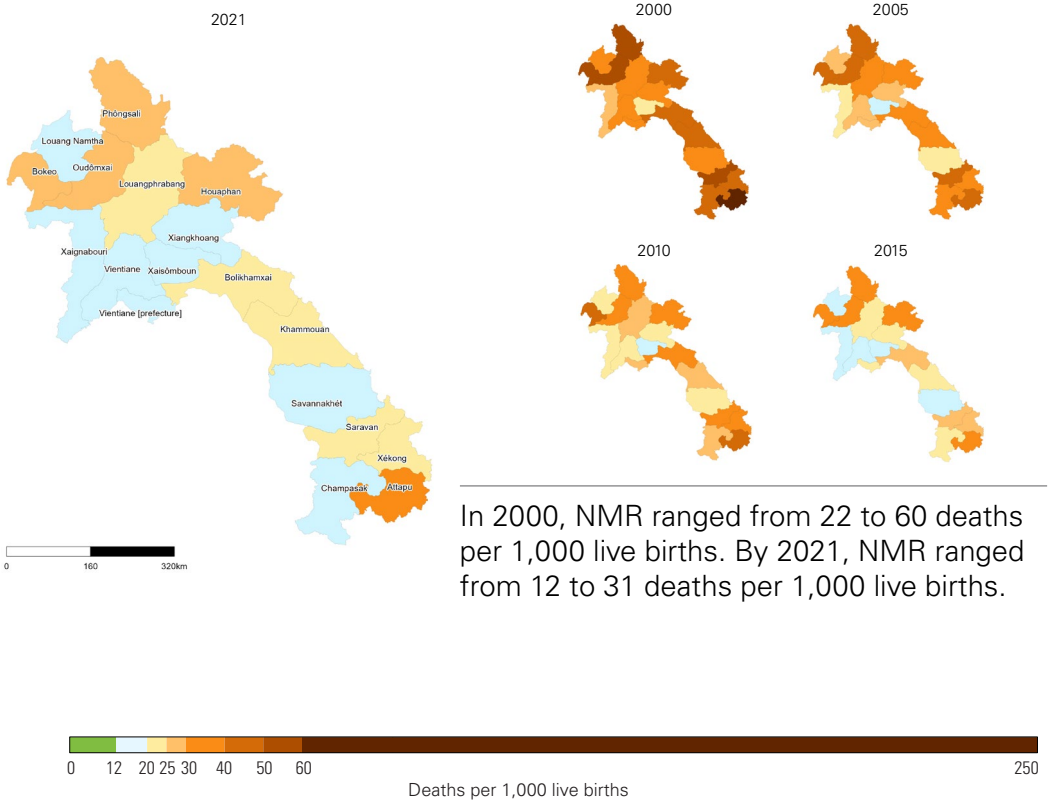
Administrative level 1

Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)

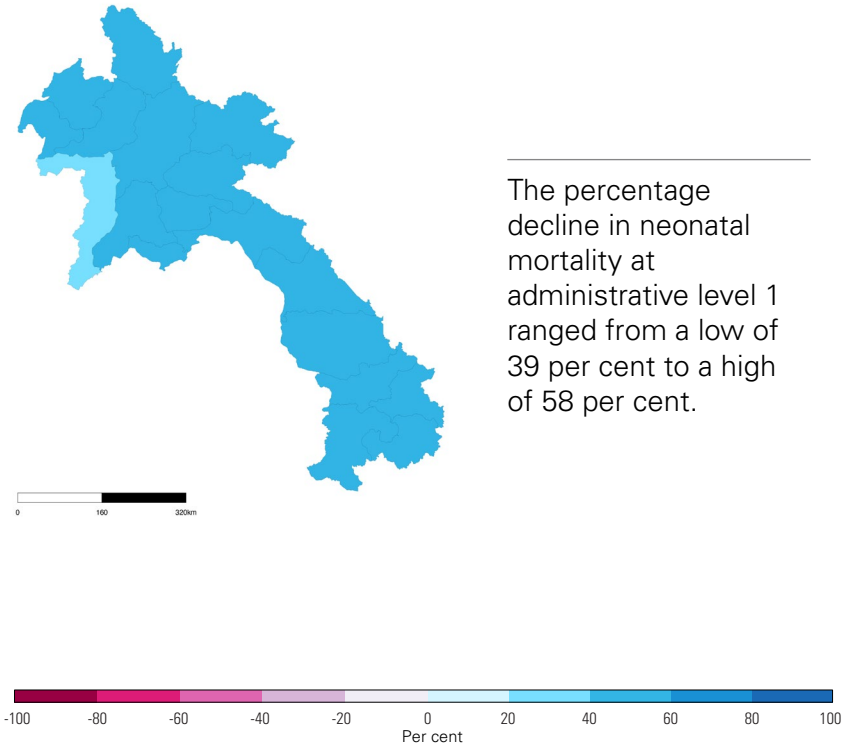


NMR by administrative 1 area in Lao People's Democratic Republic, 2000-2021



In 2000, NMR ranged from 22 to 60 deaths per 1,000 live births. By 2021, NMR ranged from 12 to 31 deaths per 1,000 live births.

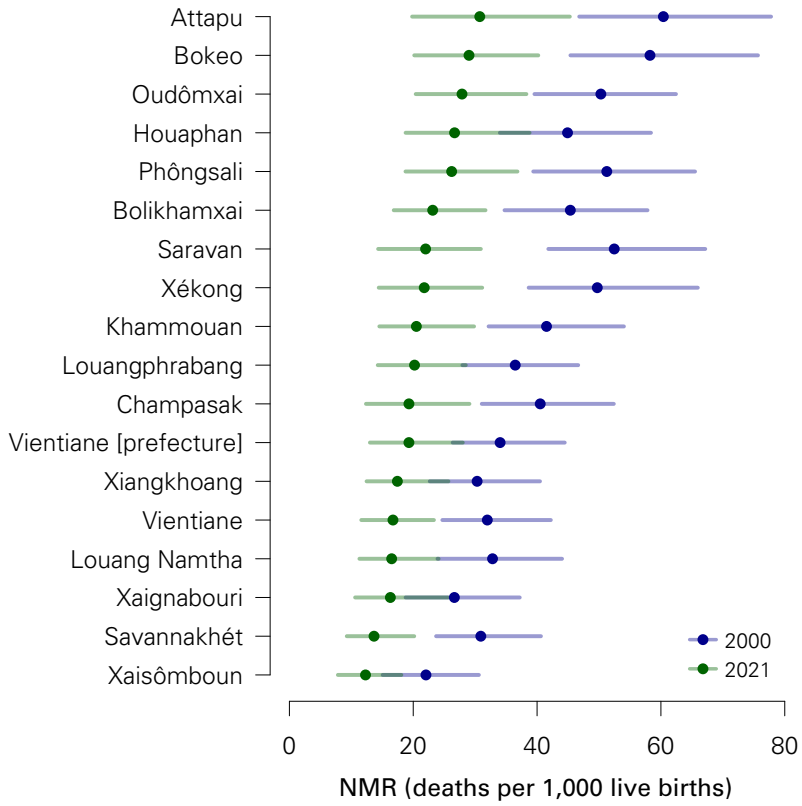
Percentage decline in administrative level 1 NMR 2000-2021 in Lao People's Democratic Republic



The percentage decline in neonatal mortality at administrative level 1 ranged from a low of 39 per cent to a high of 58 per cent.

NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Lao People's Democratic Republic, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Attapu, the highest mortality administrative level 1 area, was 2.7 times higher than in Xaisômboun, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, Attapu, was 2.5 times higher than in the lowest mortality area, Xaisômboun.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

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Data sources for Lao People's Democratic Republic: Lao Social Indicator Survey II 2017.

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LESOTHO

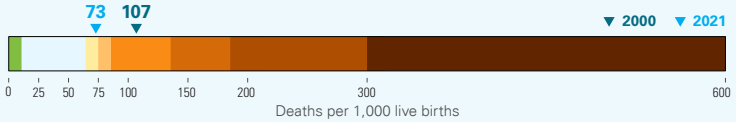
U5MR

Administrative level 1 (District): **10**

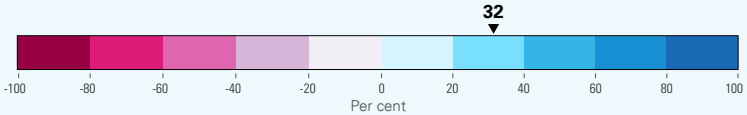
Administrative level 2: -

National level

Under-five mortality rate, 2000 and 2021

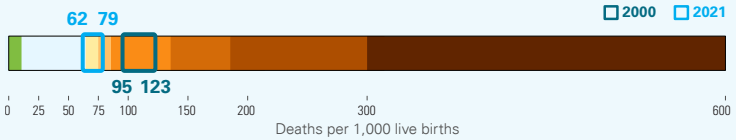


Percentage decline in under-five mortality rate, 2000–2021

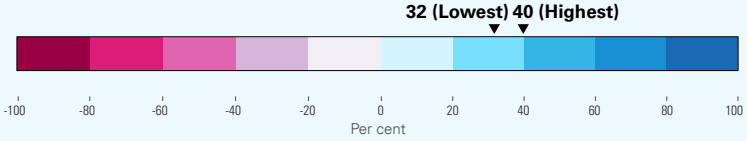


Administrative level 1

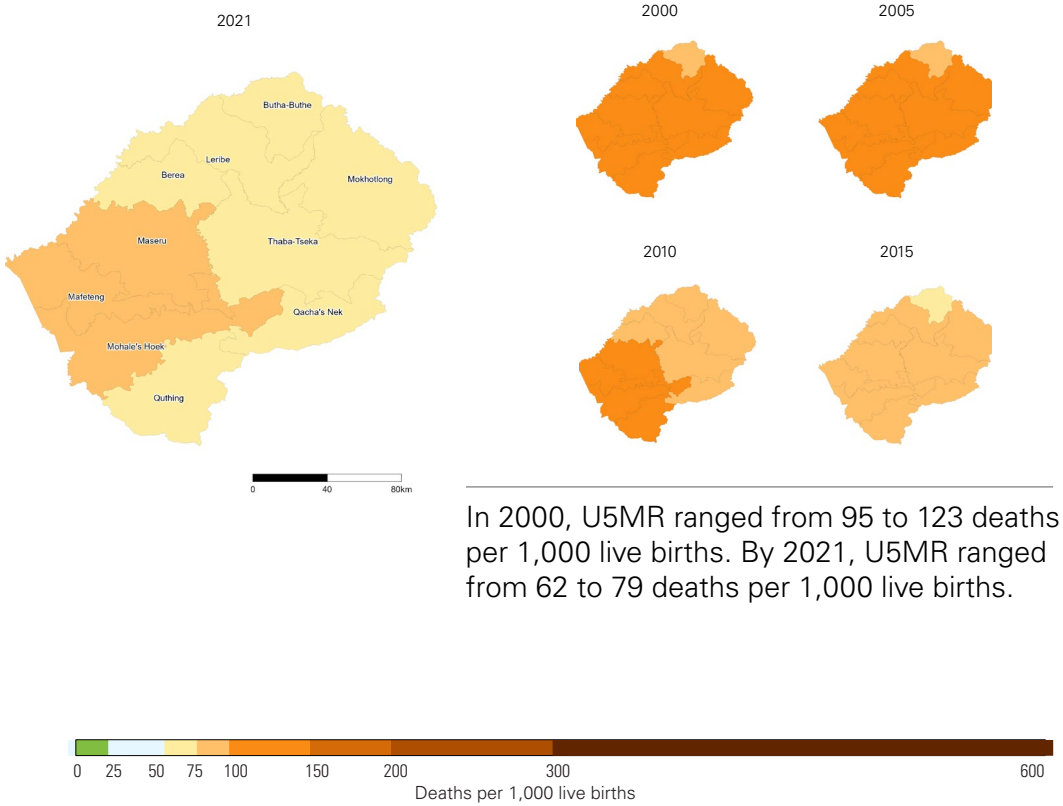
Under-five mortality rate, 2000 and 2021 (range)



Percentage decline in under-five mortality rate, 2000–2021 (range)

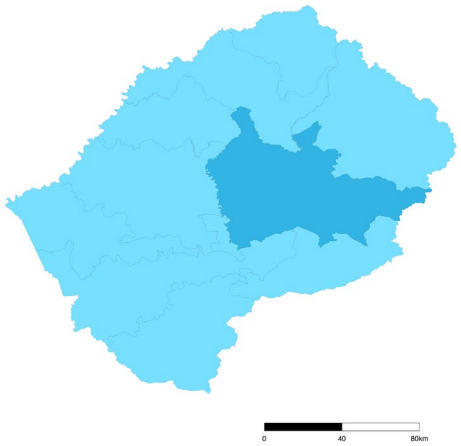


U5MR by administrative 1 area in Lesotho, 2000-2021

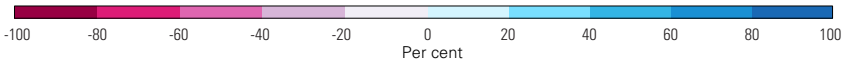


In 2000, U5MR ranged from 95 to 123 deaths per 1,000 live births. By 2021, U5MR ranged from 62 to 79 deaths per 1,000 live births.

Percentage decline in administrative level 1 U5MR 2000-2021 in Lesotho

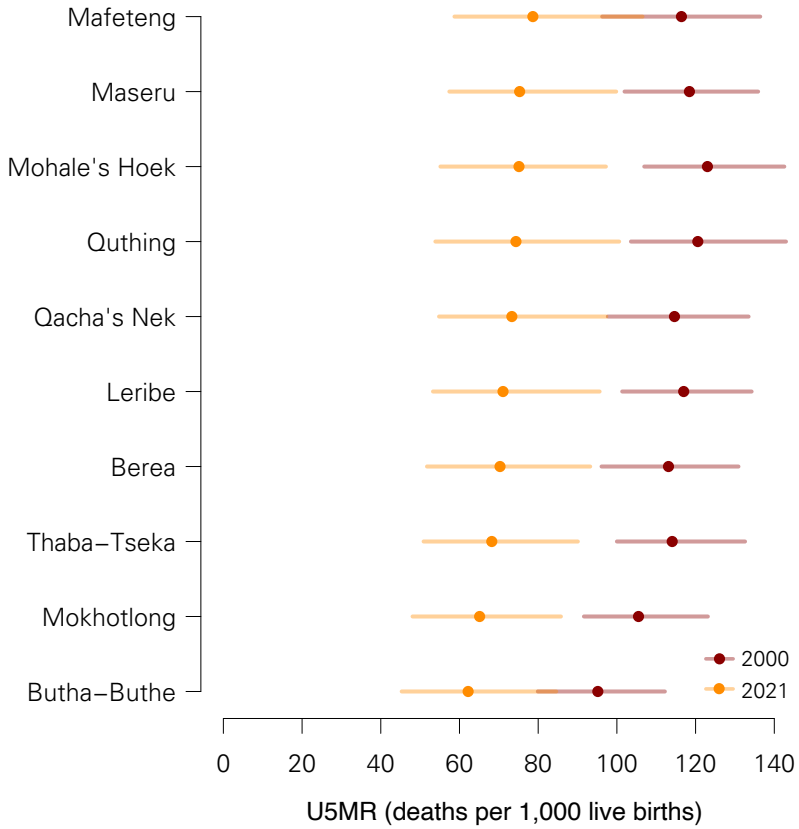


The percentage decline in under-five mortality at administrative level 1 ranged from a low of 32 per cent to a high of 40 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Lesotho, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Mohale's Hoek, the highest mortality administrative level 1 area, was 1.3 times higher than in Butha-Buthe, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Mafeteng, was 1.3 times higher than in the lowest mortality area, Butha-Buthe.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Lesotho: Demographic and Health Survey 2004; Demographic and Health Survey 2009; Demographic and Health Survey 2014; Multiple Indicator Cluster Survey 2018.

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LESOTHO

NMR

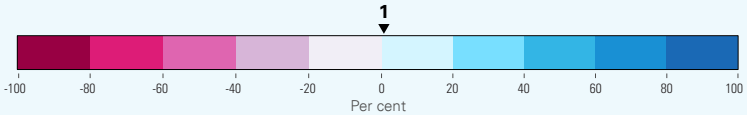
Administrative level 1 (District): **10**

Administrative level 2: -

National level

Neonatal mortality rate, 2000 and 2021

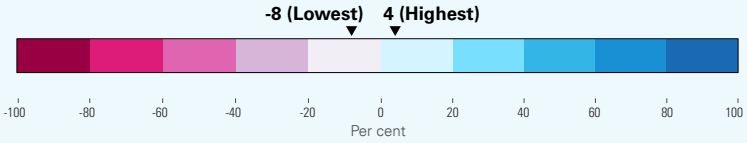
Percentage decline in neonatal mortality rate, 2000–2021



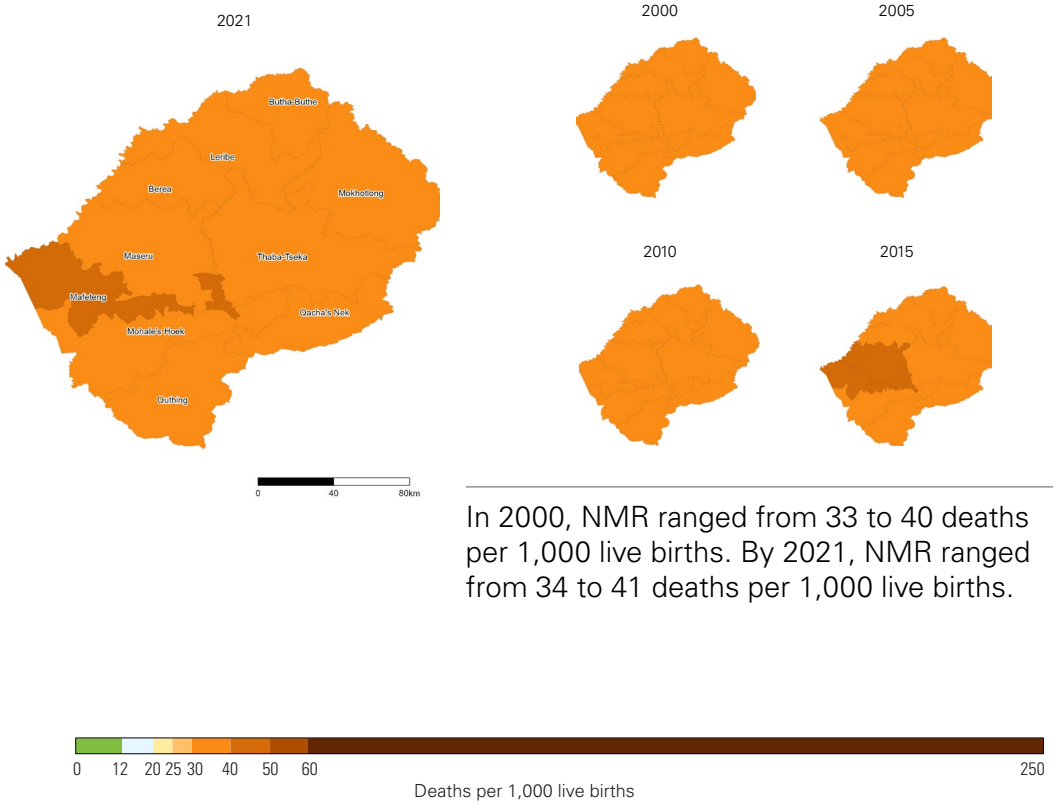
Administrative level 1

Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)

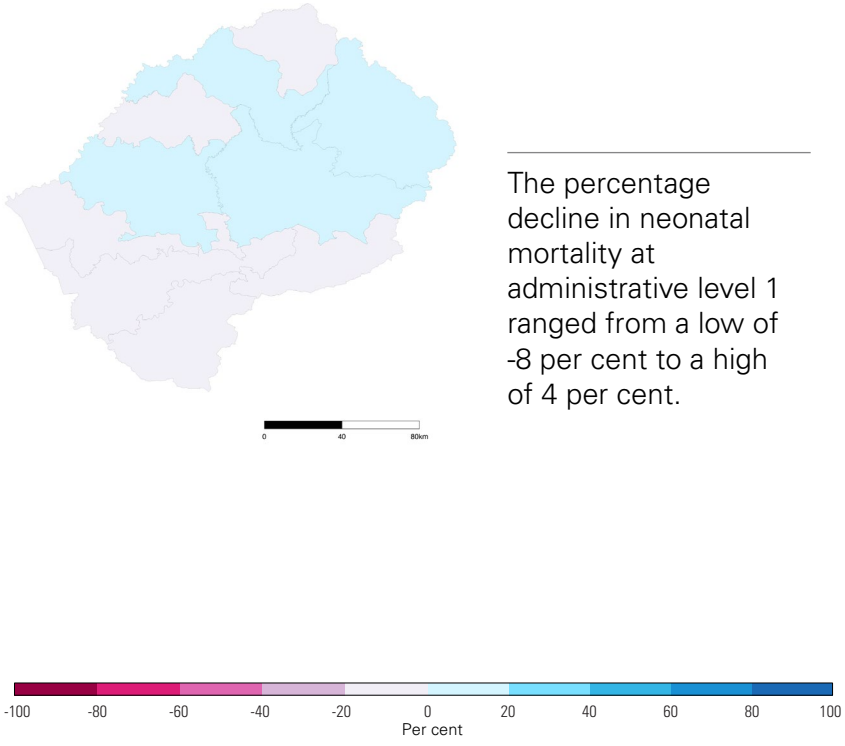


NMR by administrative 1 area in Lesotho, 2000-2021



In 2000, NMR ranged from 33 to 40 deaths per 1,000 live births. By 2021, NMR ranged from 34 to 41 deaths per 1,000 live births.

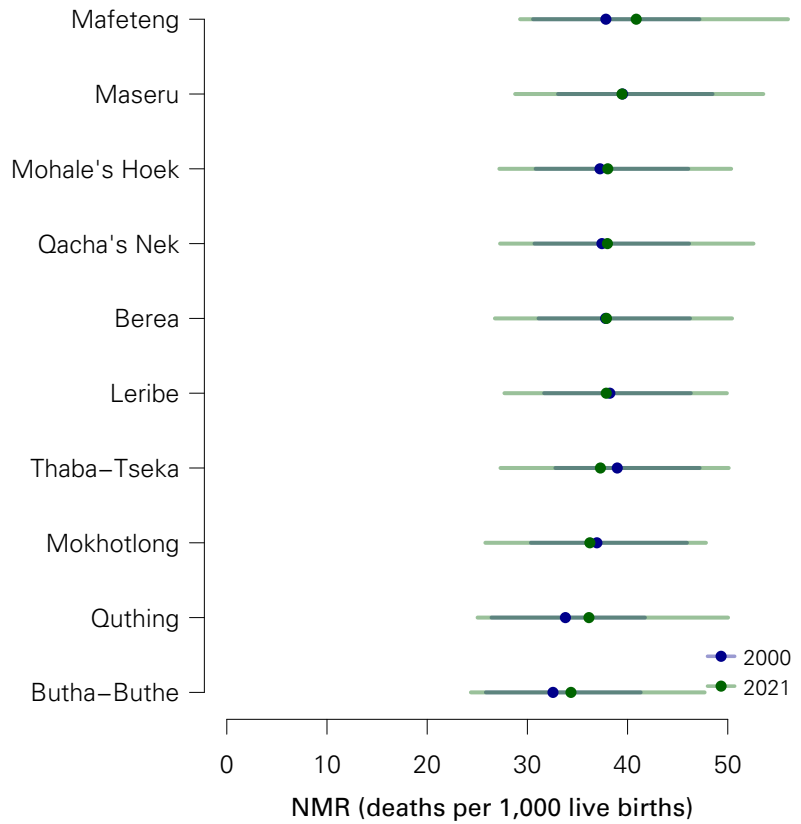
Percentage decline in administrative level 1 NMR 2000-2021 in Lesotho



The percentage decline in neonatal mortality at administrative level 1 ranged from a low of -8 per cent to a high of 4 per cent.

NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Lesotho, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Maseru, the highest mortality administrative level 1 area, was 1.2 times higher than in Butha-Buthe, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, Mafeteng, was 1.2 times higher than in the lowest mortality area, Butha-Buthe.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Lesotho: Demographic and Health Survey 2004; Demographic and Health Survey 2009; Demographic and Health Survey 2014; Multiple Indicator Cluster Survey 2018.

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LIBERIA

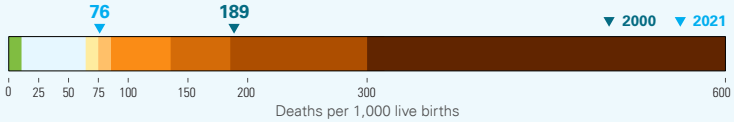
U5MR

Administrative level 1 (County): **15**

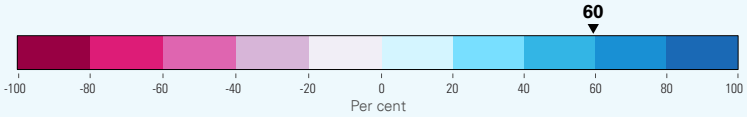
Administrative level 2 (District): **66**

National level

Under-five mortality rate, 2000 and 2021

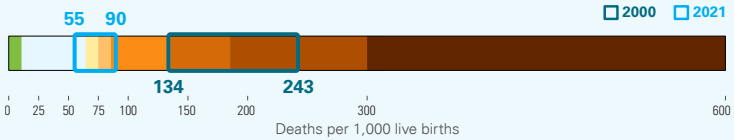


Percentage decline in under-five mortality rate, 2000–2021

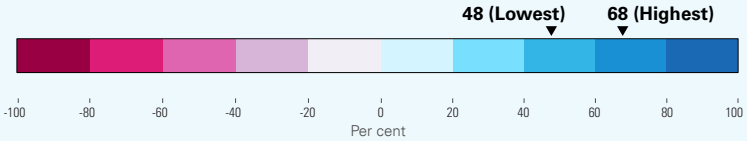


Administrative level 1

Under-five mortality rate, 2000 and 2021 (range)

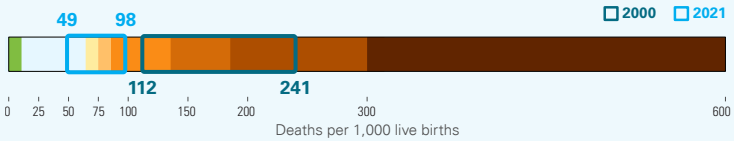


Percentage decline in under-five mortality rate, 2000–2021 (range)

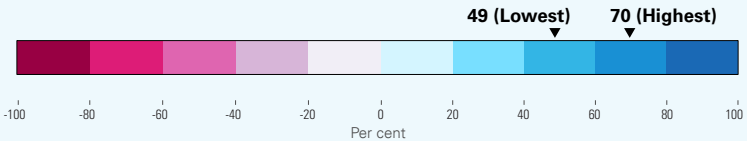


Administrative level 2

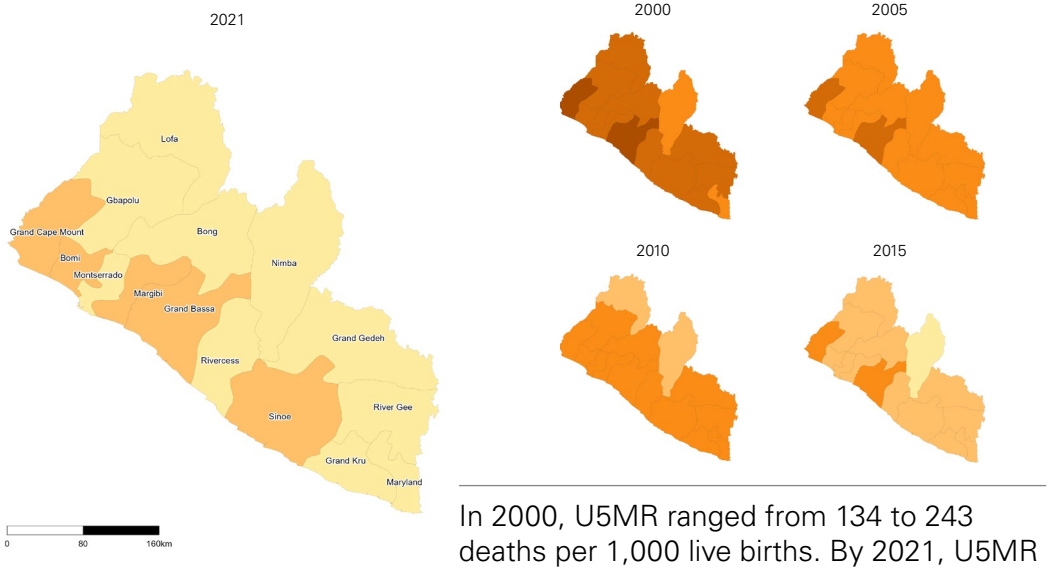
Under-five mortality rate, 2000 and 2021 (range)



Percentage decline in under-five mortality rate, 2000–2021 (range)

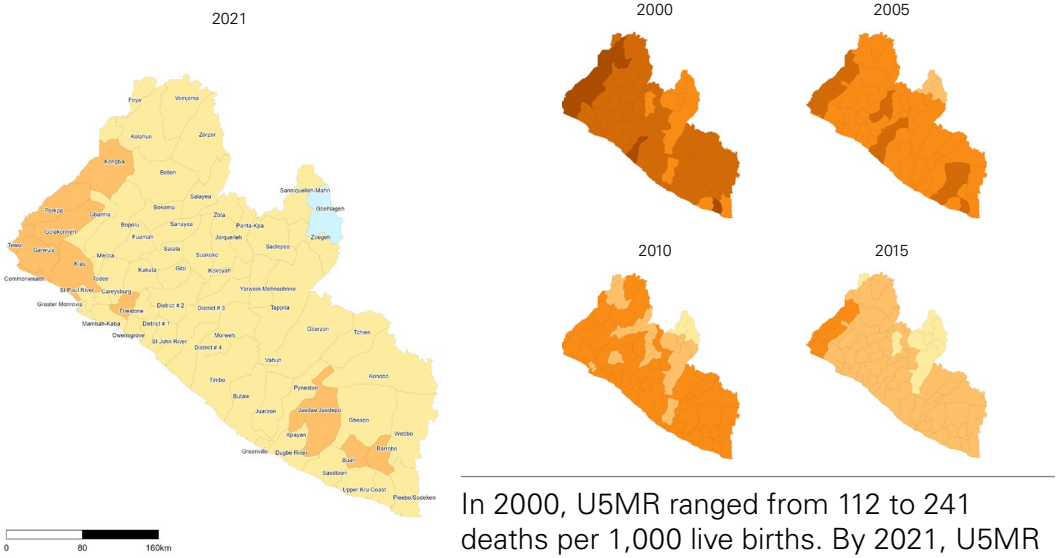


U5MR by administrative 1 area in Liberia, 2000-2021

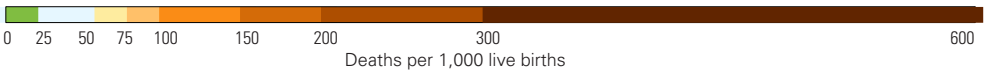


In 2000, U5MR ranged from 134 to 243 deaths per 1,000 live births. By 2021, U5MR ranged from 55 to 90 deaths per 1,000 live births.

U5MR by administrative 2 area in Liberia, 2000-2021



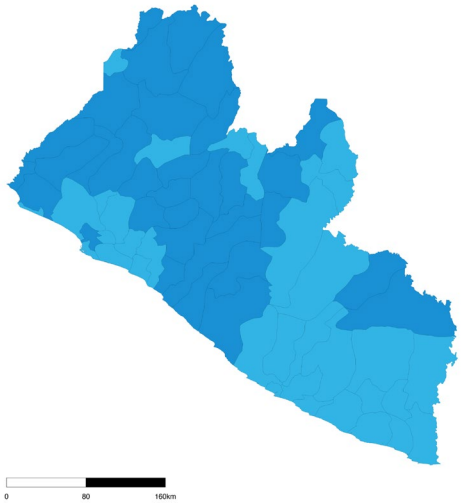
In 2000, U5MR ranged from 112 to 241 deaths per 1,000 live births. By 2021, U5MR ranged from 49 to 98 deaths per 1,000 live births.



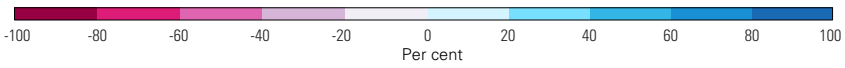
Percentage decline in administrative level 1 U5MR 2000-2021 in Liberia

The percentage decline in under-five mortality at administrative level 1 ranged from a low of 48 per cent to a high of 68 per cent.

Percentage decline in administrative level 2 U5MR 2000-2021 in Liberia

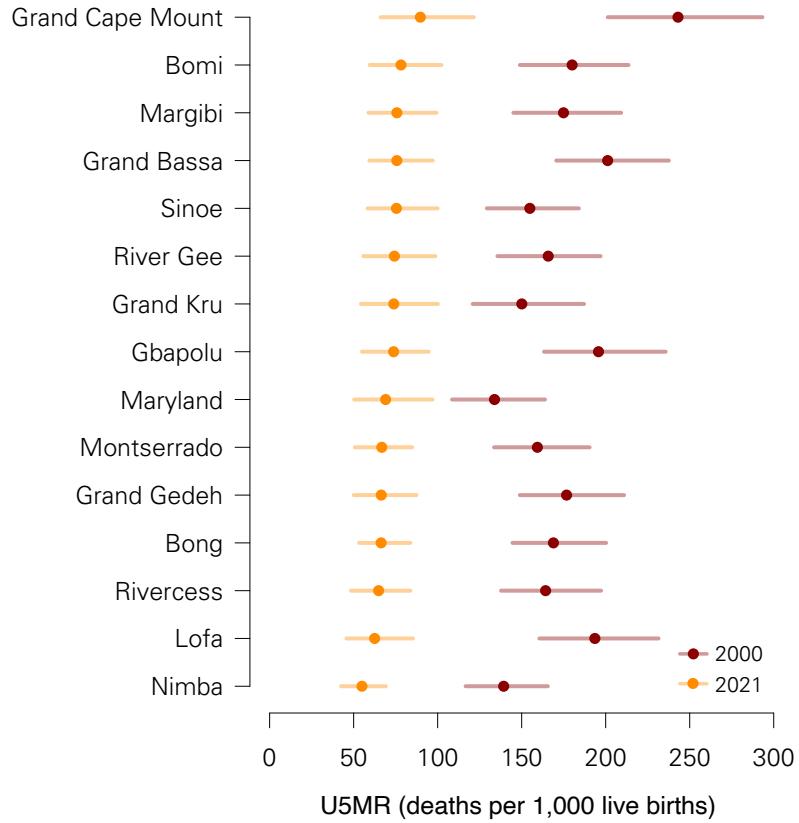


The percentage decline in under-five mortality at administrative level 2 ranged from a low of 49 per cent to a high of 70 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Liberia, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Grand Cape Mount, the highest mortality administrative level 1 area, was 1.8 times higher than in Maryland, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Grand Cape Mount, was 1.6 times higher than in the lowest mortality area, Nimba.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Liberia: Demographic and Health Survey 2013; Demographic and Health Survey 2019-2020; Malaria Indicator Survey 2008-2009.

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LIBERIA

NMR

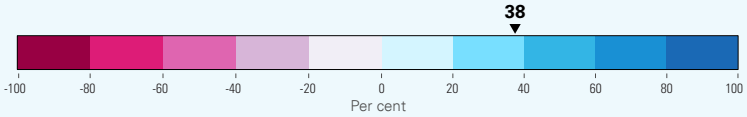
Administrative level 1 (County): **15**

Administrative level 2 (District): **66**

National level

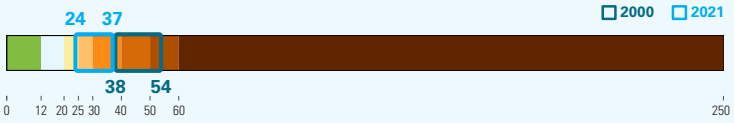
Neonatal mortality rate, 2000 and 2021

Percentage decline in neonatal mortality rate, 2000–2021

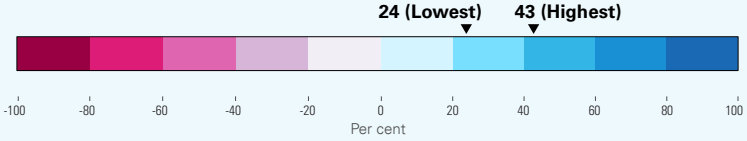


Administrative level 1

Neonatal mortality rate, 2000 and 2021 (range)



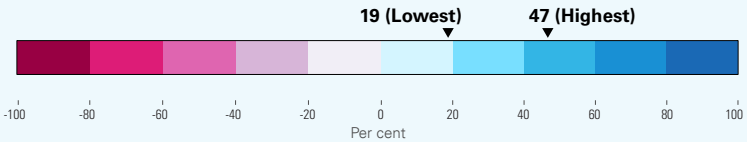
Percentage decline in neonatal mortality rate, 2000–2021 (range)



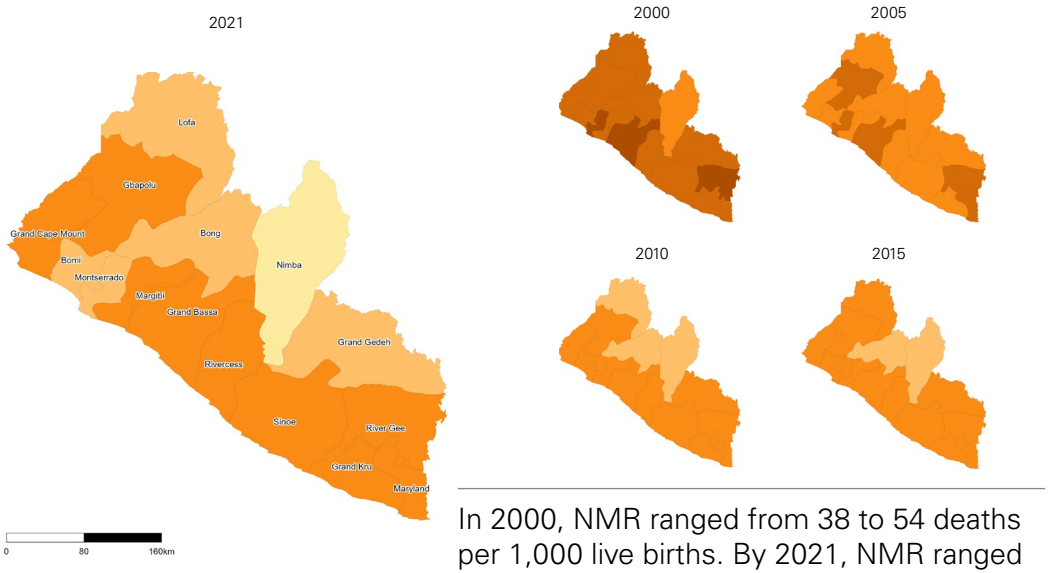
Administrative level 2

Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)

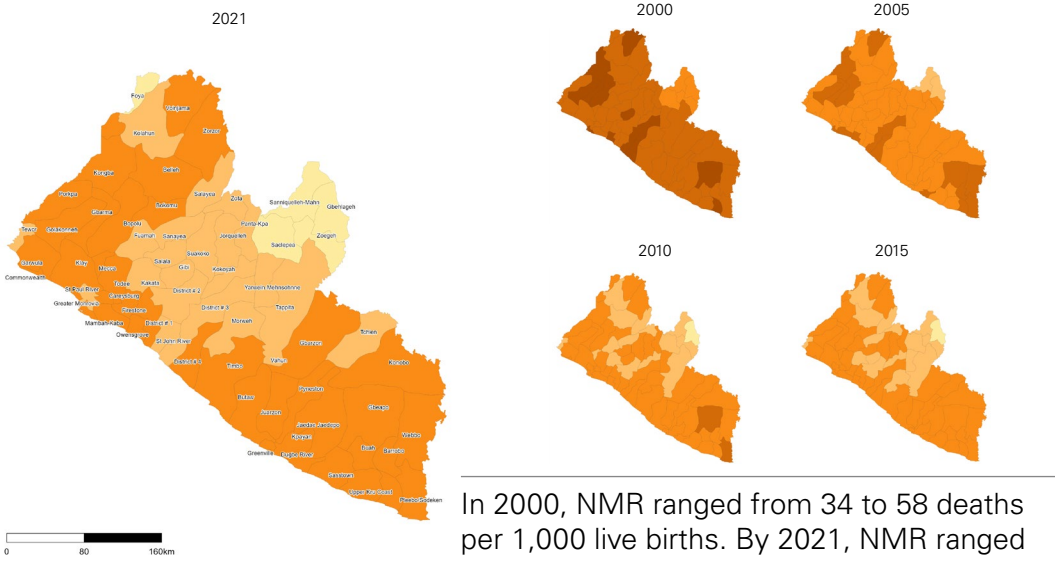


NMR by administrative 1 area in Liberia, 2000-2021



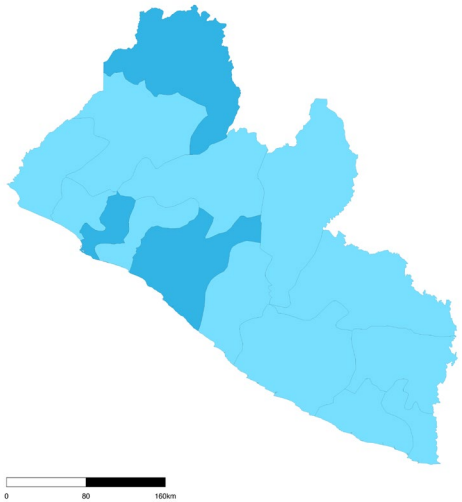
In 2000, NMR ranged from 38 to 54 deaths per 1,000 live births. By 2021, NMR ranged from 24 to 37 deaths per 1,000 live births.

NMR by administrative 2 area in Liberia, 2000-2021



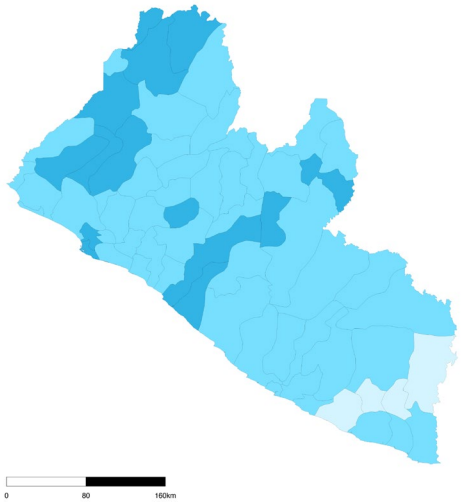
In 2000, NMR ranged from 34 to 58 deaths per 1,000 live births. By 2021, NMR ranged from 21 to 38 deaths per 1,000 live births.

Percentage decline in administrative level 1 NMR 2000-2021 in Liberia

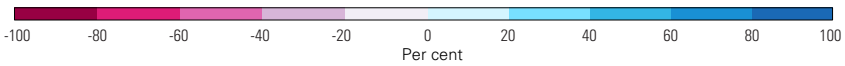


The percentage decline in neonatal mortality at administrative level 1 ranged from a low of 24 per cent to a high of 43 per cent.

Percentage decline in administrative level 2 NMR 2000-2021 in Liberia

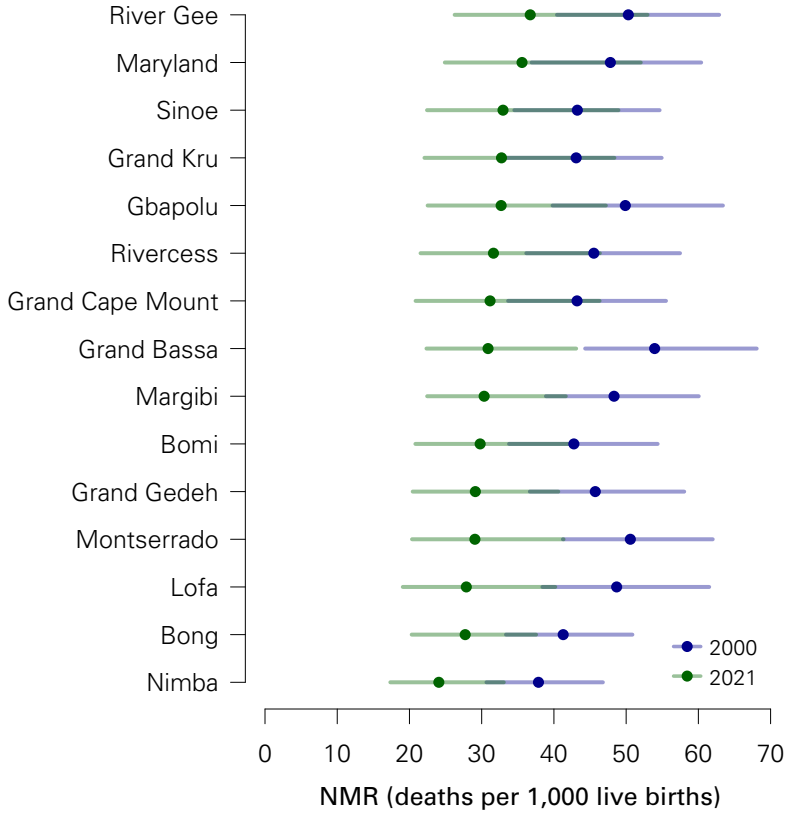


The percentage decline in neonatal mortality at administrative level 2 ranged from a low of 19 per cent to a high of 47 per cent.



NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Liberia, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Grand Bassa, the highest mortality administrative level 1 area, was 1.4 times higher than in Nimba, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, River Gee, was 1.5 times higher than in the lowest mortality area, Nimba.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

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Data sources for Liberia: Demographic and Health Survey 2013; Demographic and Health Survey 2019-2020; Malaria Indicator Survey 2008-2009.

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MADAGASCAR

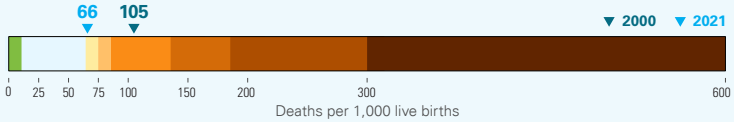
U5MR

Administrative level 1 (Region): **6**

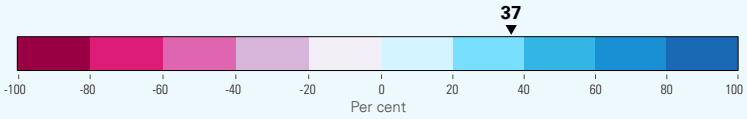
Administrative level 2 (District): **22**

National level

Under-five mortality rate, 2000 and 2021

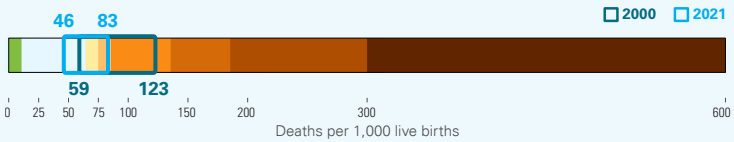


Percentage decline in under-five mortality rate, 2000–2021

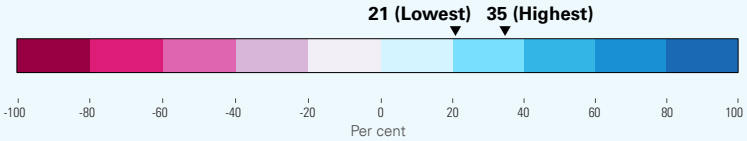


Administrative level 1

Under-five mortality rate, 2000 and 2021 (range)

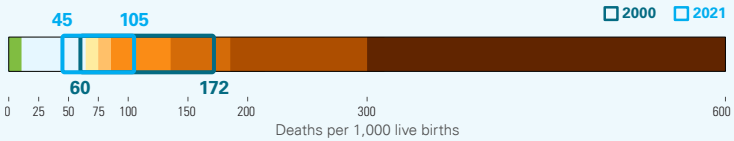


Percentage decline in under-five mortality rate, 2000–2021 (range)

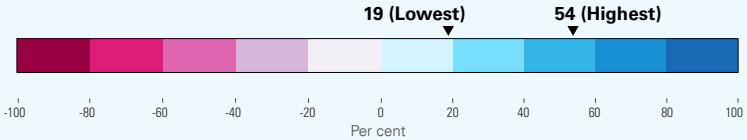


Administrative level 2

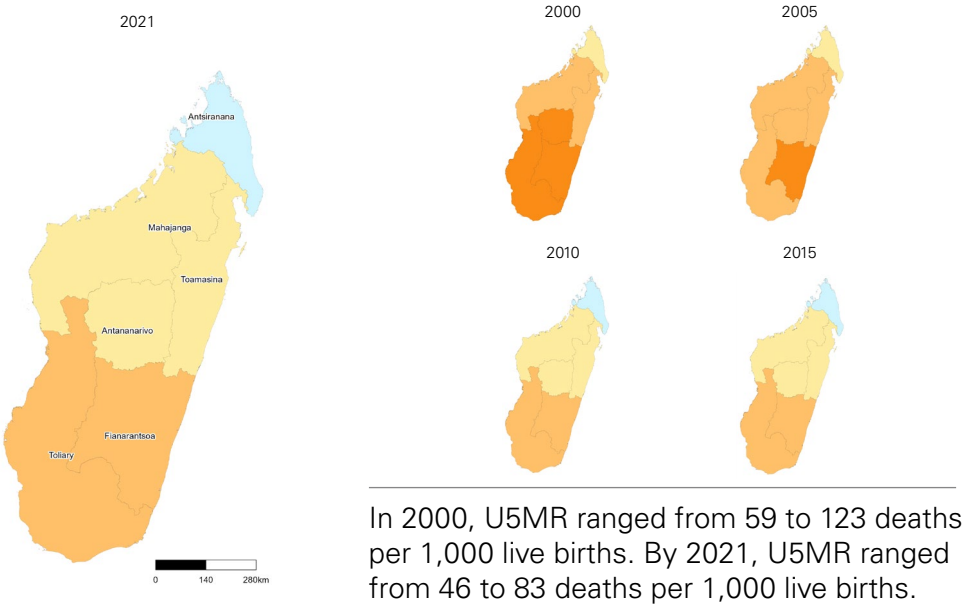
Under-five mortality rate, 2000 and 2021 (range)



Percentage decline in under-five mortality rate, 2000–2021 (range)

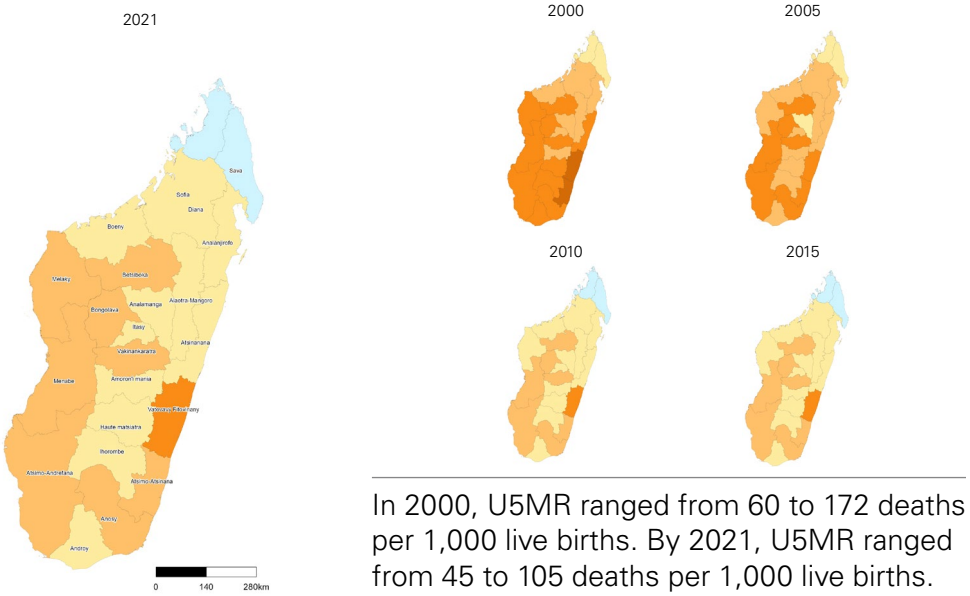


U5MR by administrative 1 area in Madagascar, 2000-2021



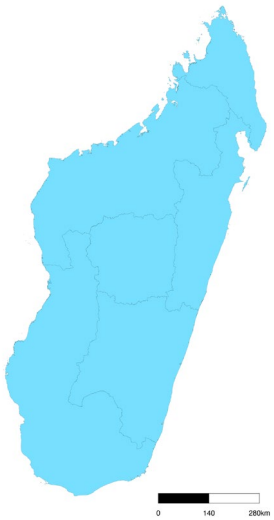
In 2000, U5MR ranged from 59 to 123 deaths per 1,000 live births. By 2021, U5MR ranged from 46 to 83 deaths per 1,000 live births.

U5MR by administrative 2 area in Madagascar, 2000-2021



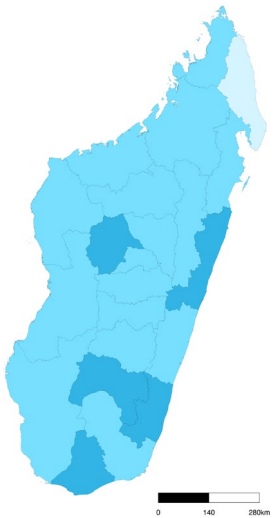
In 2000, U5MR ranged from 60 to 172 deaths per 1,000 live births. By 2021, U5MR ranged from 45 to 105 deaths per 1,000 live births.

Percentage decline in administrative level 1 U5MR 2000-2021 in Madagascar

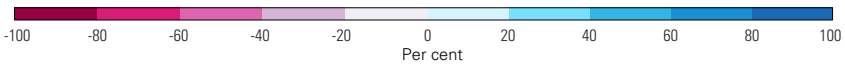


The percentage decline in under-five mortality at administrative level 1 ranged from a low of 21 per cent to a high of 35 per cent.

Percentage decline in administrative level 2 U5MR 2000-2021 in Madagascar

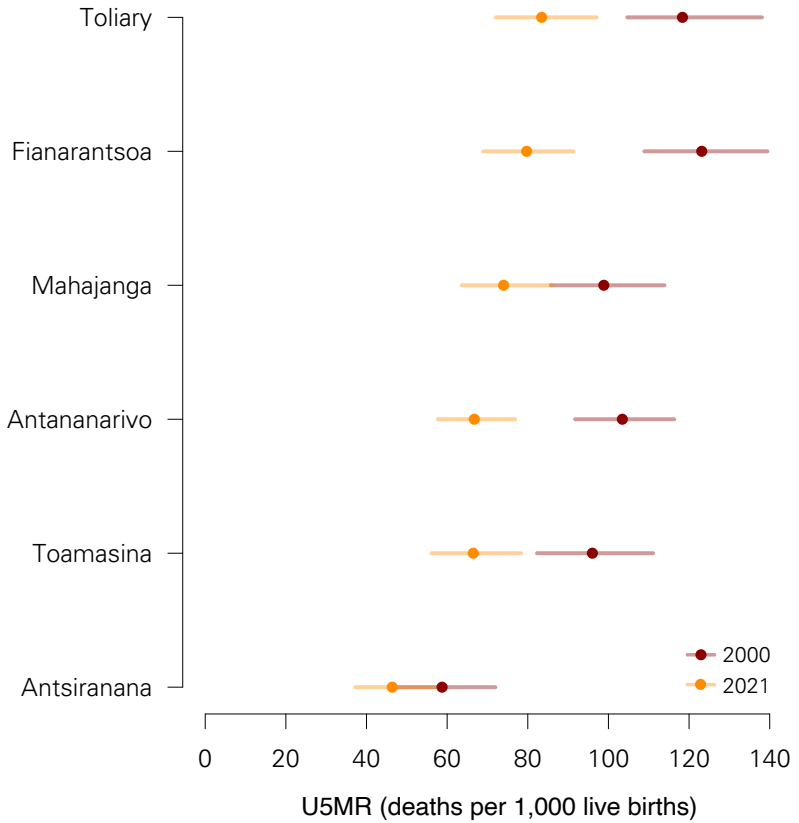


The percentage decline in under-five mortality at administrative level 2 ranged from a low of 19 per cent to a high of 54 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Madagascar, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Fianarantsoa, the highest mortality administrative level 1 area, was 2.1 times higher than in Antsiranana, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Toliary, was 1.8 times higher than in the lowest mortality area, Antsiranana.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Madagascar: Enquete Demographique et de Sante (EDSMDV) 2021; Multiple Indicator Cluster Survey 2018.

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MADAGASCAR

NMR

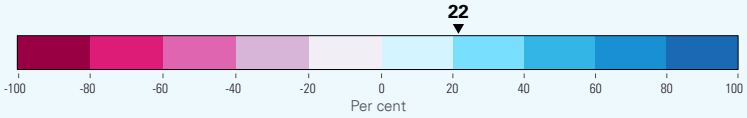
Administrative level 1 (Region): **6**

Administrative level 2 (District): **22**

National level

Neonatal mortality rate, 2000 and 2021

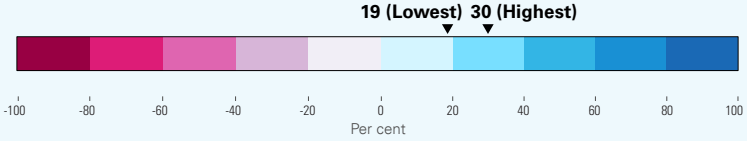
Percentage decline in neonatal mortality rate, 2000–2021



Administrative level 1

Neonatal mortality rate, 2000 and 2021 (range)

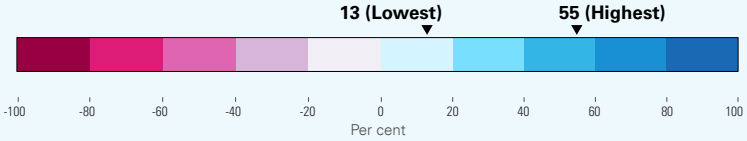
Percentage decline in neonatal mortality rate, 2000–2021 (range)



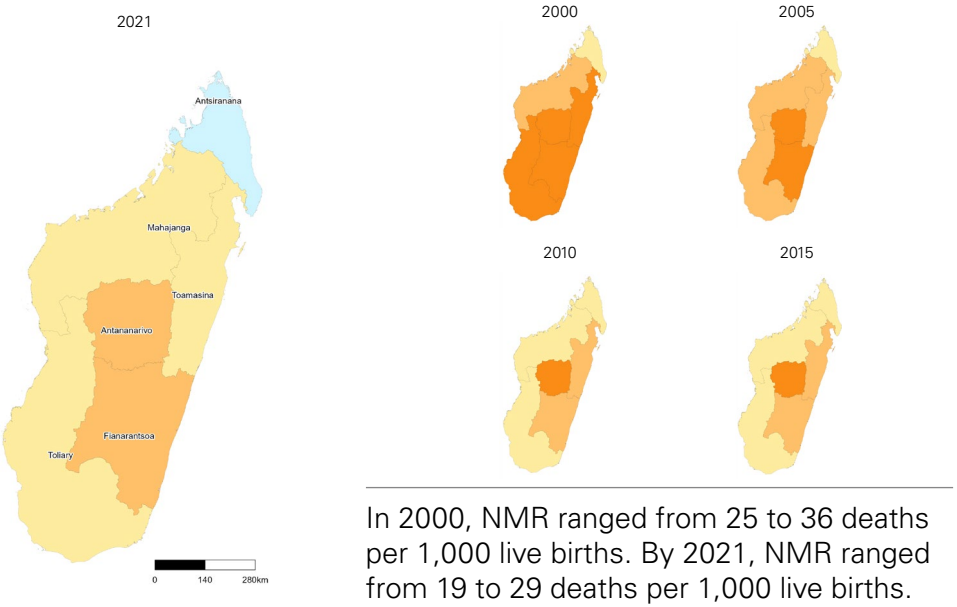
Administrative level 2

Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)

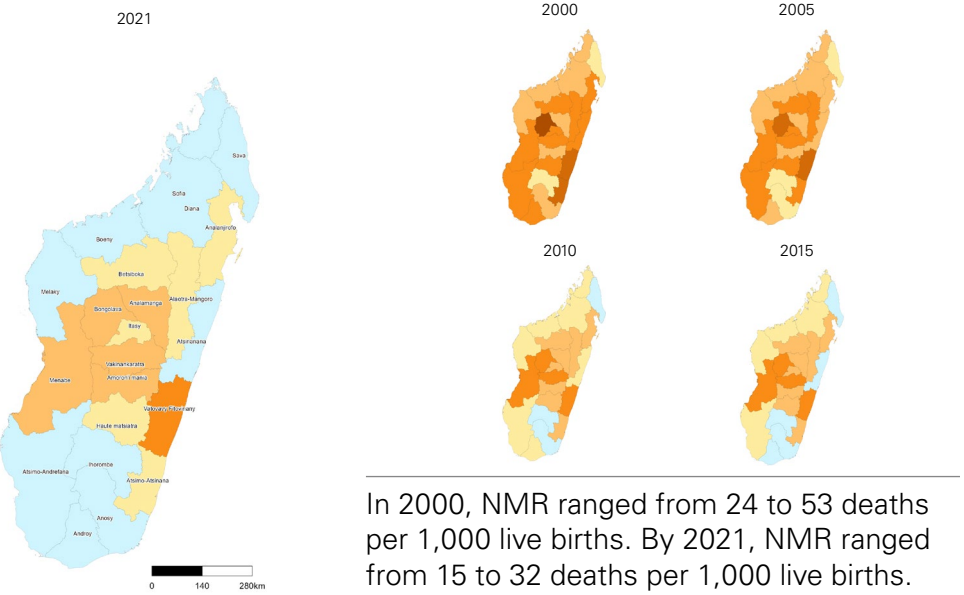


NMR by administrative 1 area in Madagascar, 2000-2021



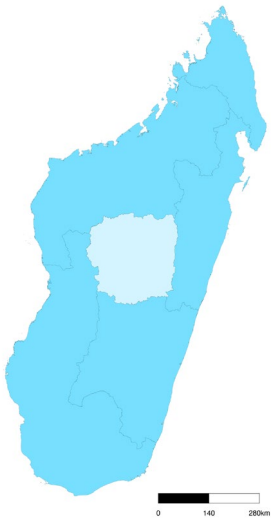
In 2000, NMR ranged from 25 to 36 deaths per 1,000 live births. By 2021, NMR ranged from 19 to 29 deaths per 1,000 live births.

NMR by administrative 2 area in Madagascar, 2000-2021



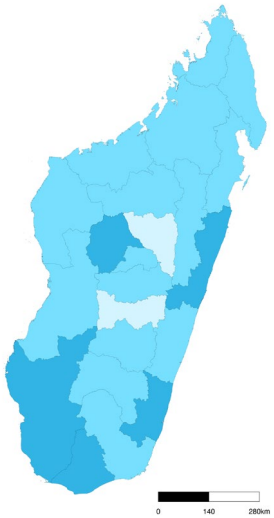
In 2000, NMR ranged from 24 to 53 deaths per 1,000 live births. By 2021, NMR ranged from 15 to 32 deaths per 1,000 live births.

Percentage decline in administrative level 1 NMR 2000-2021 in Madagascar

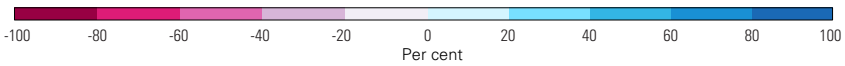


The percentage decline in neonatal mortality at administrative level 1 ranged from a low of 19 per cent to a high of 30 per cent.

Percentage decline in administrative level 2 NMR 2000-2021 in Madagascar

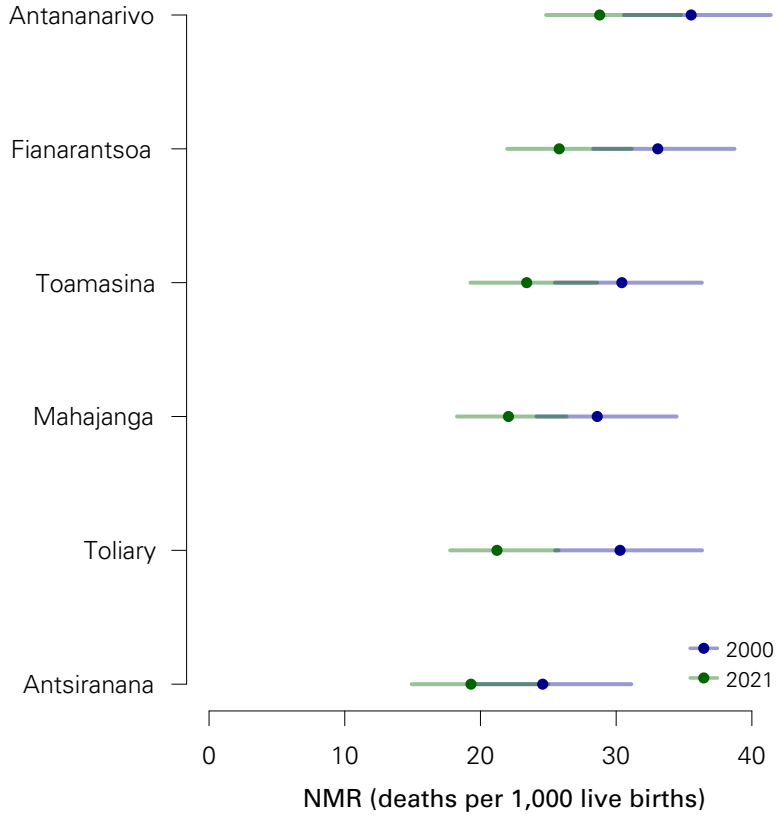


The percentage decline in neonatal mortality at administrative level 2 ranged from a low of 13 per cent to a high of 55 per cent.



NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Madagascar, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Antananarivo, the highest mortality administrative level 1 area, was 1.4 times higher than in Antsiranana, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, Antananarivo, was 1.5 times higher than in the lowest mortality area, Antsiranana.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Madagascar: Enquete Demographique et de Sante (EDSMDV) 2021; Multiple Indicator Cluster Survey 2018.

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MALAWI

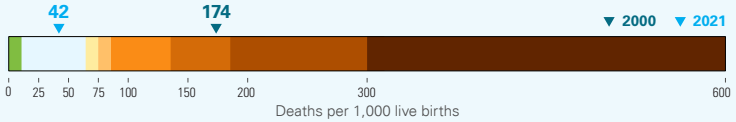
U5MR

Administrative level 1 (Region): **3**

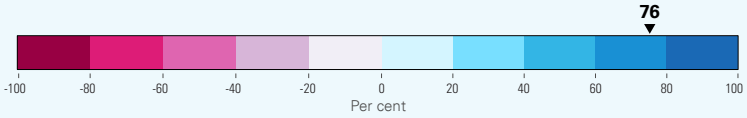
Administrative level 2 (District): **28**

National level

Under-five mortality rate, 2000 and 2021

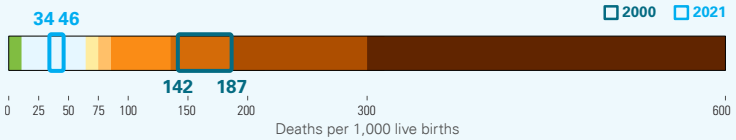


Percentage decline in under-five mortality rate, 2000–2021

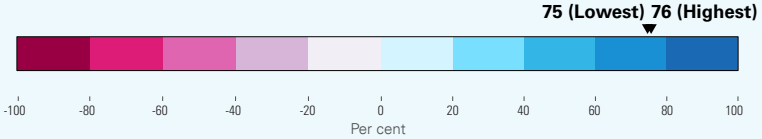


Administrative level 1

Under-five mortality rate, 2000 and 2021 (range)

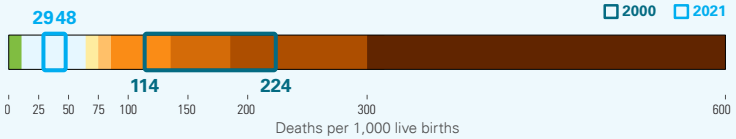


Percentage decline in under-five mortality rate, 2000–2021 (range)

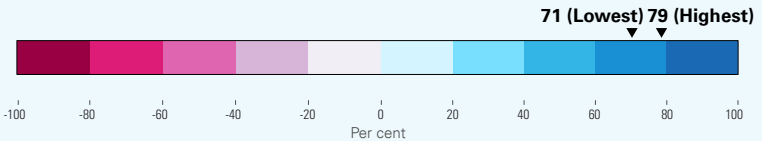


Administrative level 2

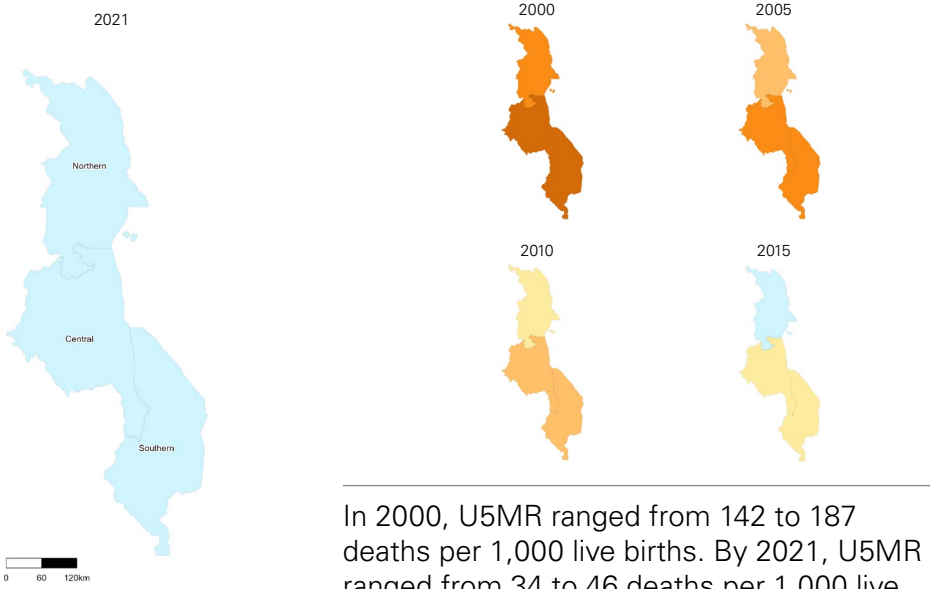
Under-five mortality rate, 2000 and 2021 (range)



Percentage decline in under-five mortality rate, 2000–2021 (range)

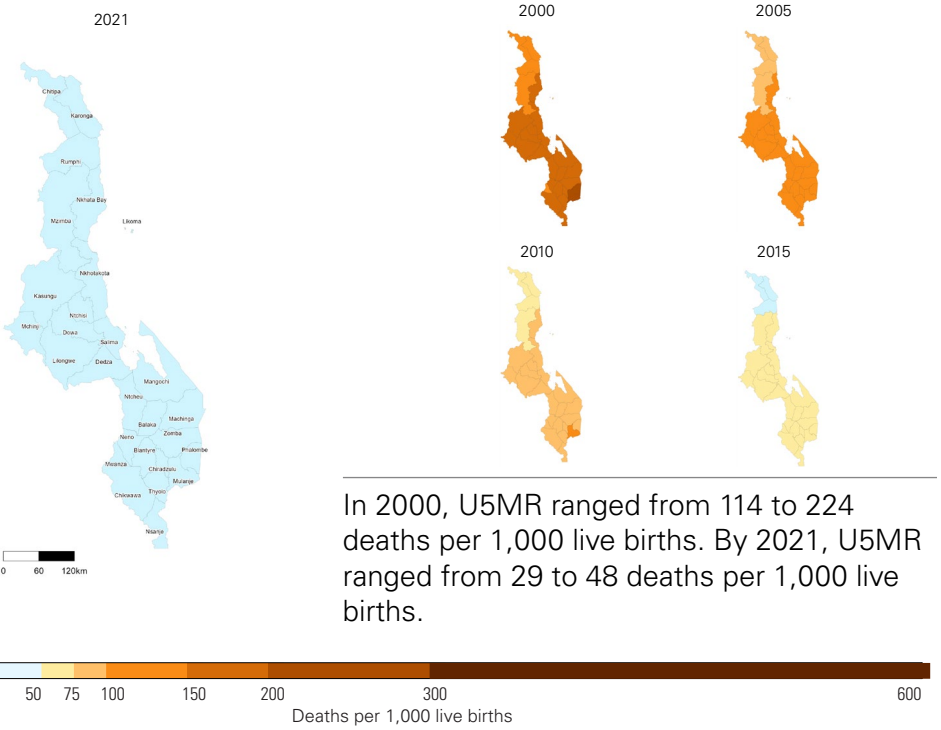


U5MR by administrative 1 area in Malawi, 2000-2021



In 2000, U5MR ranged from 142 to 187 deaths per 1,000 live births. By 2021, U5MR ranged from 34 to 46 deaths per 1,000 live births.

U5MR by administrative 2 area in Malawi, 2000-2021



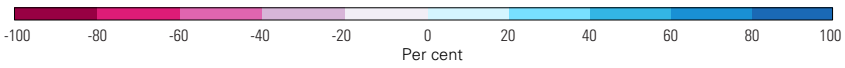
In 2000, U5MR ranged from 114 to 224 deaths per 1,000 live births. By 2021, U5MR ranged from 29 to 48 deaths per 1,000 live births.

Percentage decline in administrative level 1 U5MR 2000-2021 in Malawi

The percentage decline in under-five mortality at administrative level 1 ranged from a low of 75 per cent to a high of 76 per cent.

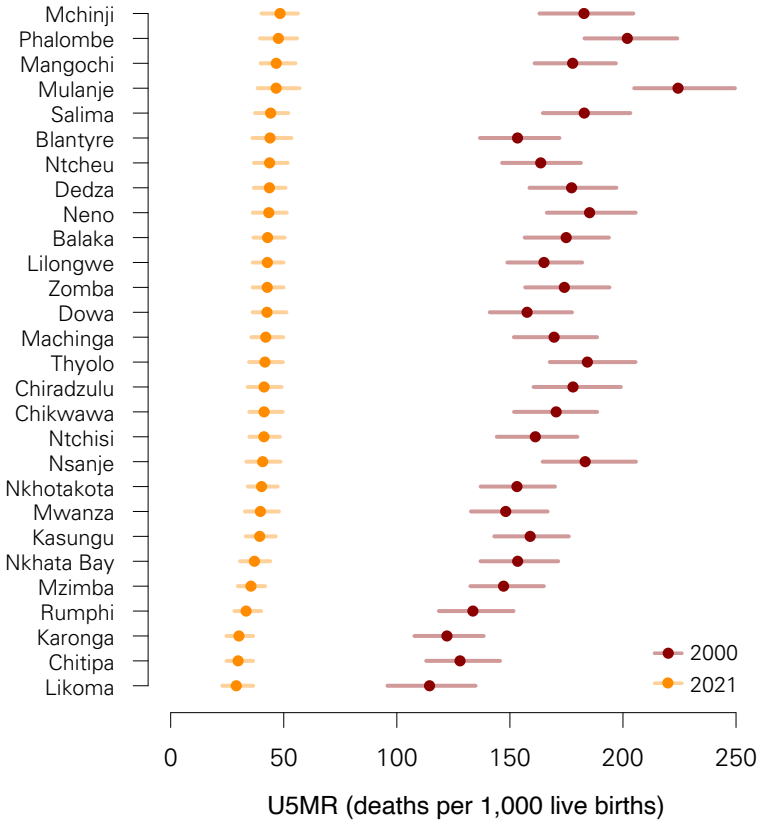
Percentage decline in administrative level 2 U5MR 2000-2021 in Malawi

The percentage decline in under-five mortality at administrative level 2 ranged from a low of 71 per cent to a high of 79 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 2 areas of Malawi, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Mulanje, the highest mortality administrative level 2 area, was 2 times higher than in Likoma, the lowest mortality area. In 2021, U5MR in the highest mortality area, Mchinji, was 1.7 times higher than in the lowest mortality area, Likoma.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Malawi: Demographic and Health Survey 2010; Demographic and Health Survey 2015-2016; Malaria Indicator Survey 2014.

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MALAWI

NMR

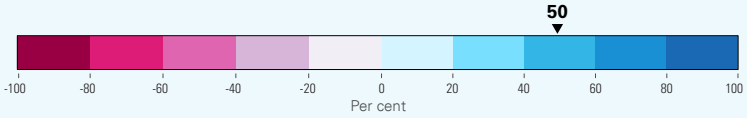
Administrative level 1 (Region): **3**

Administrative level 2 (District): **28**

National level

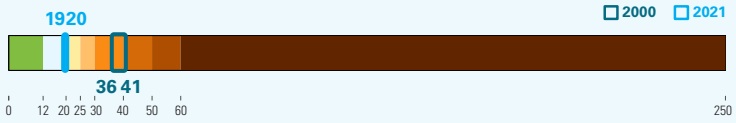
Neonatal mortality rate, 2000 and 2021

Percentage decline in neonatal mortality rate, 2000–2021

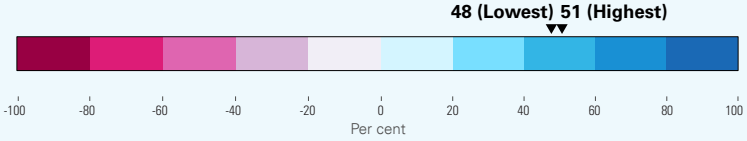


Administrative level 1

Neonatal mortality rate, 2000 and 2021 (range)



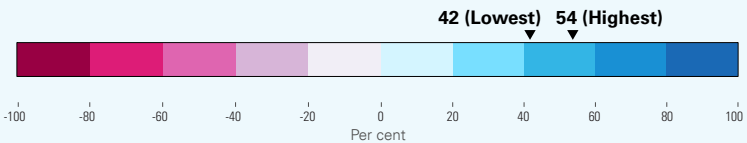
Percentage decline in neonatal mortality rate, 2000–2021 (range)



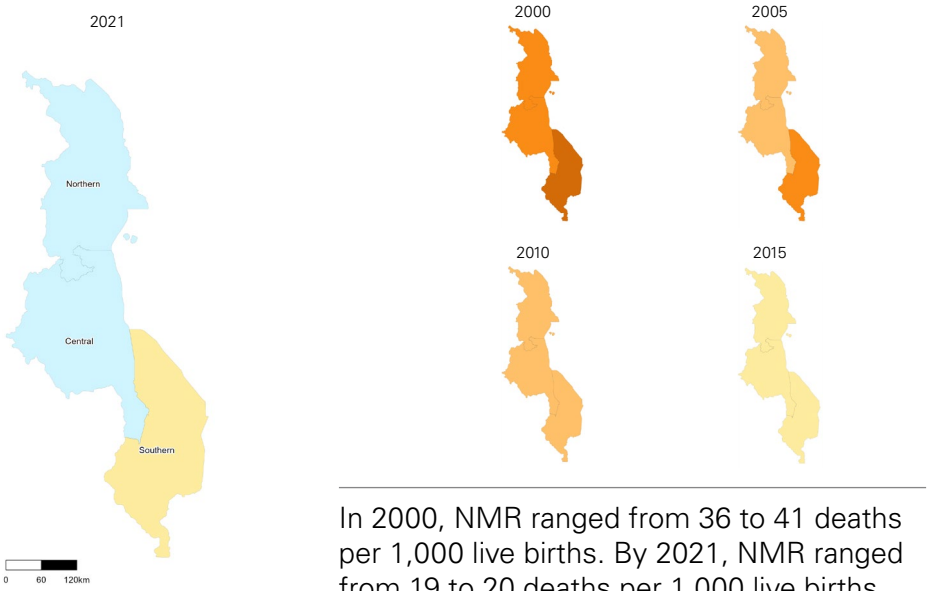
Administrative level 2

Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)

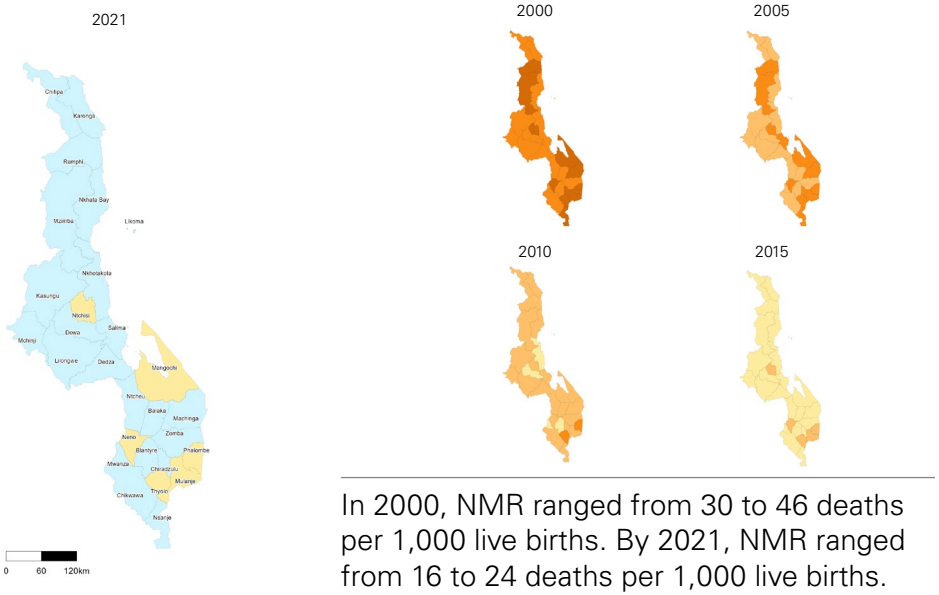


NMR by administrative 1 area in Malawi, 2000-2021



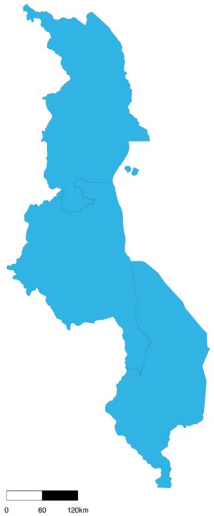
In 2000, NMR ranged from 36 to 41 deaths per 1,000 live births. By 2021, NMR ranged from 19 to 20 deaths per 1,000 live births.

NMR by administrative 2 area in Malawi, 2000-2021



In 2000, NMR ranged from 30 to 46 deaths per 1,000 live births. By 2021, NMR ranged from 16 to 24 deaths per 1,000 live births.

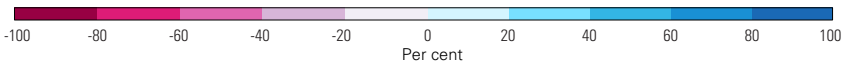
Percentage decline in administrative level 1 NMR 2000-2021 in Malawi



The percentage decline in neonatal mortality at administrative level 1 ranged from a low of 48 per cent to a high of 51 per cent.

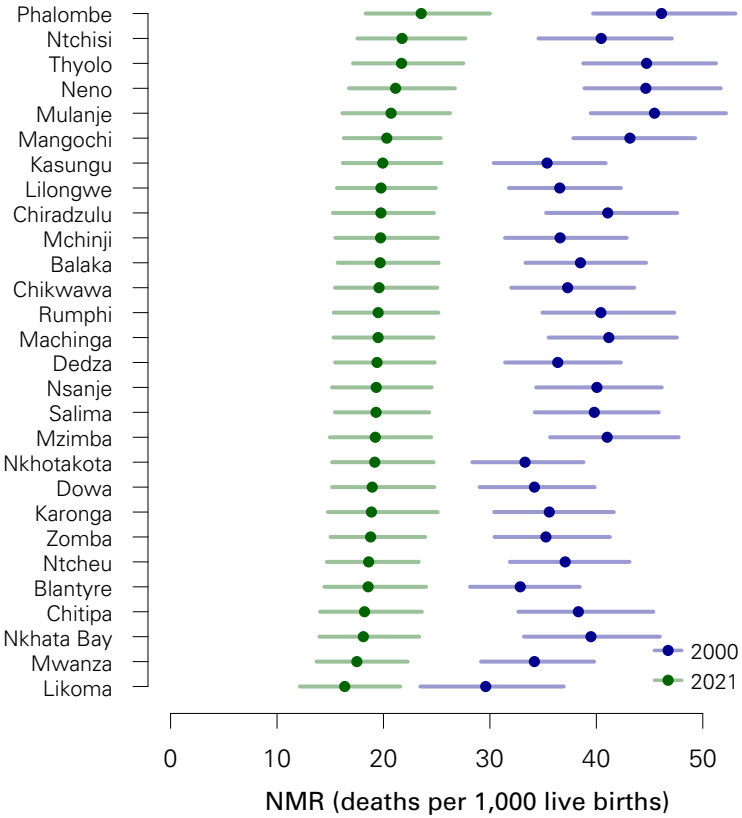
Percentage decline in administrative level 2 NMR 2000-2021 in Malawi

The percentage decline in neonatal mortality at administrative level 2 ranged from a low of 42 per cent to a high of 54 per cent.



NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 2 areas of Malawi, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Phalombe, the highest mortality administrative level 2 area, was 1.6 times higher than in Likoma, the lowest mortality area. In 2021, NMR in the highest mortality area, Phalombe, was 1.4 times higher than in the lowest mortality area, Likoma.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

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Data sources for Malawi: Demographic and Health Survey 2010; Demographic and Health Survey 2015-2016; Malaria Indicator Survey 2014.

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MALI

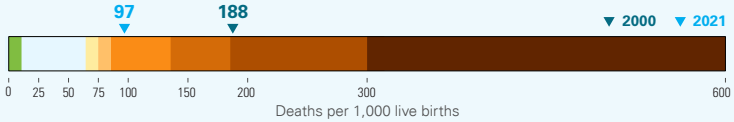
U5MR

Administrative level 1 (District, Region): **9**

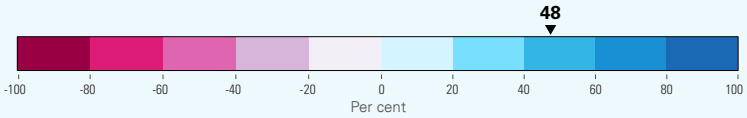
Administrative level 2 (Circle): **50**

National level

Under-five mortality rate, 2000 and 2021

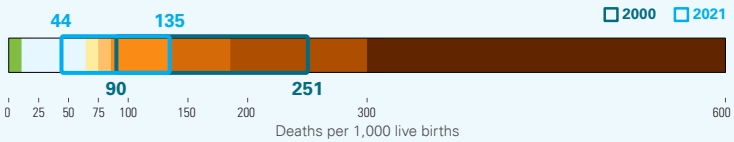


Percentage decline in under-five mortality rate, 2000–2021

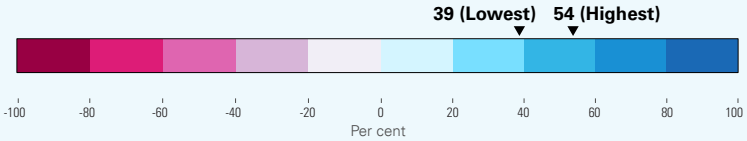


Administrative level 1

Under-five mortality rate, 2000 and 2021 (range)

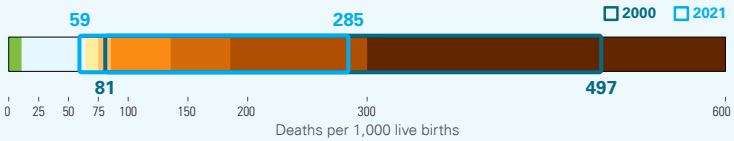


Percentage decline in under-five mortality rate, 2000–2021 (range)

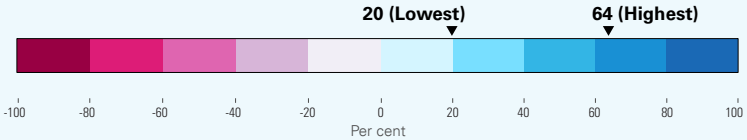


Administrative level 2

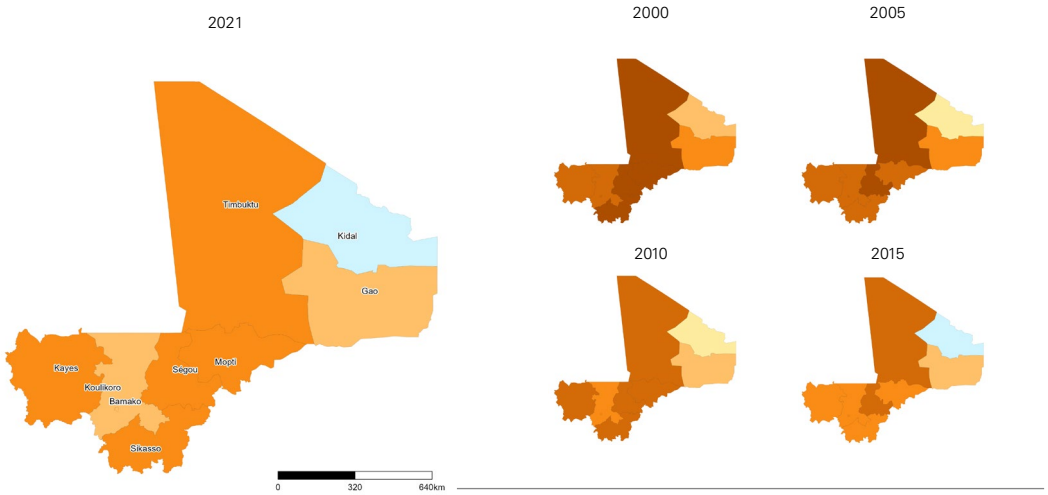
Under-five mortality rate, 2000 and 2021 (range)



Percentage decline in under-five mortality rate, 2000–2021 (range)

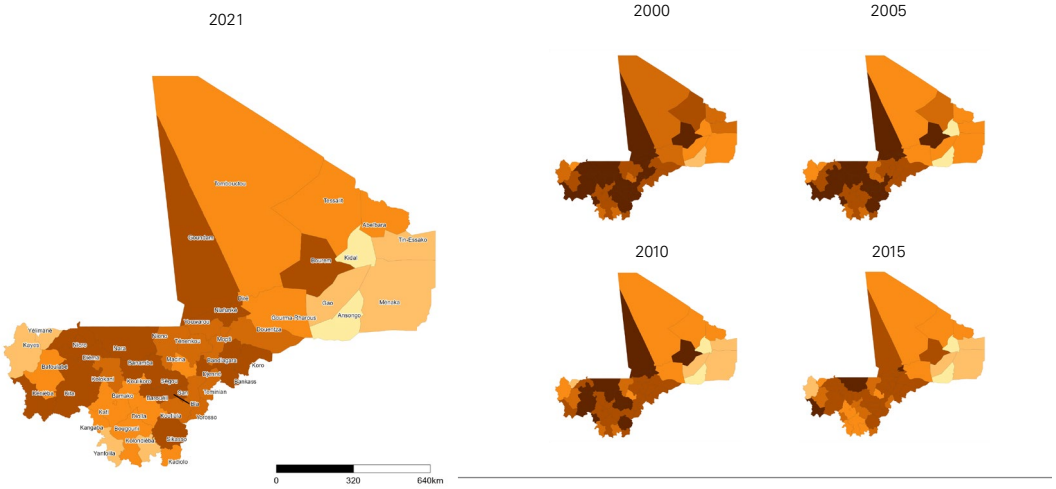


U5MR by administrative 1 area in Mali, 2000-2021

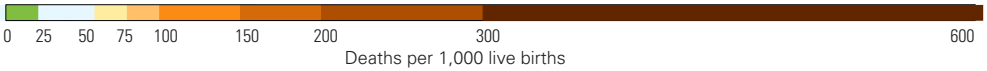


In 2000, U5MR ranged from 90 to 251 deaths per 1,000 live births. By 2021, U5MR ranged from 44 to 135 deaths per 1,000 live births.

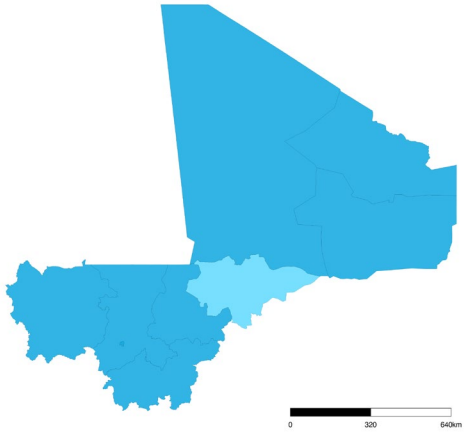
U5MR by administrative 2 area in Mali, 2000-2021



In 2000, U5MR ranged from 81 to 497 deaths per 1,000 live births. By 2021, U5MR ranged from 59 to 285 deaths per 1,000 live births.

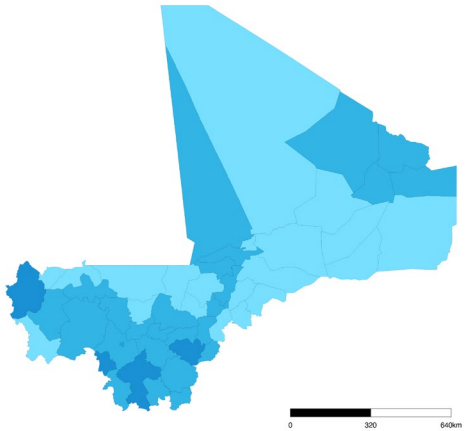


Percentage decline in administrative level 1 U5MR 2000-2021 in Mali

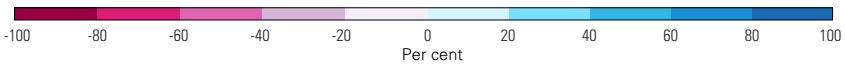


The percentage decline in under-five mortality at administrative level 1 ranged from a low of 39 per cent to a high of 54 per cent.

Percentage decline in administrative level 2 U5MR 2000-2021 in Mali

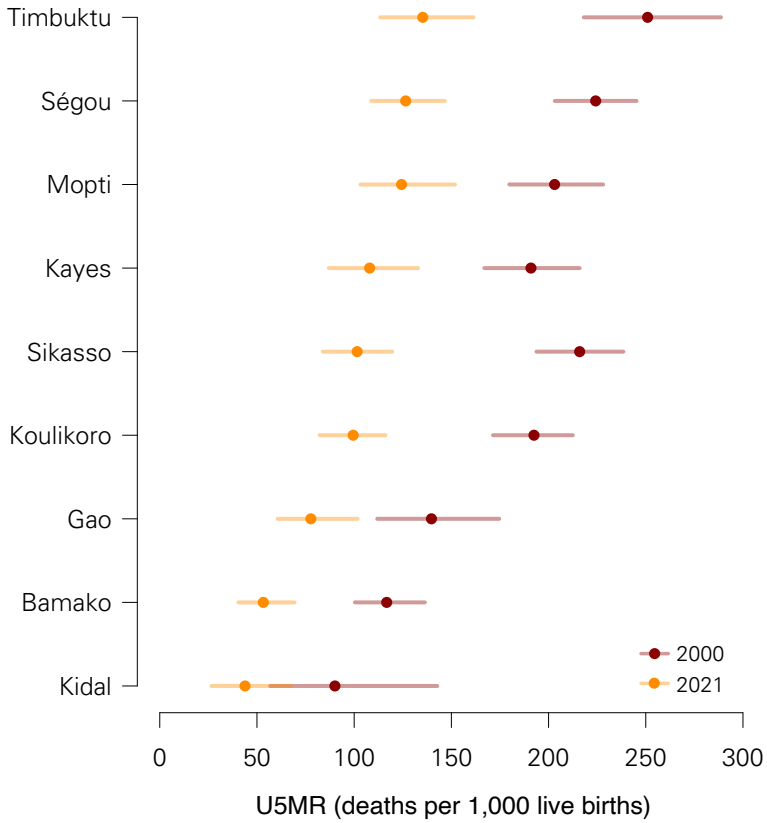


The percentage decline in under-five mortality at administrative level 2 ranged from a low of 20 per cent to a high of 64 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Mali, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Timbuktu, the highest mortality administrative level 1 area, was 2.8 times higher than in Kidal, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Timbuktu, was 3.1 times higher than in the lowest mortality area, Kidal.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Mali: Demographic and Health Survey 2012-2013; Demographic and Health Survey 2018.

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MALI

NMR

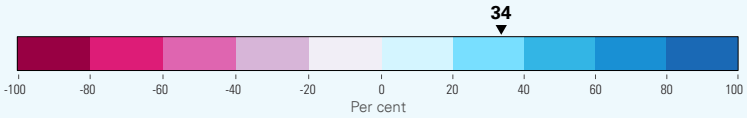
Administrative level 1 (District, Region): **9**

Administrative level 2 (Circle): **50**

National level

Neonatal mortality rate, 2000 and 2021

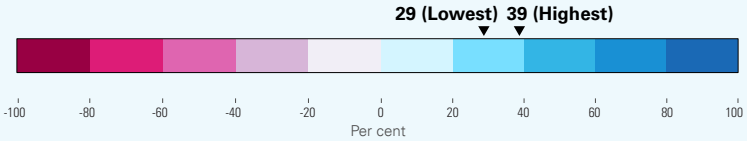
Percentage decline in neonatal mortality rate, 2000–2021



Administrative level 1

Neonatal mortality rate, 2000 and 2021 (range)

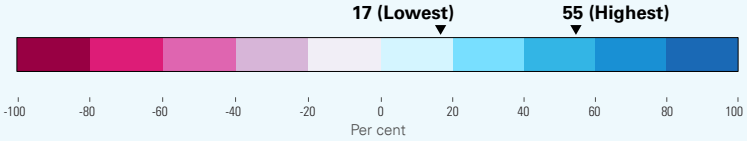
Percentage decline in neonatal mortality rate, 2000–2021 (range)



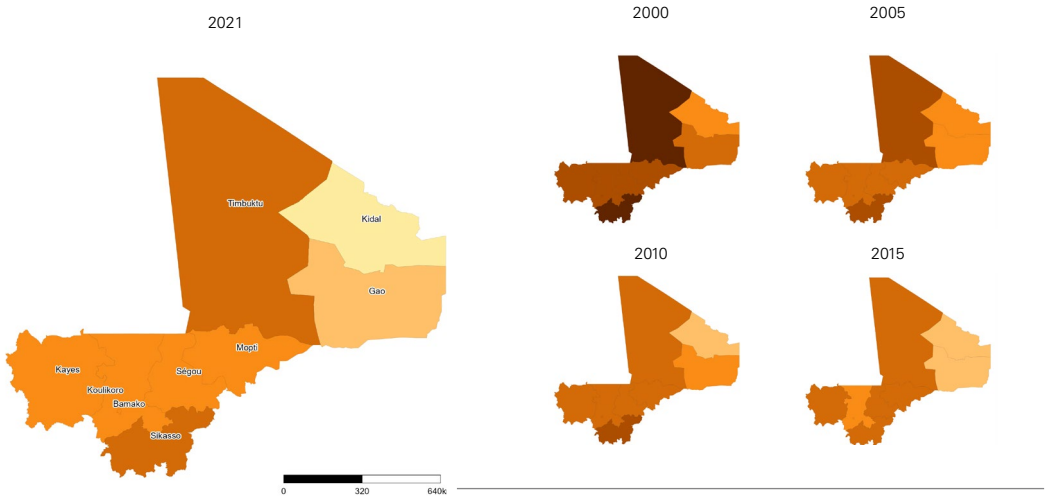
Administrative level 2

Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)

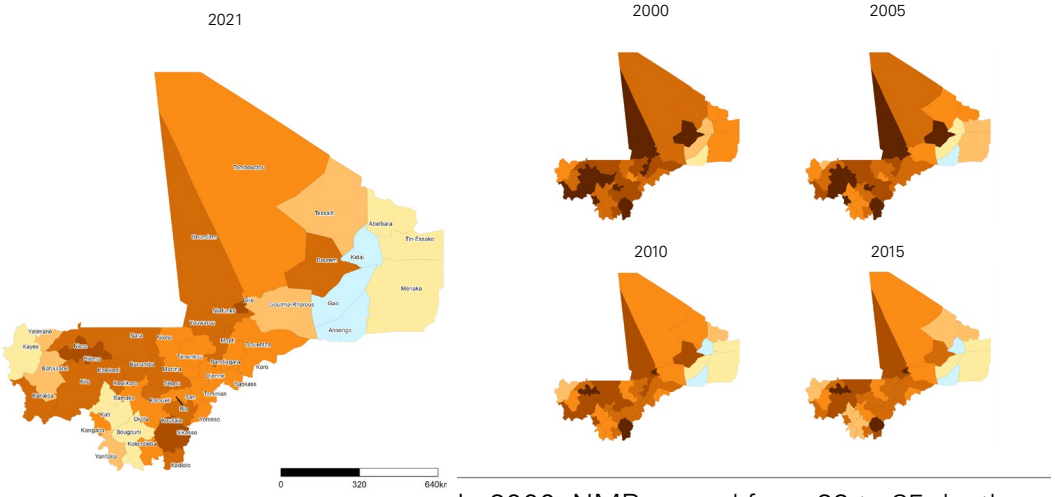


NMR by administrative 1 area in Mali, 2000-2021



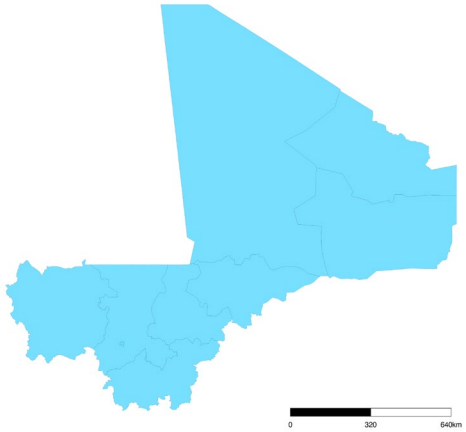
In 2000, NMR ranged from 35 to 62 deaths per 1,000 live births. By 2021, NMR ranged from 23 to 42 deaths per 1,000 live births.

NMR by administrative 2 area in Mali, 2000-2021



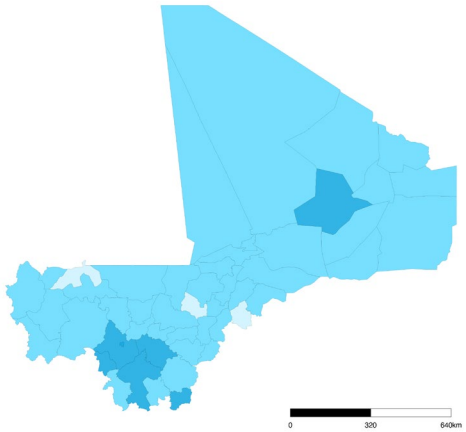
In 2000, NMR ranged from 22 to 85 deaths per 1,000 live births. By 2021, NMR ranged from 15 to 60 deaths per 1,000 live births.

Percentage decline in administrative level 1 NMR 2000-2021 in Mali

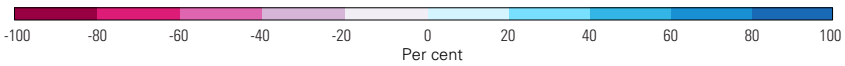


The percentage decline in neonatal mortality at administrative level 1 ranged from a low of 29 per cent to a high of 39 per cent.

Percentage decline in administrative level 2 NMR 2000-2021 in Mali

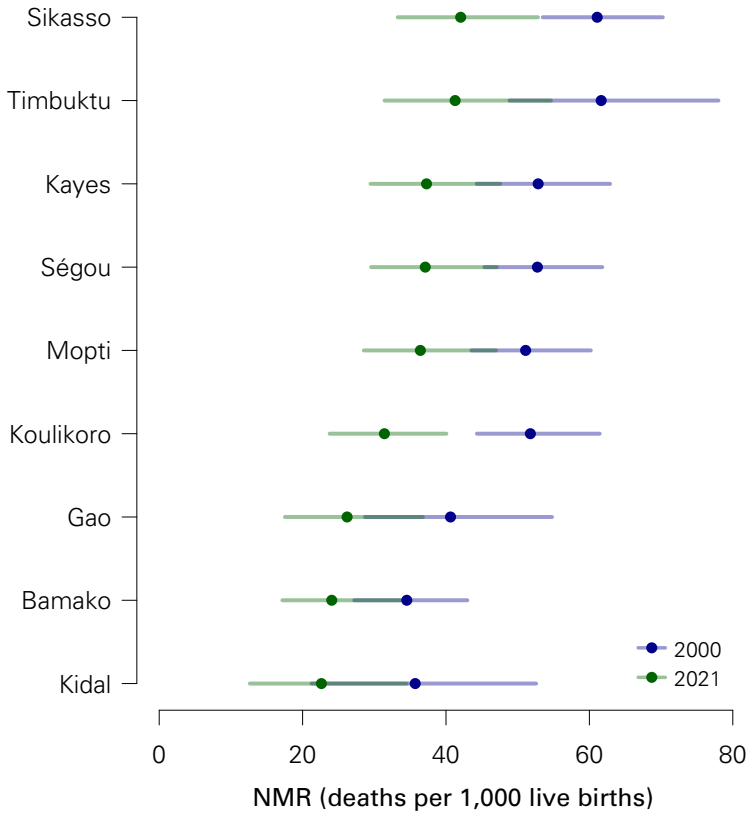


The percentage decline in neonatal mortality at administrative level 2 ranged from a low of 17 per cent to a high of 55 per cent.



NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Mali, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Timbuktu, the highest mortality administrative level 1 area, was 1.8 times higher than in Bamako, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, Sikasso, was 1.9 times higher than in the lowest mortality area, Kidal.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

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Data sources for Mali: Demographic and Health Survey 2012-2013; Demographic and Health Survey 2018.

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MAURITANIA

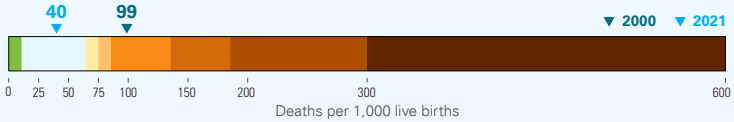
U5MR

Administrative level 1 (Region, District): **13**

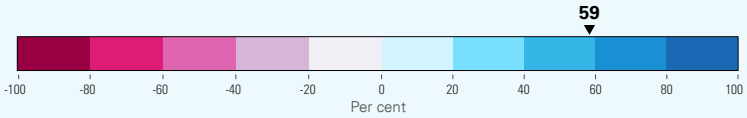
Administrative level 2 (Department): **44**

National level

Under-five mortality rate, 2000 and 2021

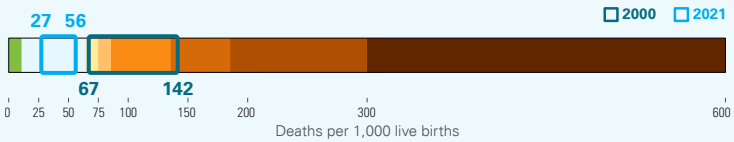


Percentage decline in under-five mortality rate, 2000–2021

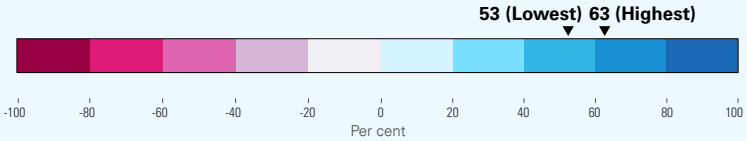


Administrative level 1

Under-five mortality rate, 2000 and 2021 (range)

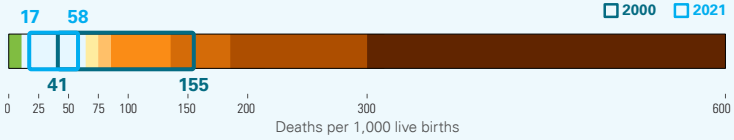


Percentage decline in under-five mortality rate, 2000–2021 (range)

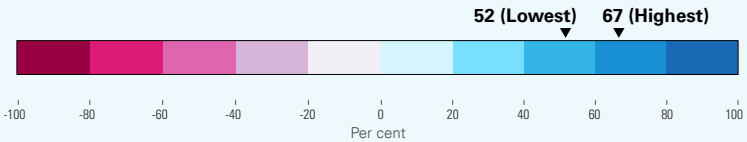


Administrative level 2

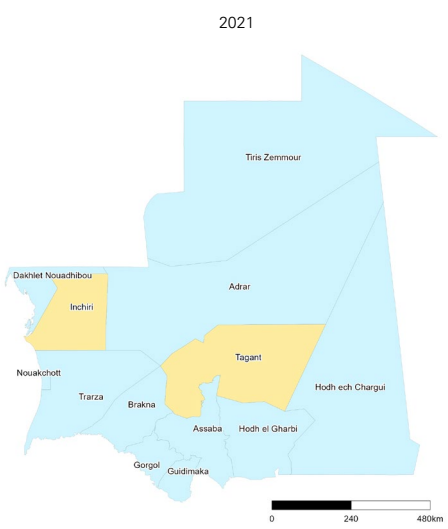
Under-five mortality rate, 2000 and 2021 (range)

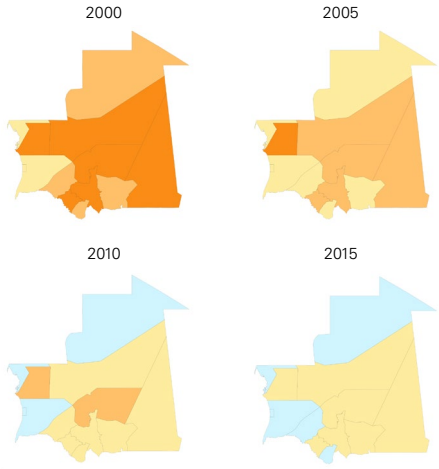


Percentage decline in under-five mortality rate, 2000–2021 (range)



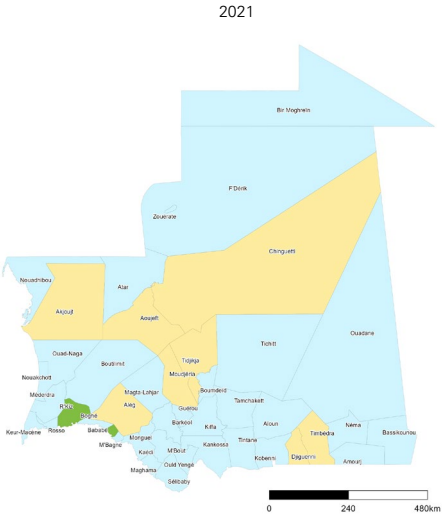
U5MR by administrative 1 area in Mauritania, 2000-2021

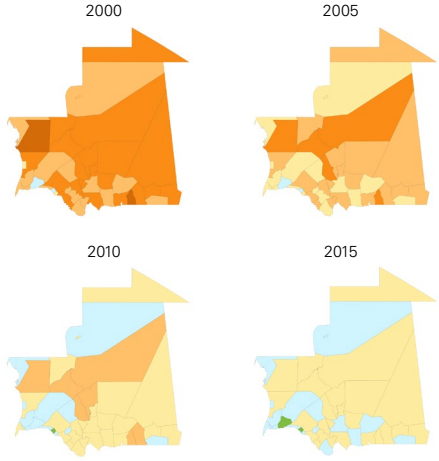




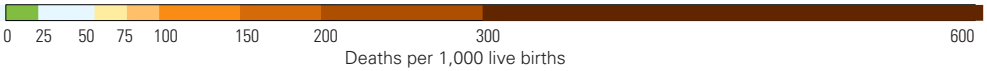
In 2000, U5MR ranged from 67 to 142 deaths per 1,000 live births. By 2021, U5MR ranged from 27 to 56 deaths per 1,000 live births.

U5MR by administrative 2 area in Mauritania, 2000-2021

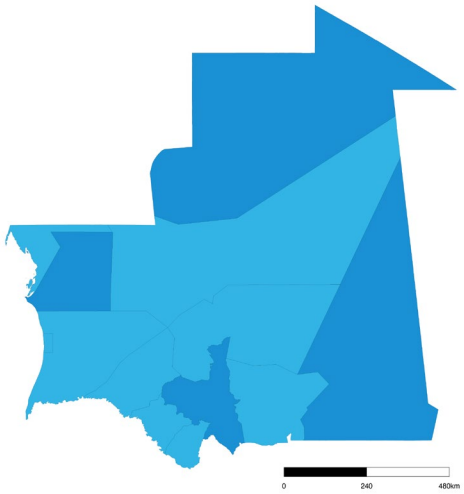




In 2000, U5MR ranged from 41 to 155 deaths per 1,000 live births. By 2021, U5MR ranged from 17 to 58 deaths per 1,000 live births.

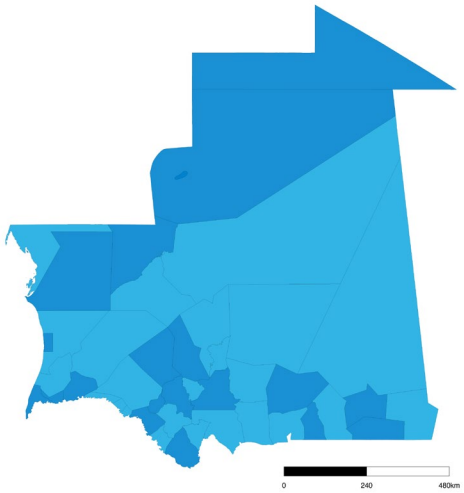


Percentage decline in administrative level 1 U5MR 2000-2021 in Mauritania

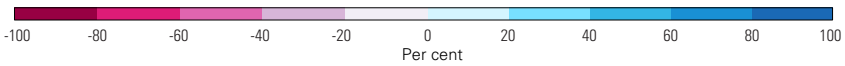


The percentage decline in under-five mortality at administrative level 1 ranged from a low of 53 per cent to a high of 63 per cent.

Percentage decline in administrative level 2 U5MR 2000-2021 in Mauritania

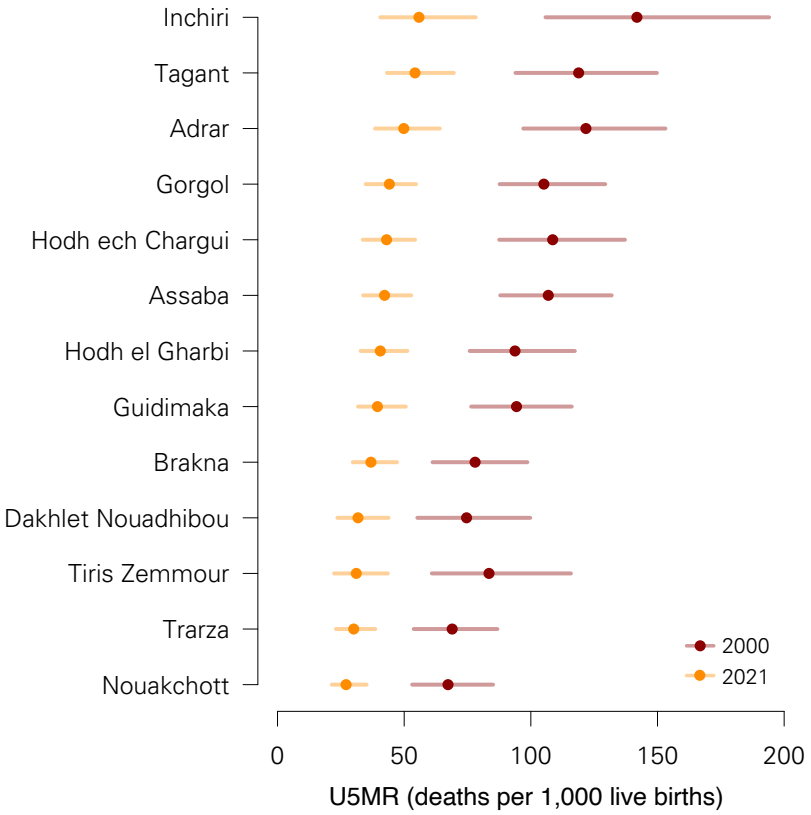


The percentage decline in under-five mortality at administrative level 2 ranged from a low of 52 per cent to a high of 67 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Mauritania, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Inchiri, the highest mortality administrative level 1 area, was 2.1 times higher than in Nouakchott, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Inchiri, was 2.1 times higher than in the lowest mortality area, Nouakchott.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

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Data sources for Mauritania: Demographic and Health Survey 2019-2021.

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MAURITANIA

NMR

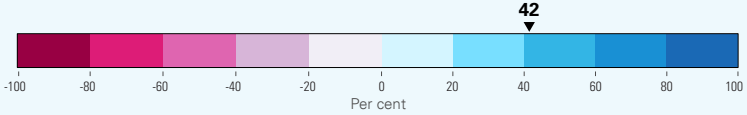
Administrative level 1 (Region, District): **13**

Administrative level 2 (Department): **44**

National level

Neonatal mortality rate, 2000 and 2021

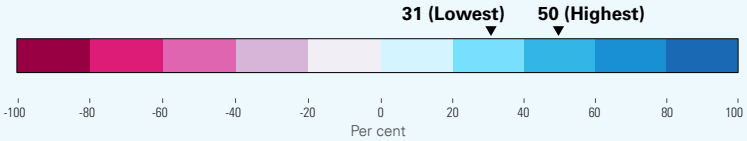
Percentage decline in neonatal mortality rate, 2000–2021



Administrative level 1

Neonatal mortality rate, 2000 and 2021 (range)

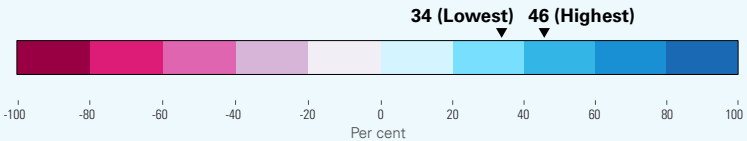
Percentage decline in neonatal mortality rate, 2000–2021 (range)



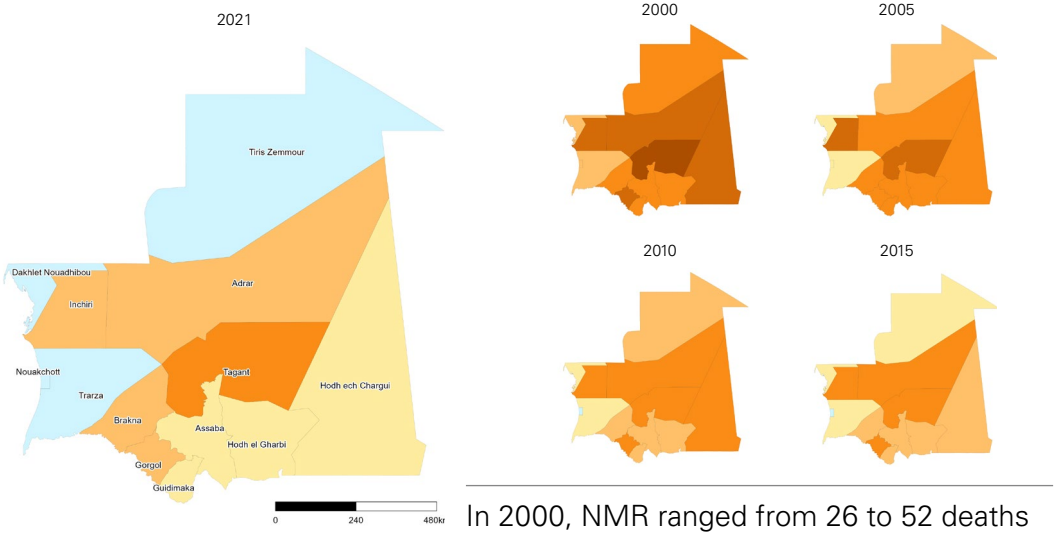
Administrative level 2

Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)

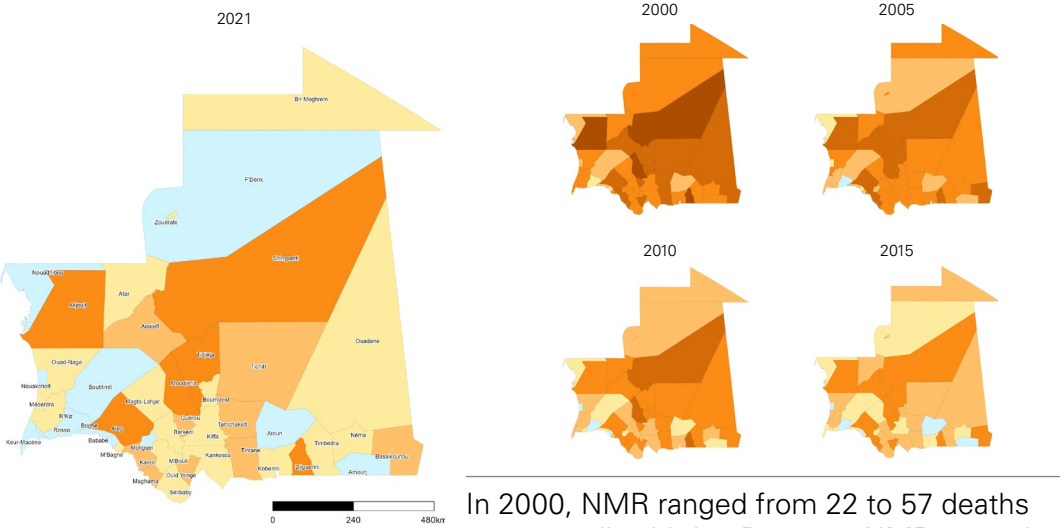


NMR by administrative 1 area in Mauritania, 2000-2021



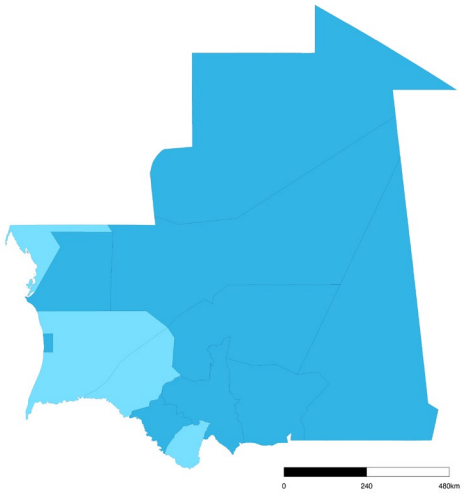
In 2000, NMR ranged from 26 to 52 deaths per 1,000 live births. By 2021, NMR ranged from 14 to 31 deaths per 1,000 live births.

NMR by administrative 2 area in Mauritania, 2000-2021



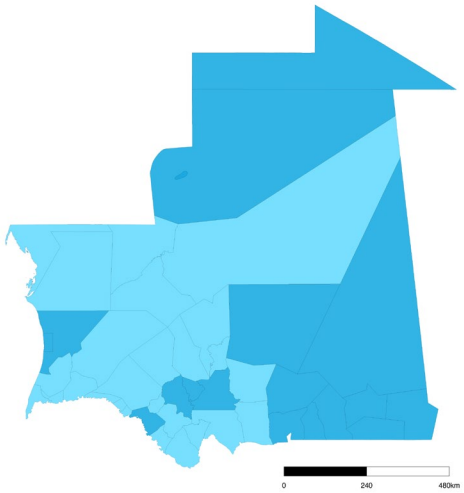
In 2000, NMR ranged from 22 to 57 deaths per 1,000 live births. By 2021, NMR ranged from 14 to 33 deaths per 1,000 live births.

Percentage decline in administrative level 1 NMR 2000-2021 in Mauritania

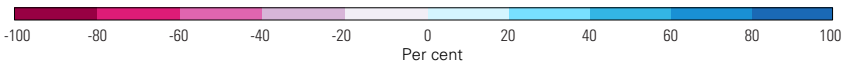


The percentage decline in neonatal mortality at administrative level 1 ranged from a low of 31 per cent to a high of 50 per cent.

Percentage decline in administrative level 2 NMR 2000-2021 in Mauritania

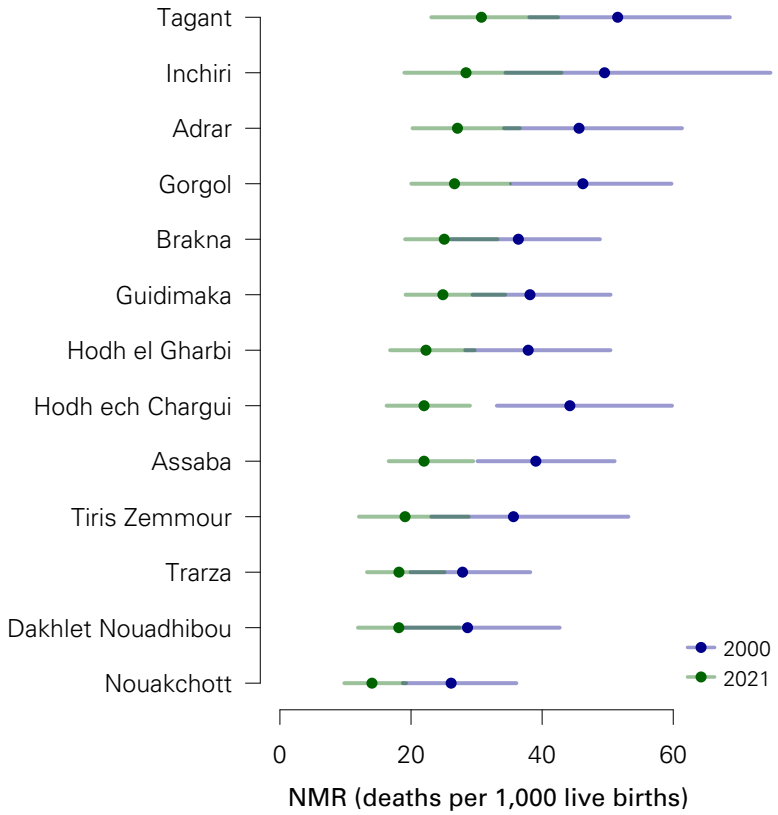


The percentage decline in neonatal mortality at administrative level 2 ranged from a low of 34 per cent to a high of 46 per cent.



NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Mauritania, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Tagant, the highest mortality administrative level 1 area, was 2 times higher than in Nouakchott, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, Tagant, was 2.2 times higher than in the lowest mortality area, Nouakchott.



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MYANMAR

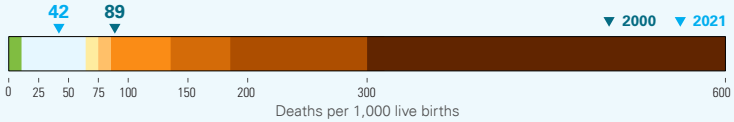
U5MR

Administrative level 1 (Region, State, Union Territory): **15**

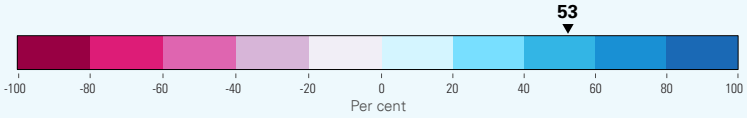
Administrative level 2 (District): **63**

National level

Under-five mortality rate, 2000 and 2021

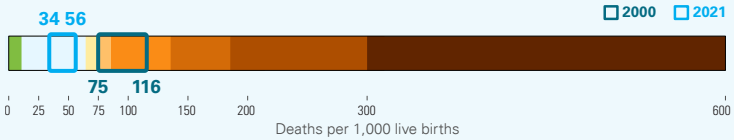


Percentage decline in under-five mortality rate, 2000–2021

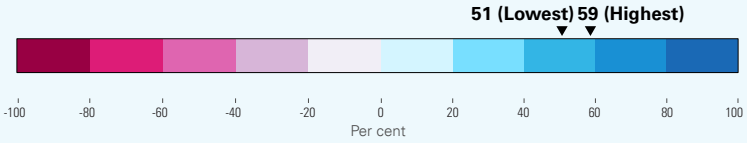


Administrative level 1

Under-five mortality rate, 2000 and 2021 (range)

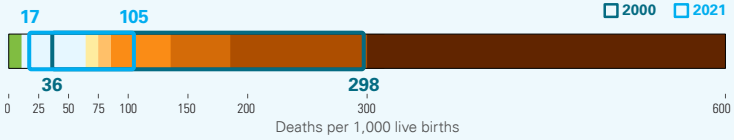


Percentage decline in under-five mortality rate, 2000–2021 (range)

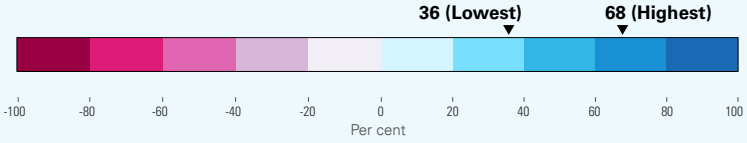


Administrative level 2

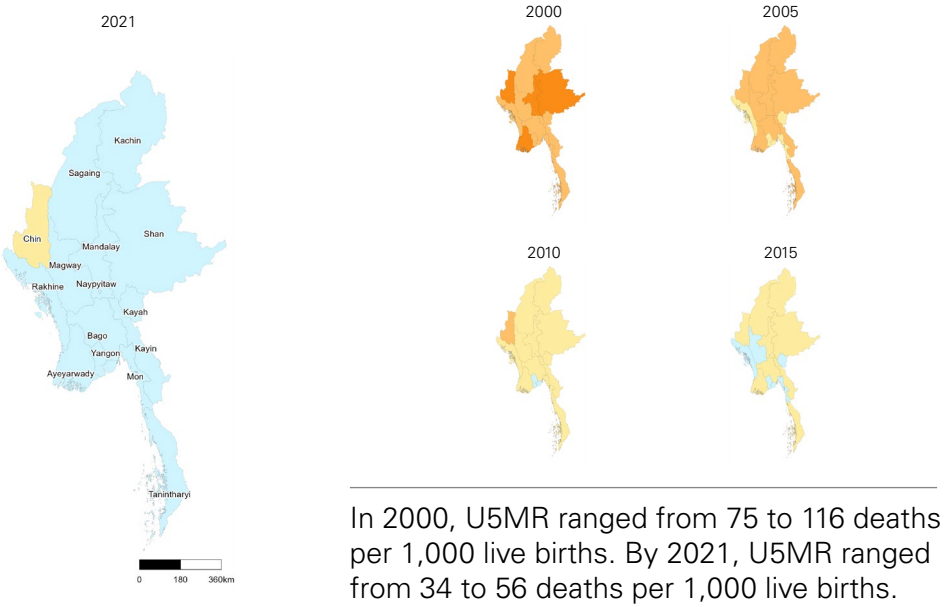
Under-five mortality rate, 2000 and 2021 (range)



Percentage decline in under-five mortality rate, 2000–2021 (range)

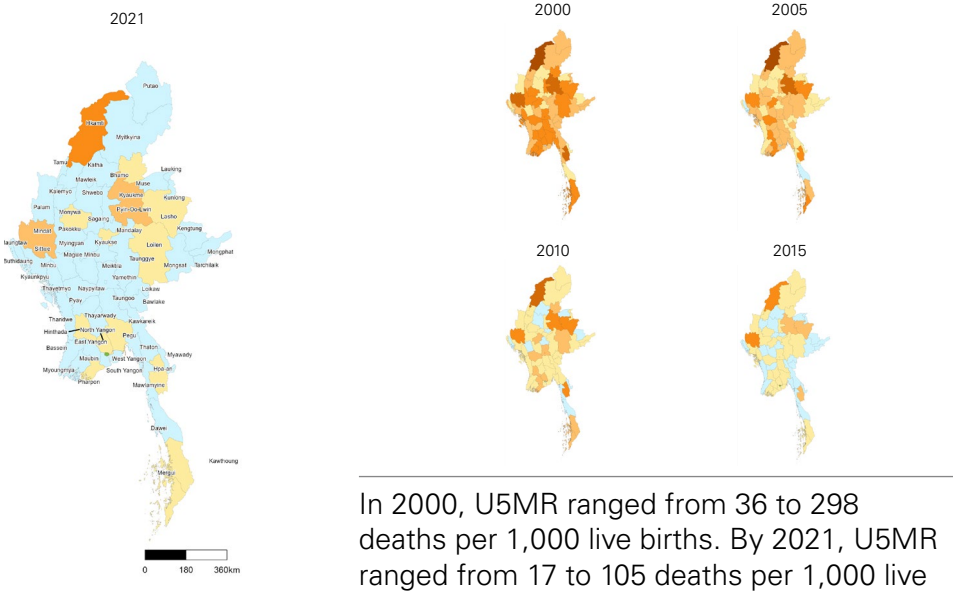


U5MR by administrative 1 area in Myanmar, 2000-2021

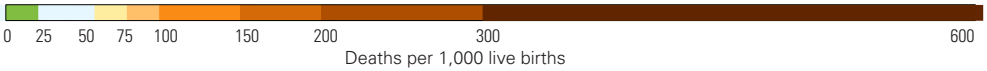


In 2000, U5MR ranged from 75 to 116 deaths per 1,000 live births. By 2021, U5MR ranged from 34 to 56 deaths per 1,000 live births.

U5MR by administrative 2 area in Myanmar, 2000-2021



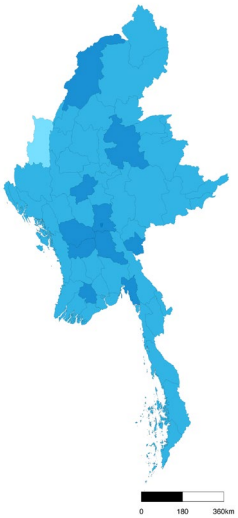
In 2000, U5MR ranged from 36 to 298 deaths per 1,000 live births. By 2021, U5MR ranged from 17 to 105 deaths per 1,000 live births.



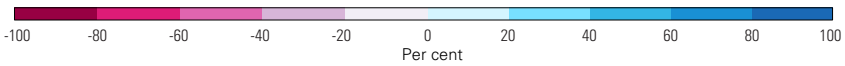
Percentage decline in administrative level 1 U5MR 2000-2021 in Myanmar

The percentage decline in under-five mortality at administrative level 1 ranged from a low of 51 per cent to a high of 59 per cent.

Percentage decline in administrative level 2 U5MR 2000-2021 in Myanmar

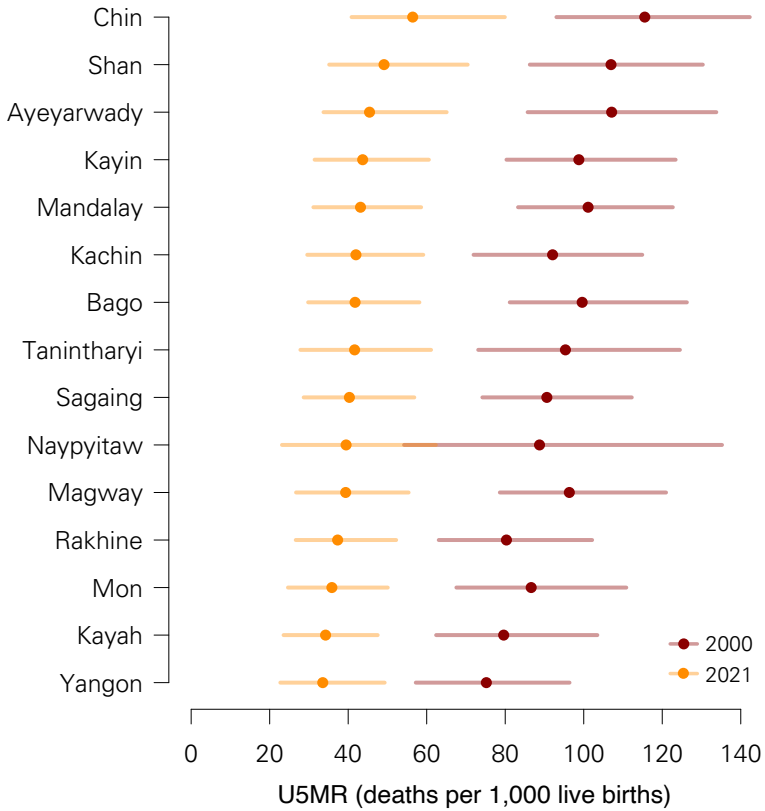


The percentage decline in under-five mortality at administrative level 2 ranged from a low of 36 per cent to a high of 68 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Myanmar, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Chin, the highest mortality administrative level 1 area, was 1.5 times higher than in Yangon, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Chin, was 1.7 times higher than in the lowest mortality area, Yangon.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Myanmar: Demographic and Health Survey 2015-2016.

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MYANMAR

NMR

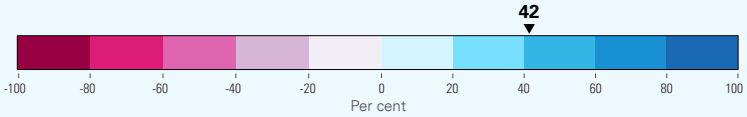
Administrative level 1 (Region, State, Union Territory): **15**

Administrative level 2 (District): **63**

National level

Neonatal mortality rate, 2000 and 2021

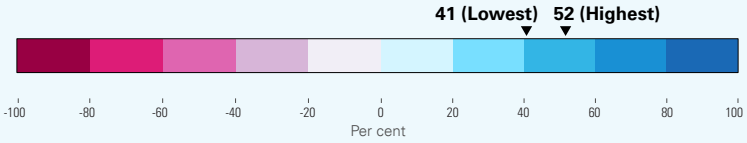
Percentage decline in neonatal mortality rate, 2000–2021



Administrative level 1

Neonatal mortality rate, 2000 and 2021 (range)

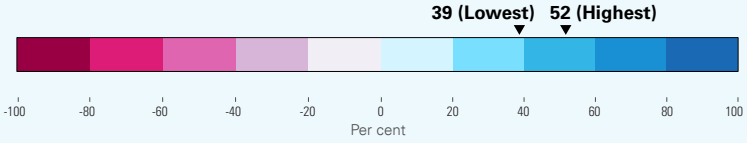
Percentage decline in neonatal mortality rate, 2000–2021 (range)



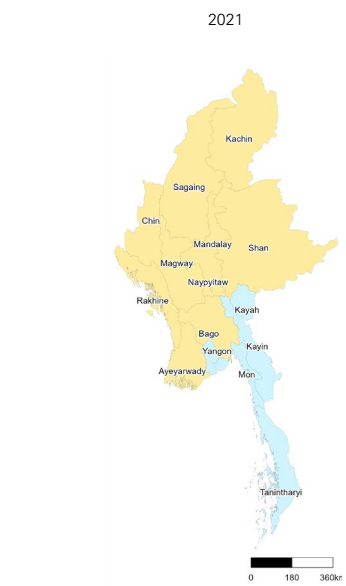
Administrative level 2

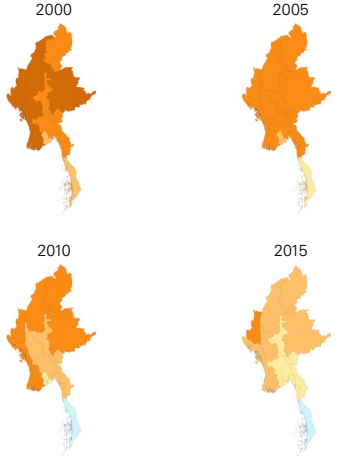
Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)



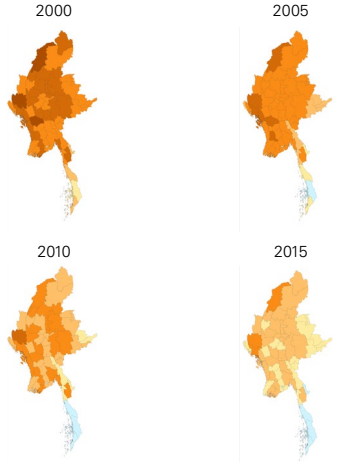
NMR by administrative 1 area in Myanmar, 2000-2021





In 2000, NMR ranged from 27 to 44 deaths per 1,000 live births. By 2021, NMR ranged from 15 to 25 deaths per 1,000 live births.

NMR by administrative 2 area in Myanmar, 2000-2021

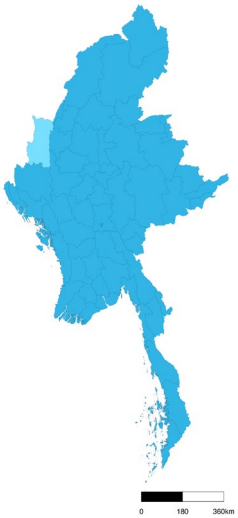


In 2000, NMR ranged from 19 to 55 deaths per 1,000 live births. By 2021, NMR ranged from 12 to 30 deaths per 1,000 live births.

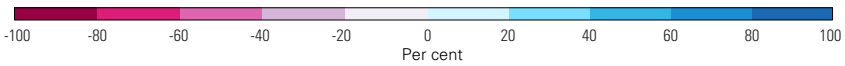
Percentage decline in administrative level 1 NMR 2000-2021 in Myanmar

The percentage decline in neonatal mortality at administrative level 1 ranged from a low of 41 per cent to a high of 52 per cent.

Percentage decline in administrative level 2 NMR 2000-2021 in Myanmar

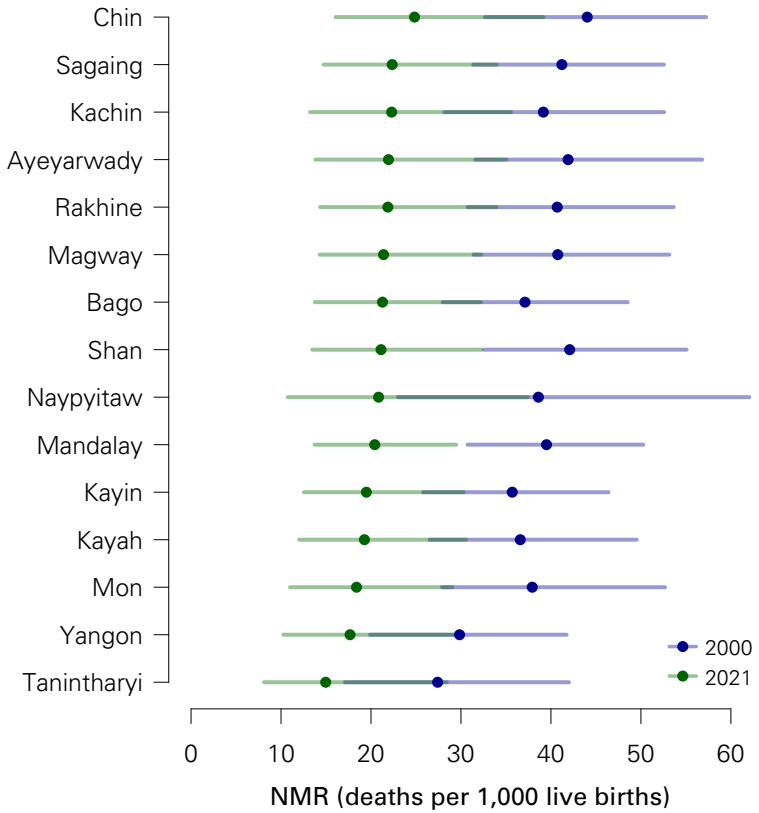


The percentage decline in neonatal mortality at administrative level 2 ranged from a low of 39 per cent to a high of 52 per cent.



NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Myanmar, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Chin, the highest mortality administrative level 1 area, was 1.6 times higher than in Tanintharyi, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, Chin, was 1.7 times higher than in the lowest mortality area, Tanintharyi.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

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NAMIBIA

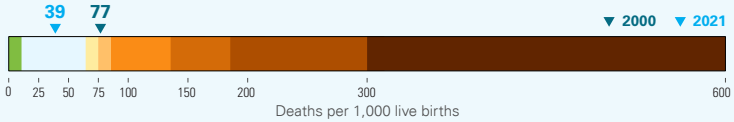
U5MR

Administrative level 1 (Region): **13**

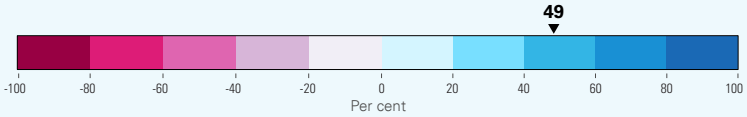
Administrative level 2 (Constituency): **107**

National level

Under-five mortality rate, 2000 and 2021

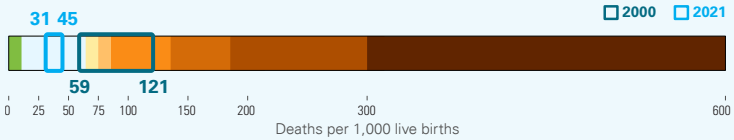


Percentage decline in under-five mortality rate, 2000–2021

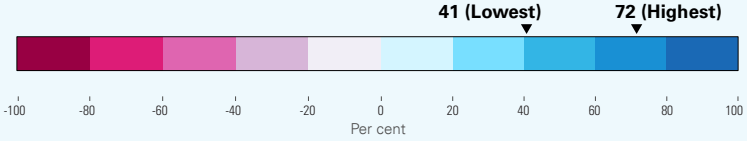


Administrative level 1

Under-five mortality rate, 2000 and 2021 (range)

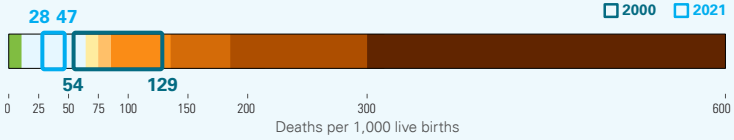


Percentage decline in under-five mortality rate, 2000–2021 (range)

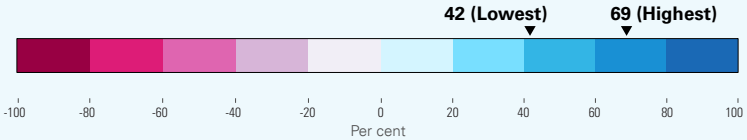


Administrative level 2

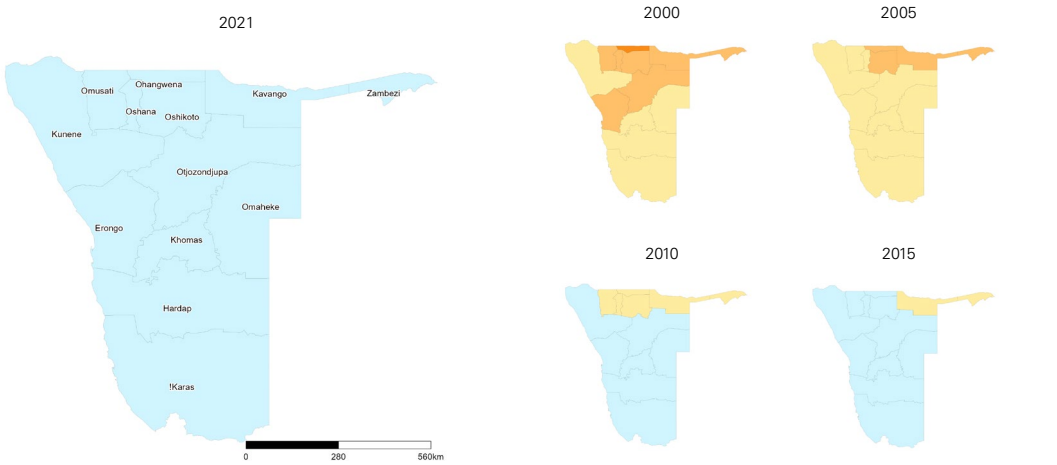
Under-five mortality rate, 2000 and 2021 (range)



Percentage decline in under-five mortality rate, 2000–2021 (range)

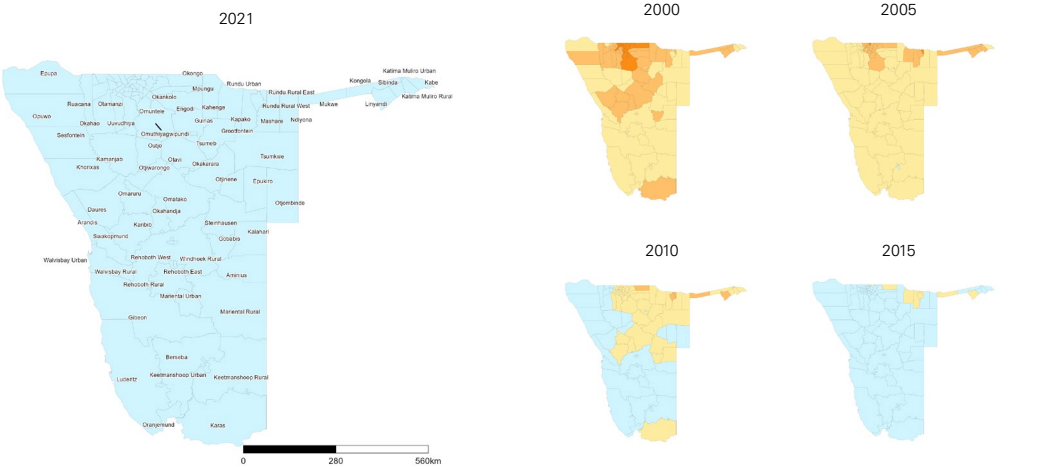


U5MR by administrative 1 area in Namibia, 2000-2021

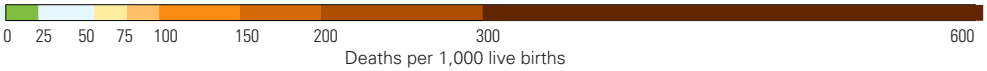


In 2000, U5MR ranged from 59 to 121 deaths per 1,000 live births. By 2021, U5MR ranged from 31 to 45 deaths per 1,000 live births.

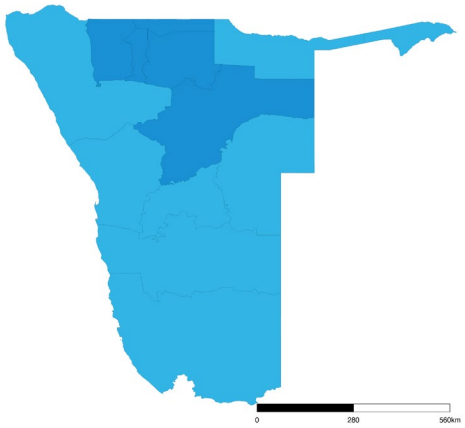
U5MR by administrative 2 area in Namibia, 2000-2021



In 2000, U5MR ranged from 54 to 129 deaths per 1,000 live births. By 2021, U5MR ranged from 28 to 47 deaths per 1,000 live births.

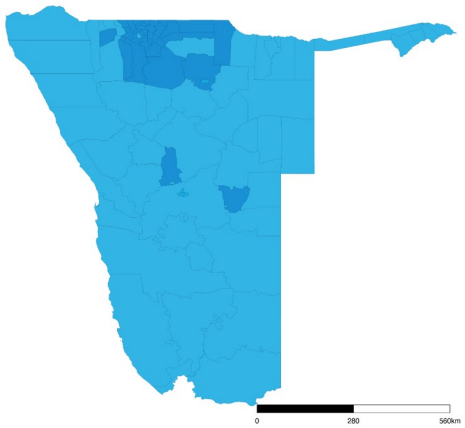


Percentage decline in administrative level 1 U5MR 2000-2021 in Namibia

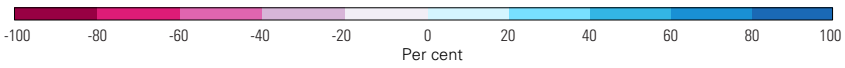


The percentage decline in under-five mortality at administrative level 1 ranged from a low of 41 per cent to a high of 72 per cent.

Percentage decline in administrative level 2 U5MR 2000-2021 in Namibia

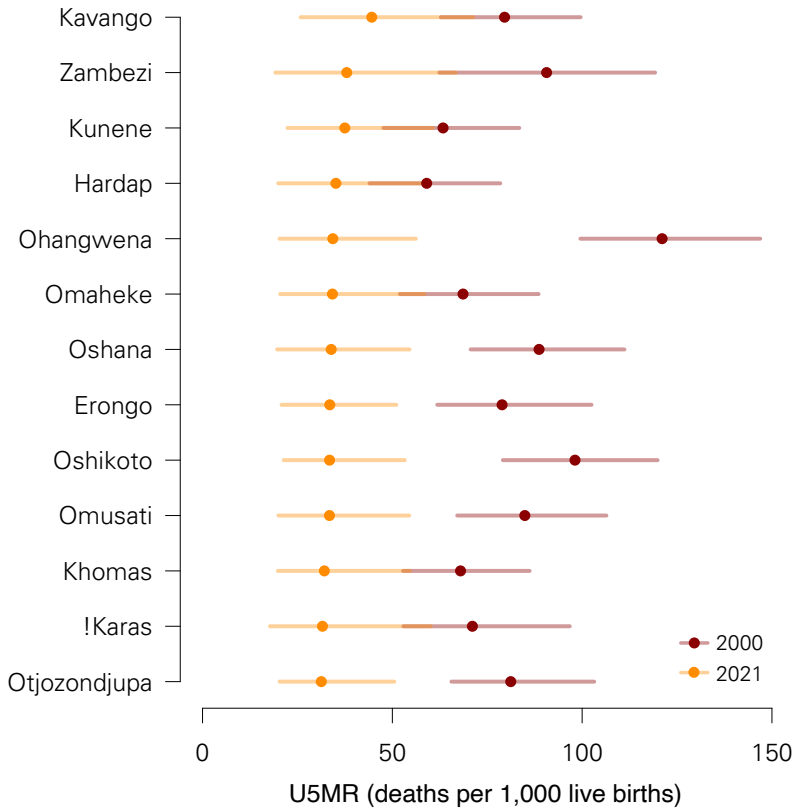


The percentage decline in under-five mortality at administrative level 2 ranged from a low of 42 per cent to a high of 69 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Namibia, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Ohangwena, the highest mortality administrative level 1 area, was 2.1 times higher than in Hardap, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Kavango, was 1.4 times higher than in the lowest mortality area, Otjozondjupa.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

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Data sources for Namibia: Demographic and Health Survey 2000; Demographic and Health Survey 2006-2007; Demographic and Health Survey 2013.

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NAMIBIA

NMR

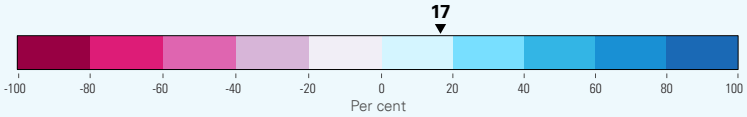
Administrative level 1 (Region): **13**

Administrative level 2 (Constituency): **107**

National level

Neonatal mortality rate, 2000 and 2021

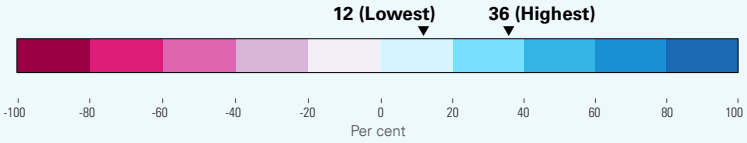
Percentage decline in neonatal mortality rate, 2000–2021



Administrative level 1

Neonatal mortality rate, 2000 and 2021 (range)

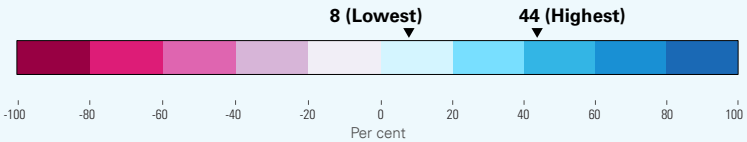
Percentage decline in neonatal mortality rate, 2000–2021 (range)



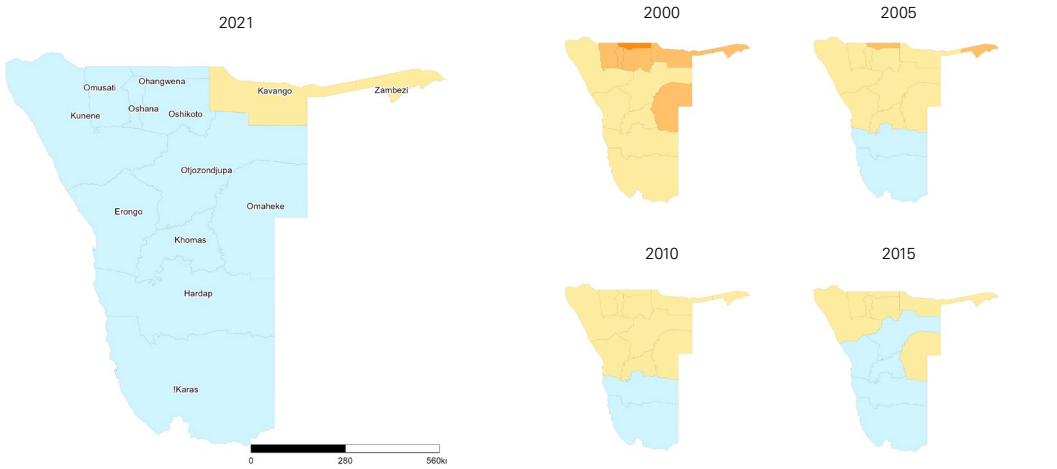
Administrative level 2

Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)

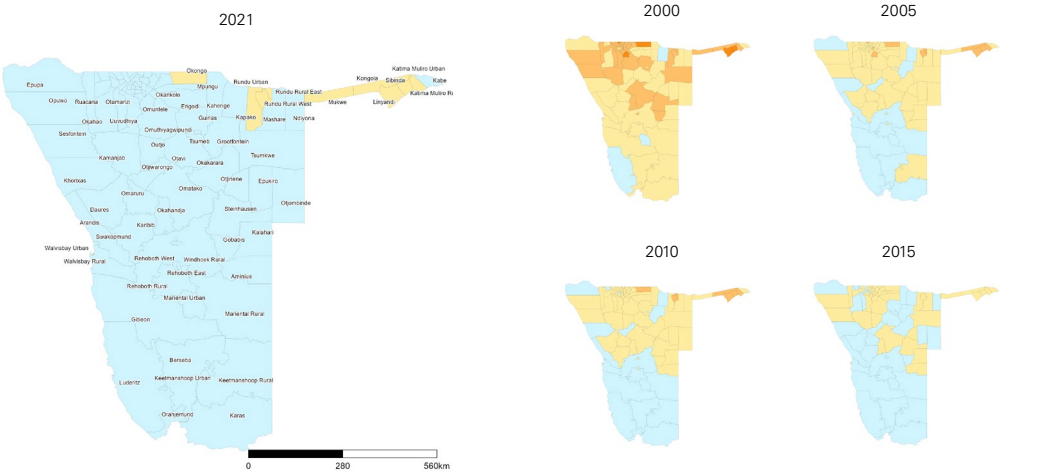


NMR by administrative 1 area in Namibia, 2000-2021



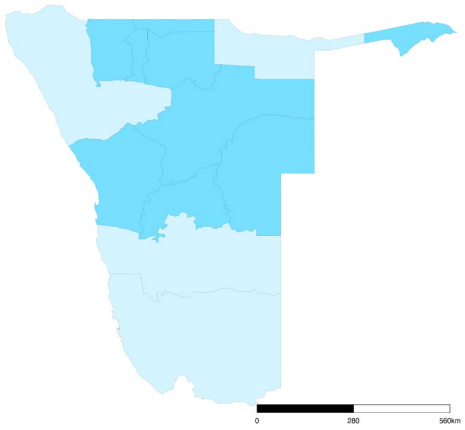
In 2000, NMR ranged from 20 to 30 deaths per 1,000 live births. By 2021, NMR ranged from 18 to 21 deaths per 1,000 live births.

NMR by administrative 2 area in Namibia, 2000-2021



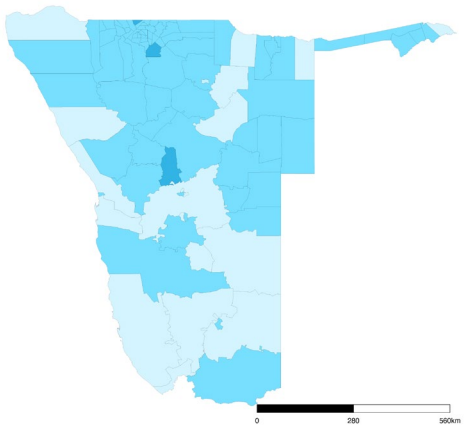
In 2000, NMR ranged from 19 to 34 deaths per 1,000 live births. By 2021, NMR ranged from 17 to 22 deaths per 1,000 live births.

Percentage decline in administrative level 1 NMR 2000-2021 in Namibia

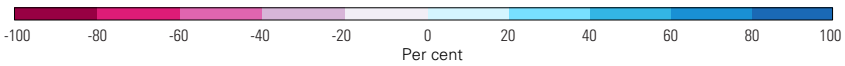


The percentage decline in neonatal mortality at administrative level 1 ranged from a low of 12 per cent to a high of 36 per cent.

Percentage decline in administrative level 2 NMR 2000-2021 in Namibia

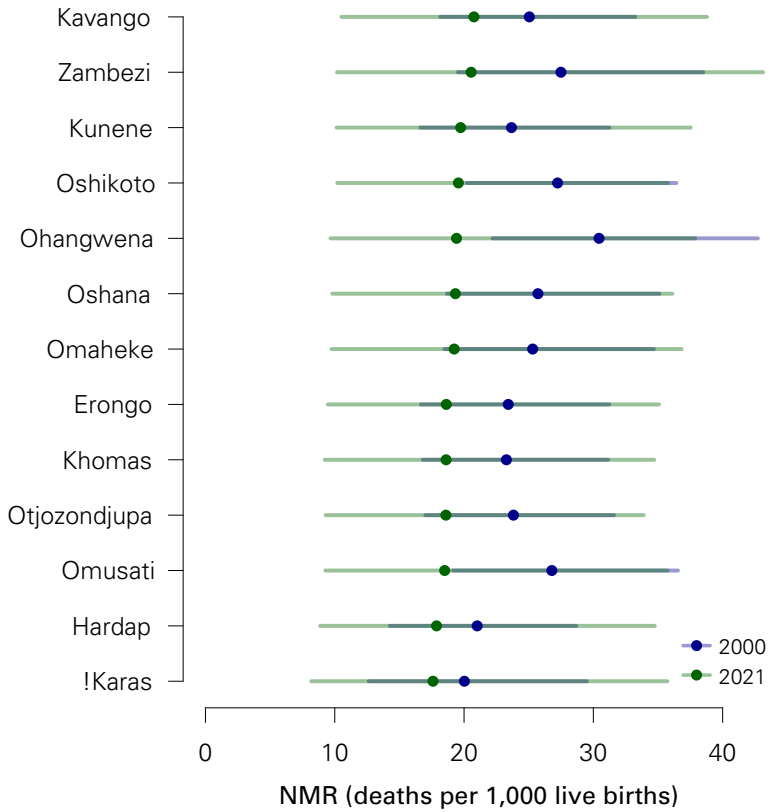


The percentage decline in neonatal mortality at administrative level 2 ranged from a low of 8 per cent to a high of 44 per cent.



NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Namibia, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Ohangwena, the highest mortality administrative level 1 area, was 1.5 times higher than in !Karas, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, Kavango, was 1.2 times higher than in the lowest mortality area, !Karas.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

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NEPAL

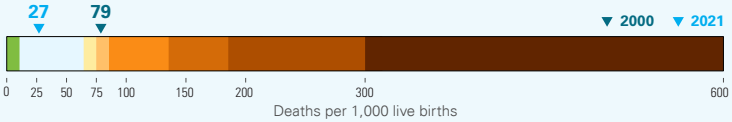
U5MR

Administrative level 1 (Province): **7**

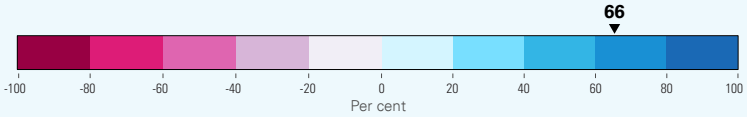
Administrative level 2 (District): **77**

National level

Under-five mortality rate, 2000 and 2021

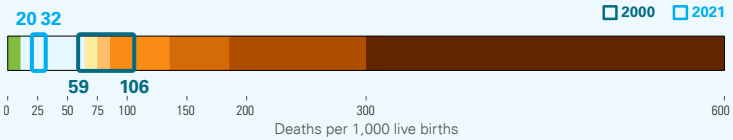


Percentage decline in under-five mortality rate, 2000–2021

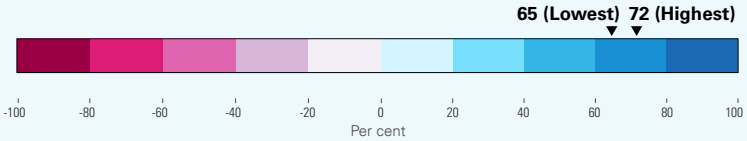


Administrative level 1

Under-five mortality rate, 2000 and 2021 (range)

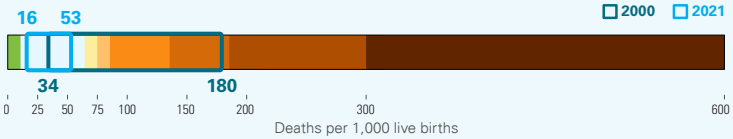


Percentage decline in under-five mortality rate, 2000–2021 (range)

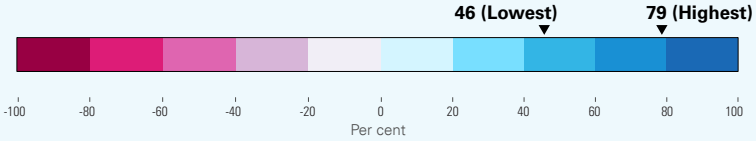


Administrative level 2

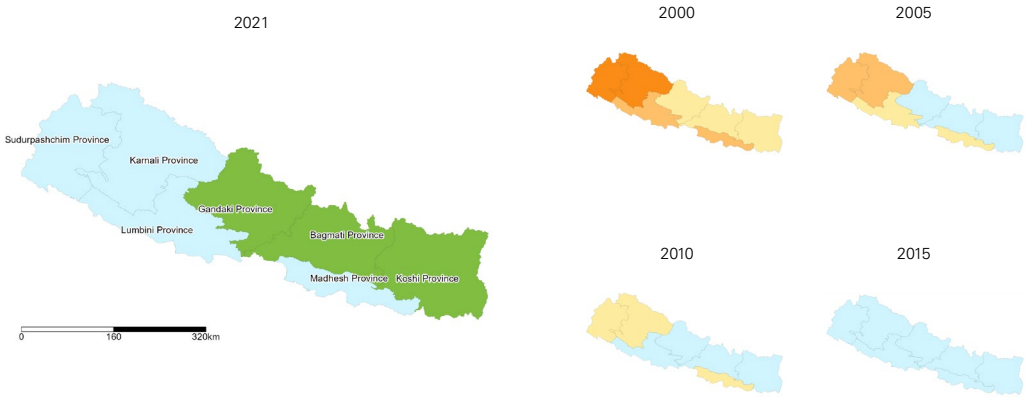
Under-five mortality rate, 2000 and 2021 (range)



Percentage decline in under-five mortality rate, 2000–2021 (range)

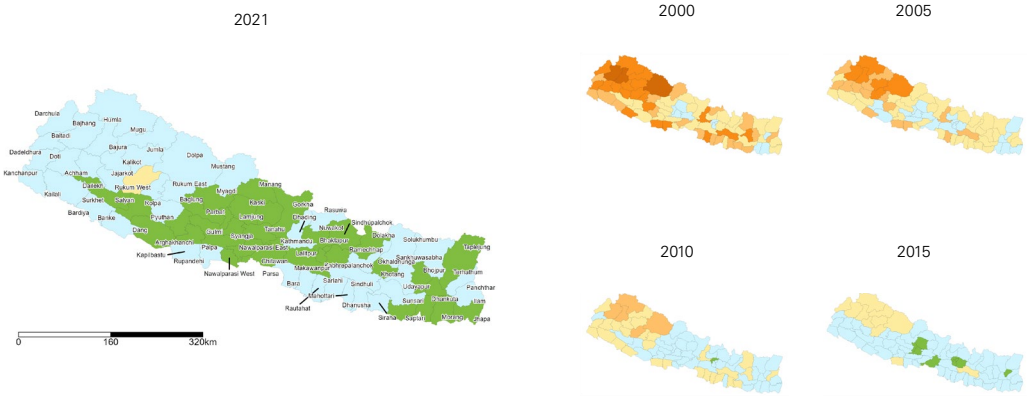


U5MR by administrative 1 area in Nepal, 2000-2021

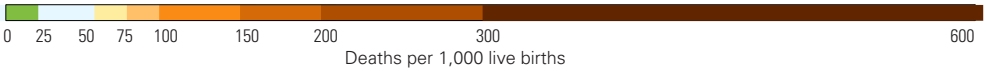


In 2000, U5MR ranged from 59 to 106 deaths per 1,000 live births. By 2021, U5MR ranged from 20 to 32 deaths per 1,000 live births.

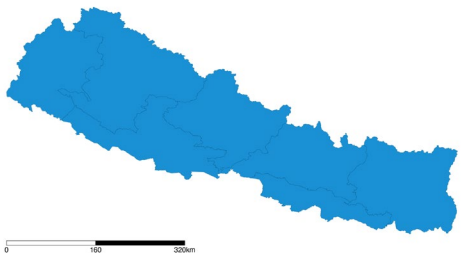
U5MR by administrative 2 area in Nepal, 2000-2021



In 2000, U5MR ranged from 34 to 180 deaths per 1,000 live births. By 2021, U5MR ranged from 16 to 53 deaths per 1,000 live births.

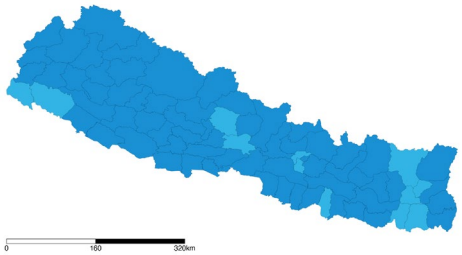


Percentage decline in administrative level 1 U5MR 2000-2021 in Nepal

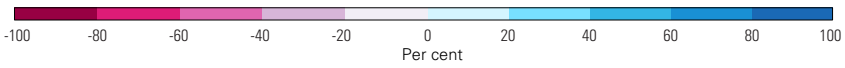


The percentage decline in under-five mortality at administrative level 1 ranged from a low of 65 per cent to a high of 72 per cent.

Percentage decline in administrative level 2 U5MR 2000-2021 in Nepal

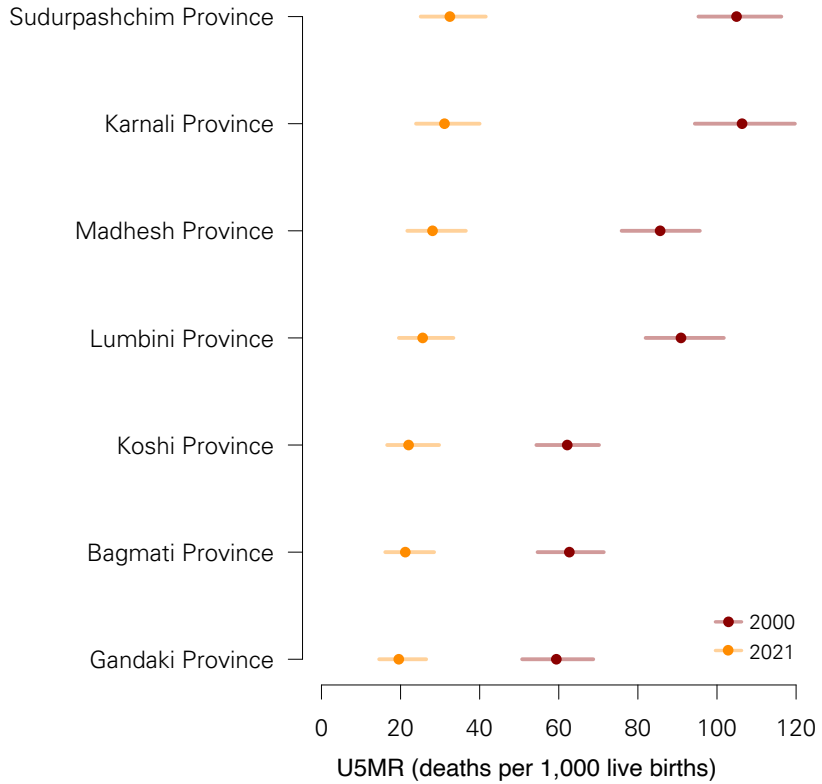


The percentage decline in under-five mortality at administrative level 2 ranged from a low of 46 per cent to a high of 79 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Nepal, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Karnali Province, the highest mortality administrative level 1 area, was 1.8 times higher than in Gandaki Province, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Sudurpashchim Province, was 1.7 times higher than in the lowest mortality area, Gandaki Province.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on shapefiles from the UN Office for the Coordination of Humanitarian Affairs.

Data sources for Nepal: Demographic and Health Survey 2001; Demographic and Health Survey 2006; Demographic and Health Survey 2011; Demographic and Health Survey 2016.

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NEPAL

NMR

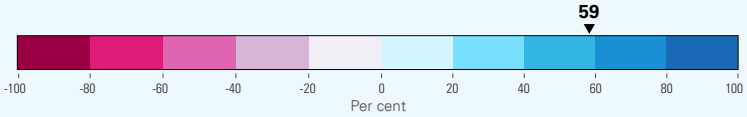
Administrative level 1 (Province): **7**

Administrative level 2 (District): **77**

National level

Neonatal mortality rate, 2000 and 2021

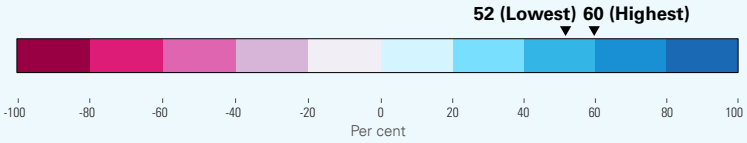
Percentage decline in neonatal mortality rate, 2000–2021



Administrative level 1

Neonatal mortality rate, 2000 and 2021 (range)

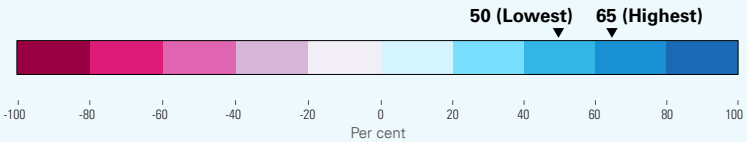
Percentage decline in neonatal mortality rate, 2000–2021 (range)



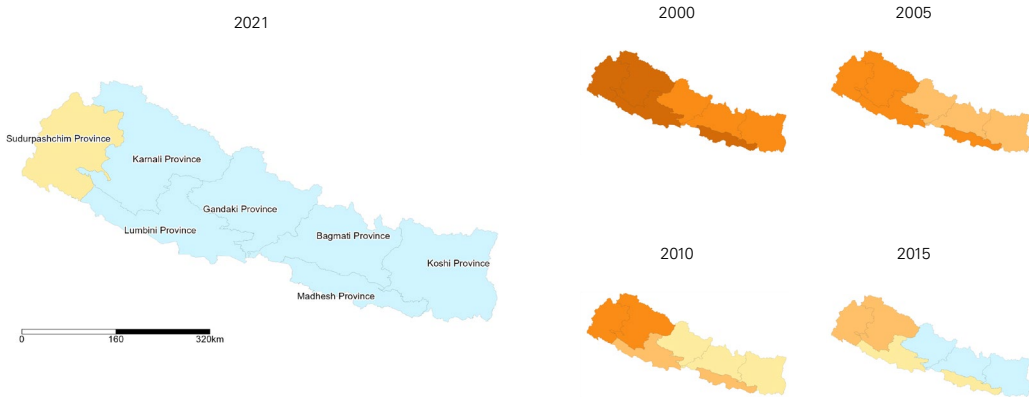
Administrative level 2

Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)

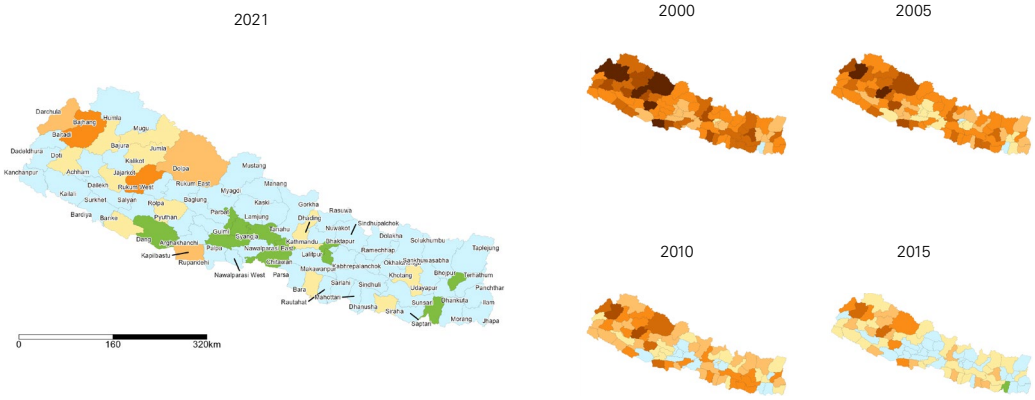


NMR by administrative 1 area in Nepal, 2000-2021



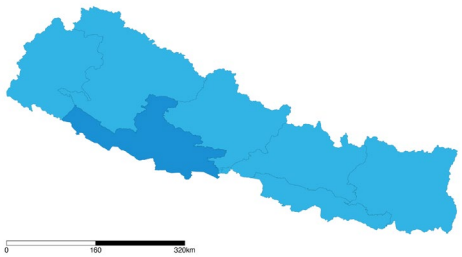
In 2000, NMR ranged from 32 to 48 deaths per 1,000 live births. By 2021, NMR ranged from 15 to 20 deaths per 1,000 live births.

NMR by administrative 2 area in Nepal, 2000-2021



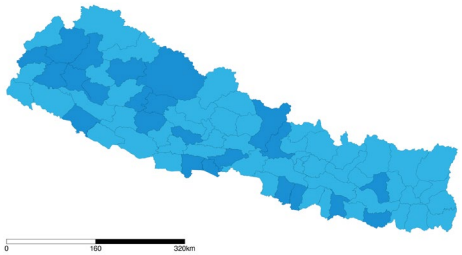
In 2000, NMR ranged from 19 to 83 deaths per 1,000 live births. By 2021, NMR ranged from 9 to 31 deaths per 1,000 live births.

Percentage decline in administrative level 1 NMR 2000-2021 in Nepal

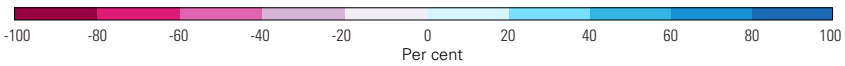


The percentage decline in neonatal mortality at administrative level 1 ranged from a low of 52 per cent to a high of 60 per cent.

Percentage decline in administrative level 2 NMR 2000-2021 in Nepal

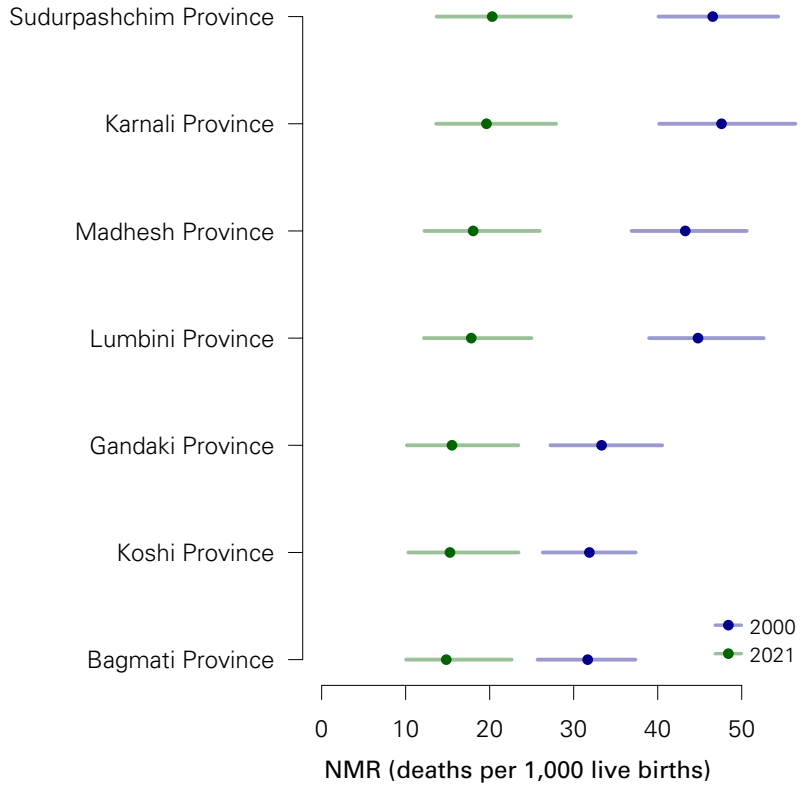


The percentage decline in neonatal mortality at administrative level 2 ranged from a low of 50 per cent to a high of 65 per cent.



NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Nepal, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Karnali Province, the highest mortality administrative level 1 area, was 1.5 times higher than in Bagmati Province, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, Sudurpashchim Province, was 1.4 times higher than in the lowest mortality area, Bagmati Province.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on shapefiles from the UN Office for the Coordination of Humanitarian Affairs.

Data sources for Nepal: Demographic and Health Survey 2001; Demographic and Health Survey 2006; Demographic and Health Survey 2011; Demographic and Health Survey 2016.

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NIGERIA

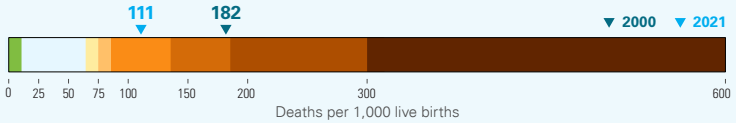
U5MR

Administrative level 1 (State): **37**

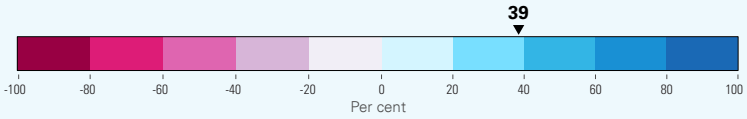
Administrative level 2: -

National level

Under-five mortality rate, 2000 and 2021

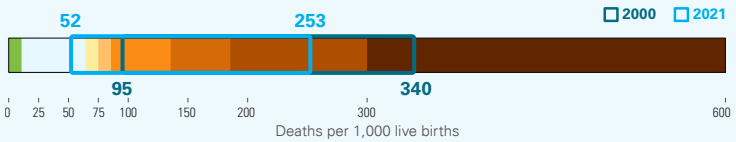


Percentage decline in under-five mortality rate, 2000–2021

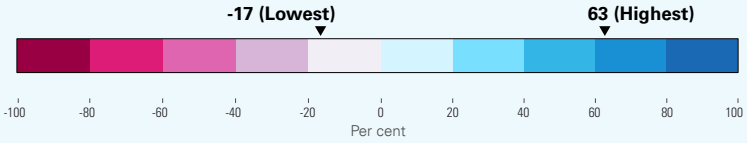


Administrative level 1

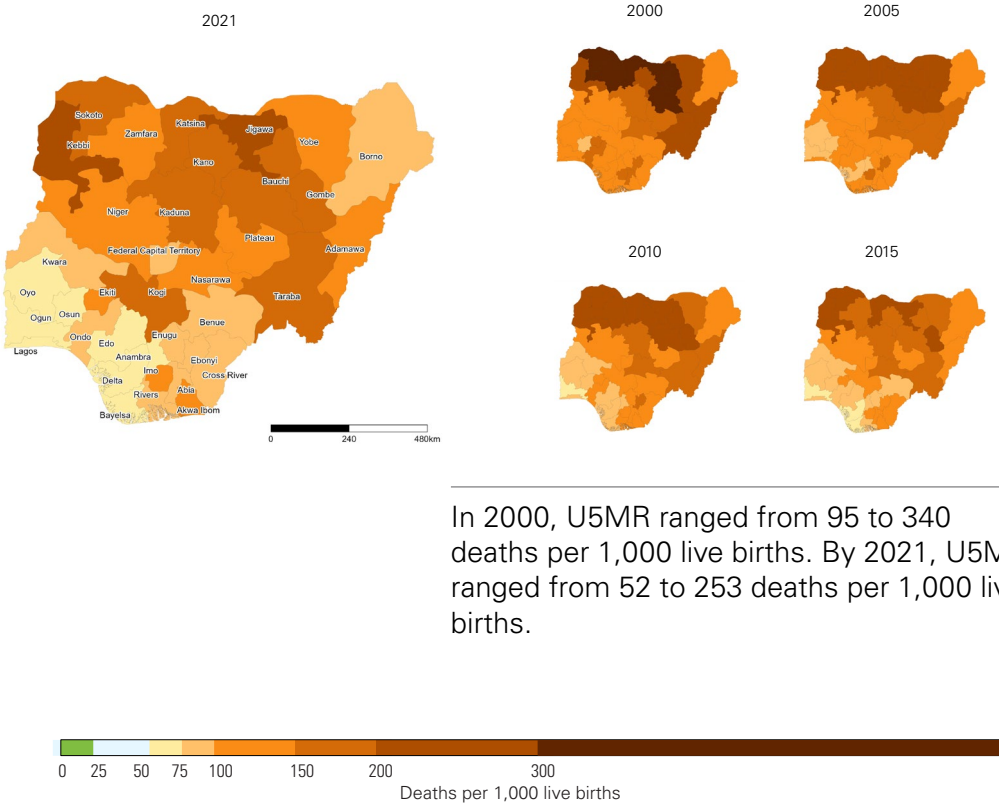
Under-five mortality rate, 2000 and 2021 (range)



Percentage decline in under-five mortality rate, 2000–2021 (range)

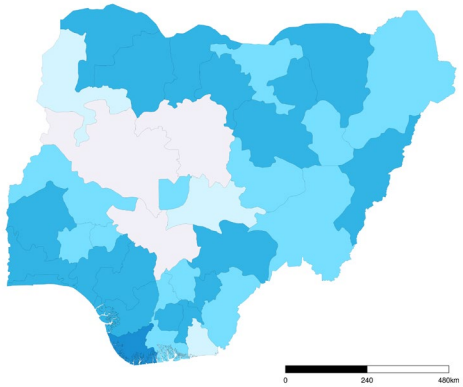


U5MR by administrative 1 area in Nigeria, 2000-2021

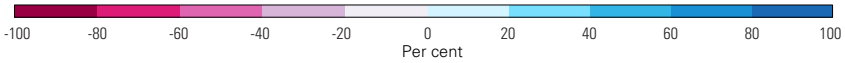


In 2000, U5MR ranged from 95 to 340 deaths per 1,000 live births. By 2021, U5MR ranged from 52 to 253 deaths per 1,000 live births.

Percentage decline in administrative level 1 U5MR 2000-2021 in Nigeria

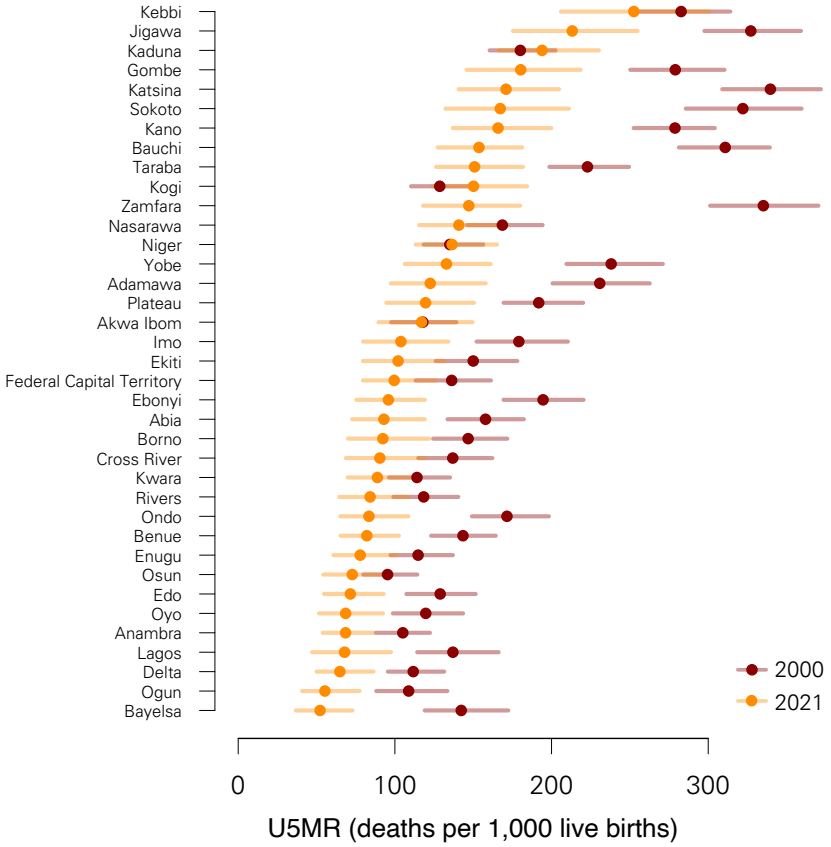


The percentage decline in under-five mortality at administrative level 1 ranged from a low of -17 per cent to a high of 63 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Nigeria, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Katsina, the highest mortality administrative level 1 area, was 3.6 times higher than in Osun, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Kebbi, was 4.8 times higher than in the lowest mortality area, Bayelsa.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Nigeria: Demographic and Health Survey 2013; Demographic and Health Survey 2018; Malaria Indicator Survey 2010.

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NIGERIA

NMR

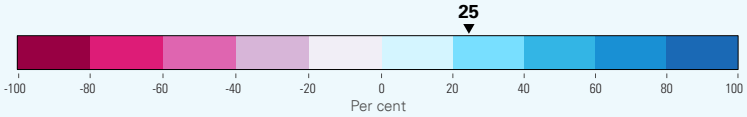
Administrative level 1 (State): **37**

Administrative level 2: -

National level

Neonatal mortality rate, 2000 and 2021

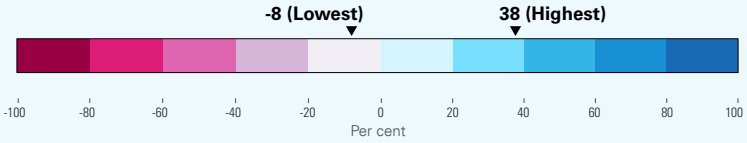
Percentage decline in neonatal mortality rate, 2000–2021



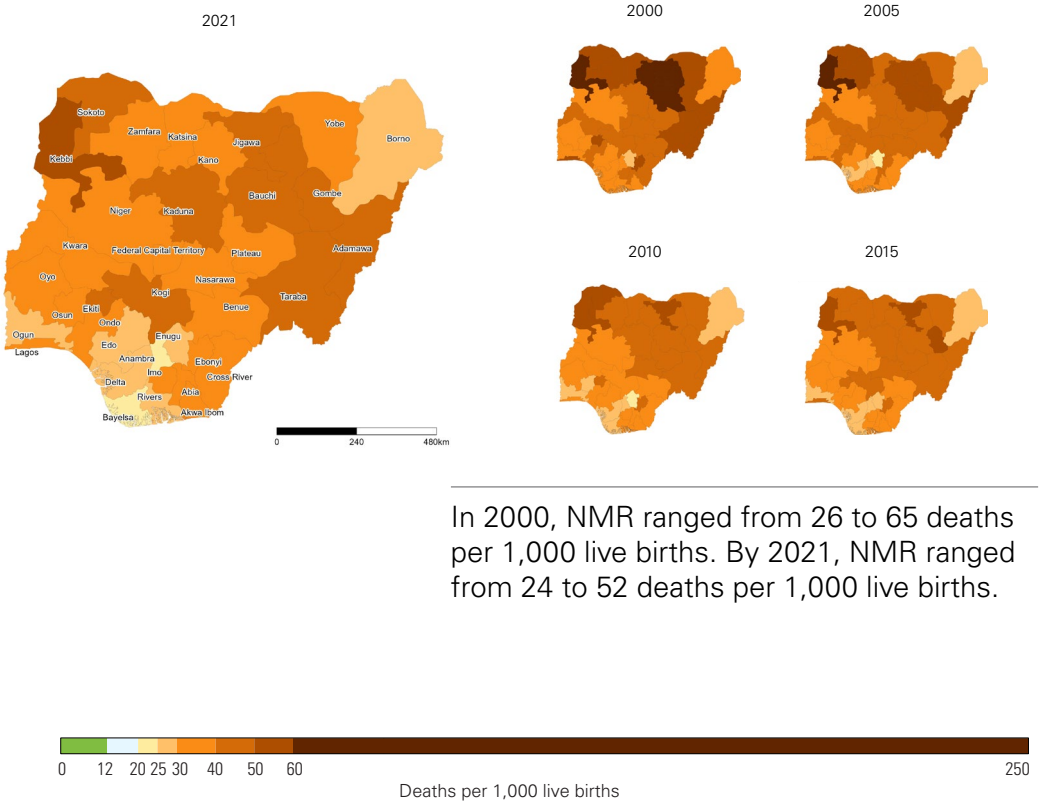
Administrative level 1

Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)

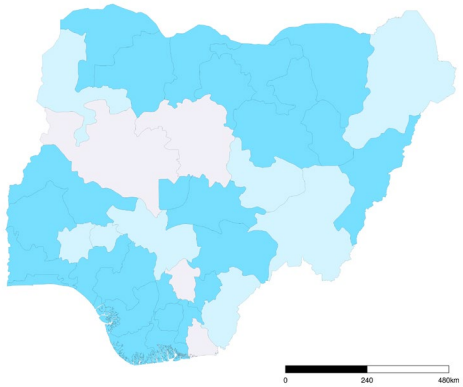


NMR by administrative 1 area in Nigeria, 2000-2021

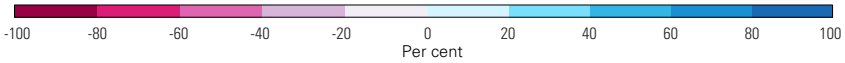


In 2000, NMR ranged from 26 to 65 deaths per 1,000 live births. By 2021, NMR ranged from 24 to 52 deaths per 1,000 live births.

Percentage decline in administrative level 1 NMR 2000-2021 in Nigeria

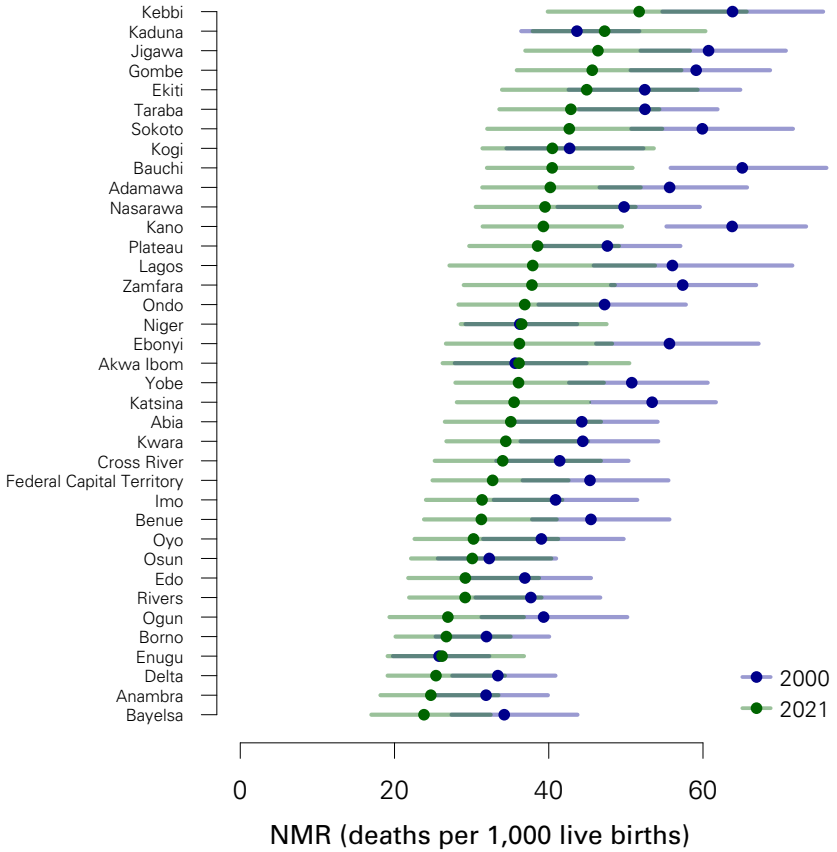


The percentage decline in neonatal mortality at administrative level 1 ranged from a low of -8 per cent to a high of 38 per cent.



NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Nigeria, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Bauchi, the highest mortality administrative level 1 area, was 2.5 times higher than in Enugu, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, Kebbi, was 2.2 times higher than in the lowest mortality area, Bayelsa.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Nigeria: Demographic and Health Survey 2013; Demographic and Health Survey 2018; Malaria Indicator Survey 2010.

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PAKISTAN

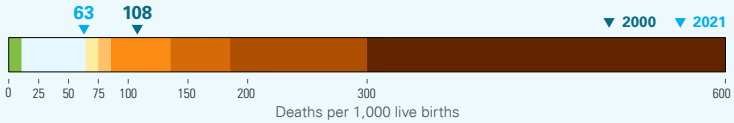
U5MR

Administrative level 1 (Province, Territory, Capital Territory): **6**

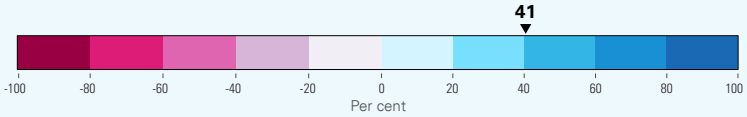
Administrative level 2 (Division): **30**

National level

Under-five mortality rate, 2000 and 2021

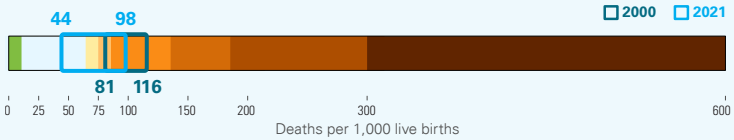


Percentage decline in under-five mortality rate, 2000–2021

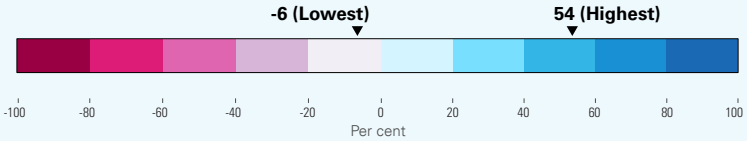


Administrative level 1

Under-five mortality rate, 2000 and 2021 (range)

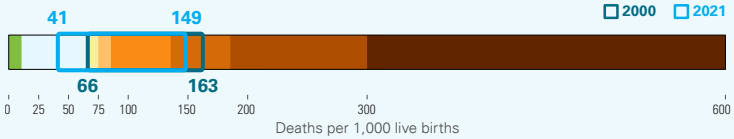


Percentage decline in under-five mortality rate, 2000–2021 (range)

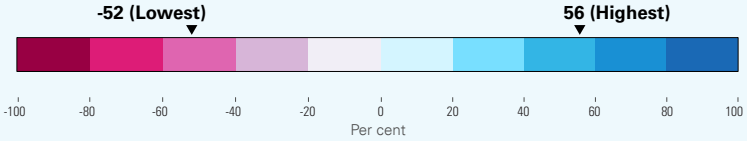


Administrative level 2

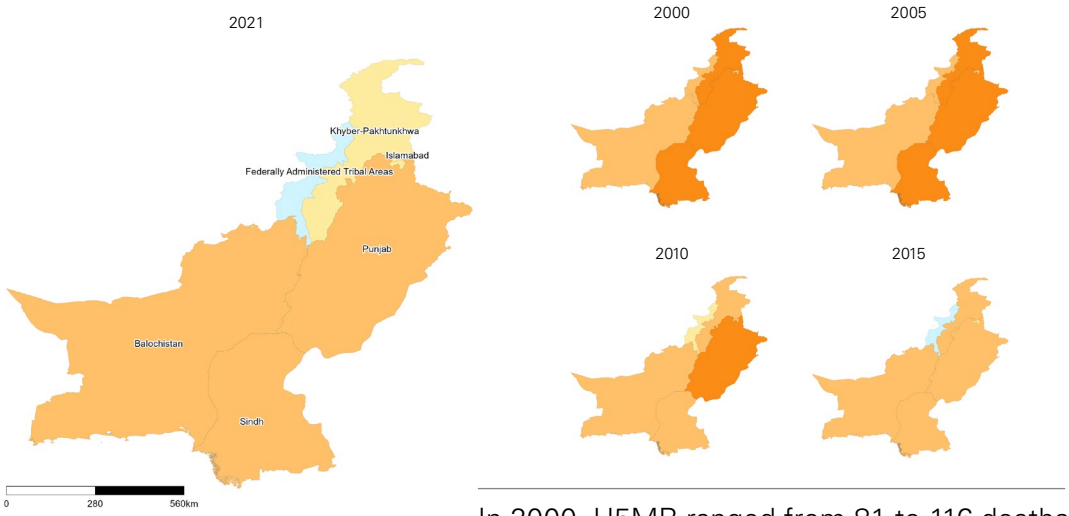
Under-five mortality rate, 2000 and 2021 (range)



Percentage decline in under-five mortality rate, 2000–2021 (range)

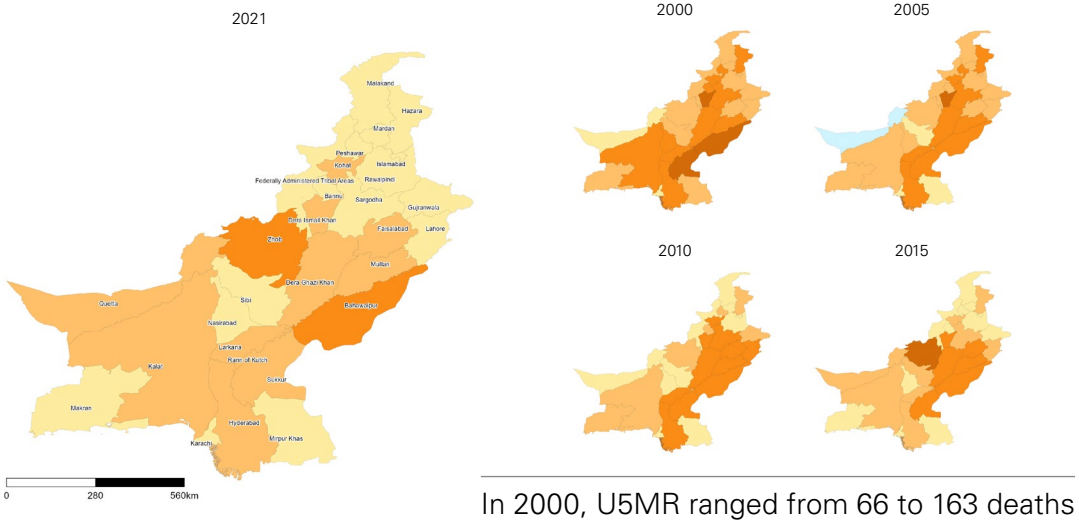


U5MR by administrative 1 area in Pakistan, 2000-2021

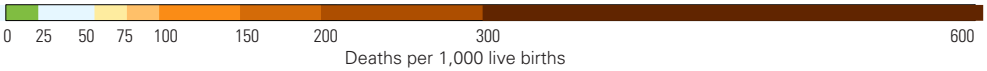


In 2000, U5MR ranged from 81 to 116 deaths per 1,000 live births. By 2021, U5MR ranged from 44 to 98 deaths per 1,000 live births.

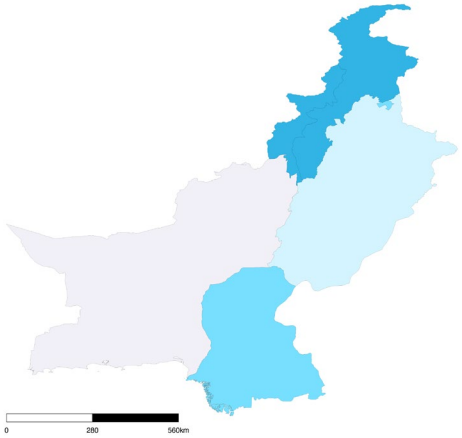
U5MR by administrative 2 area in Pakistan, 2000-2021



In 2000, U5MR ranged from 66 to 163 deaths per 1,000 live births. By 2021, U5MR ranged from 41 to 149 deaths per 1,000 live births.

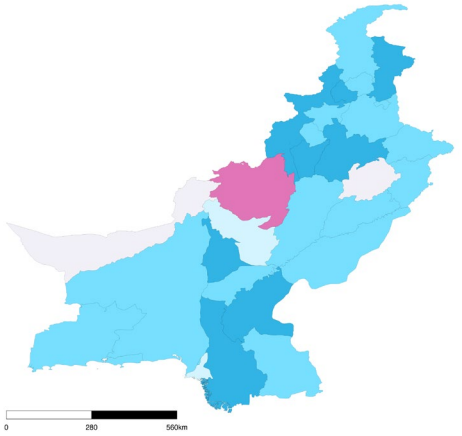


Percentage decline in administrative level 1 U5MR 2000-2021 in Pakistan

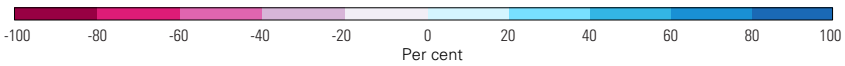


The percentage decline in under-five mortality at administrative level 1 ranged from a low of -6 per cent to a high of 54 per cent.

Percentage decline in administrative level 2 U5MR 2000-2021 in Pakistan

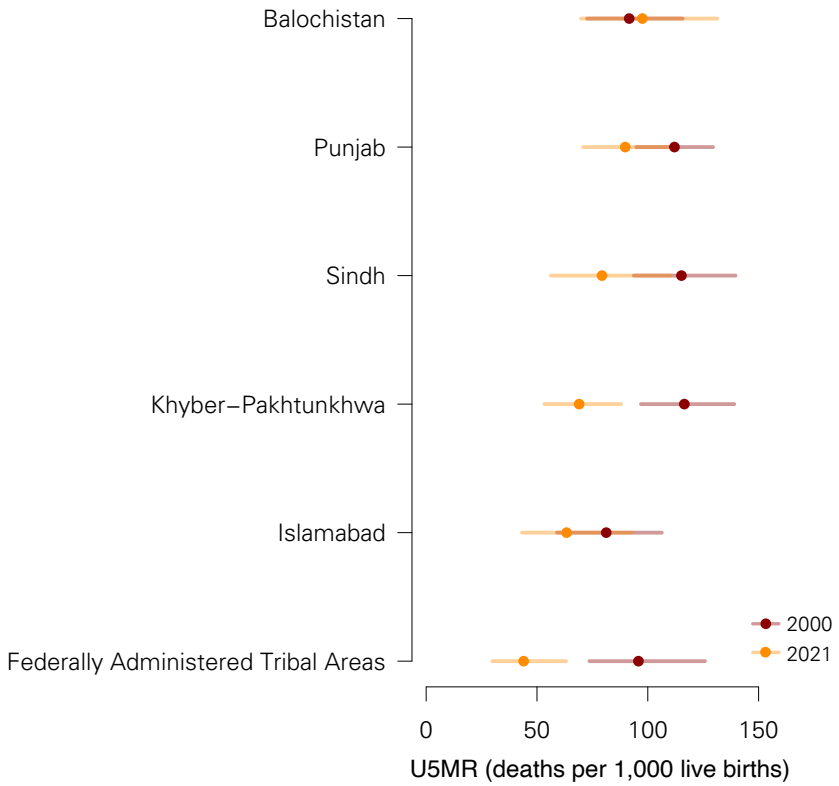


The percentage decline in under-five mortality at administrative level 2 ranged from a low of -52 per cent to a high of 56 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Pakistan, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Khyber-Pakhtunkhwa, the highest mortality administrative level 1 area, was 1.4 times higher than in Islamabad, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Balochistan, was 2.2 times higher than in the lowest mortality area, Federally Administered Tribal Areas.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Pakistan: Demographic and Health Survey 2017-2018.

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PAKISTAN

NMR

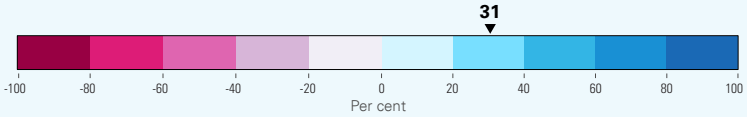
Administrative level 1 (Province, Territory, Capital Territory): **6**

Administrative level 2 (Division): **30**

National level

Neonatal mortality rate, 2000 and 2021

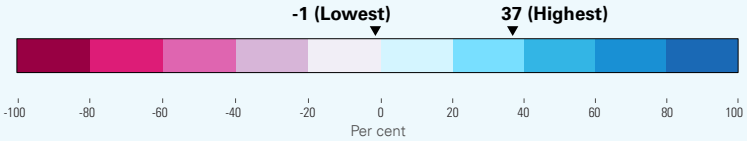
Percentage decline in neonatal mortality rate, 2000–2021



Administrative level 1

Neonatal mortality rate, 2000 and 2021 (range)

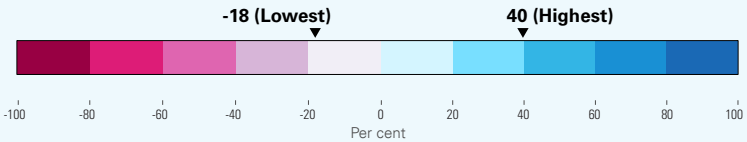
Percentage decline in neonatal mortality rate, 2000–2021 (range)



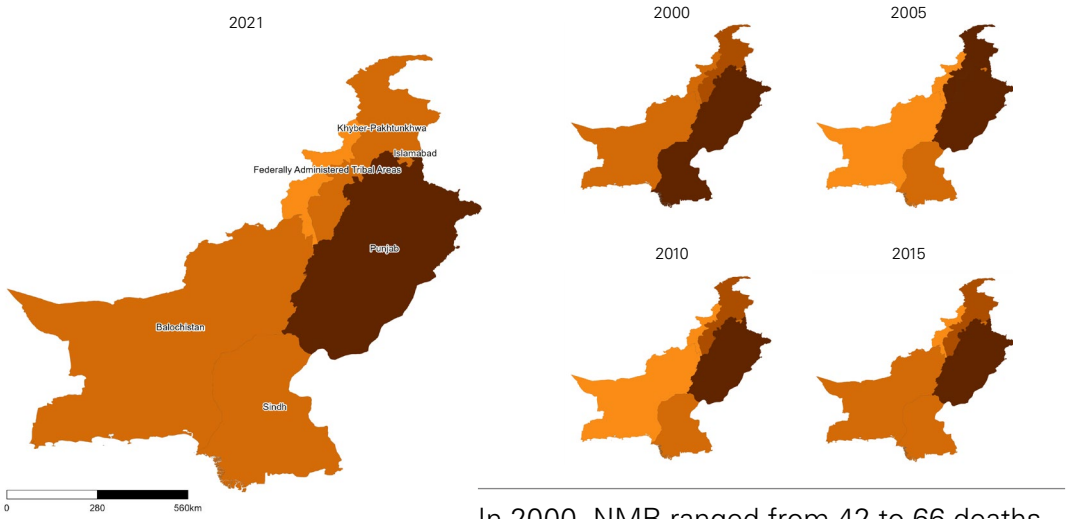
Administrative level 2

Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)

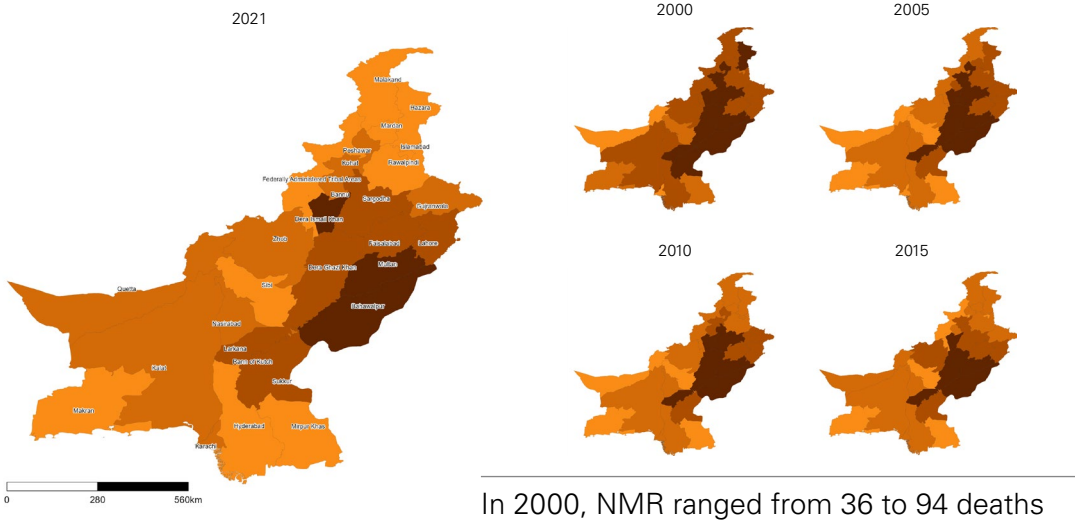


NMR by administrative 1 area in Pakistan, 2000-2021



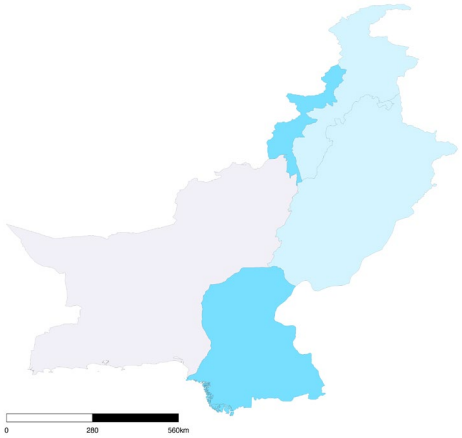
In 2000, NMR ranged from 42 to 66 deaths per 1,000 live births. By 2021, NMR ranged from 30 to 60 deaths per 1,000 live births.

NMR by administrative 2 area in Pakistan, 2000-2021



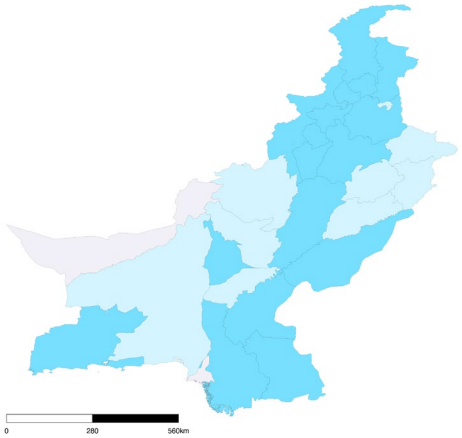
In 2000, NMR ranged from 36 to 94 deaths per 1,000 live births. By 2021, NMR ranged from 29 to 71 deaths per 1,000 live births.

Percentage decline in administrative level 1 NMR 2000-2021 in Pakistan

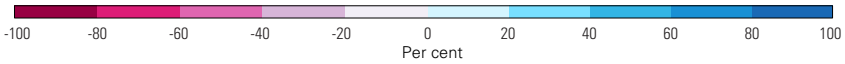


The percentage decline in neonatal mortality at administrative level 1 ranged from a low of -1 per cent to a high of 37 per cent.

Percentage decline in administrative level 2 NMR 2000-2021 in Pakistan

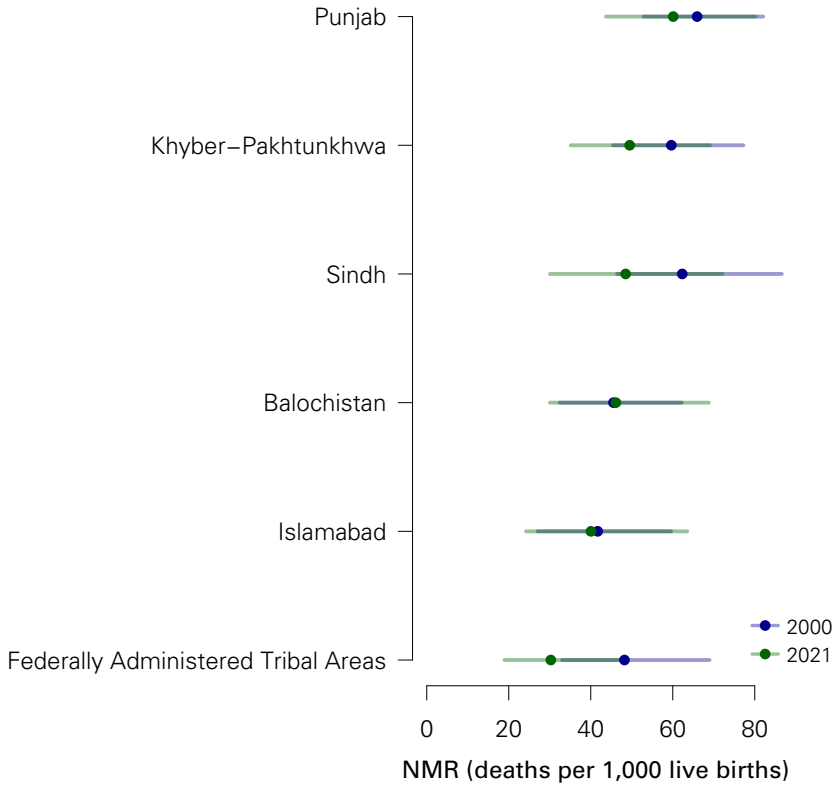


The percentage decline in neonatal mortality at administrative level 2 ranged from a low of -18 per cent to a high of 40 per cent.



NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Pakistan, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Punjab, the highest mortality administrative level 1 area, was 1.6 times higher than in Islamabad, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, Punjab, was 2 times higher than in the lowest mortality area, Federally Administered Tribal Areas.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Pakistan: Demographic and Health Survey 2017-2018.

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RWANDA

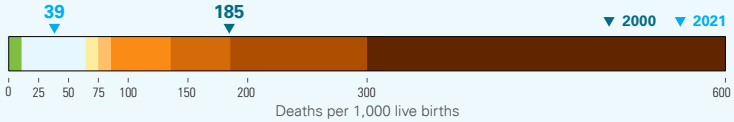
U5MR

Administrative level 1 (Province): **5**

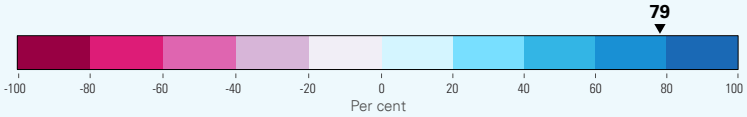
Administrative level 2 (District): **30**

National level

Under-five mortality rate, 2000 and 2021

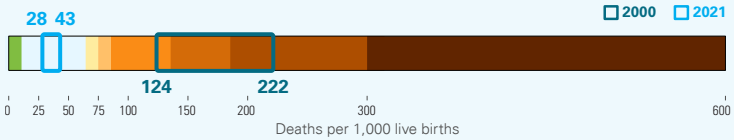


Percentage decline in under-five mortality rate, 2000–2021

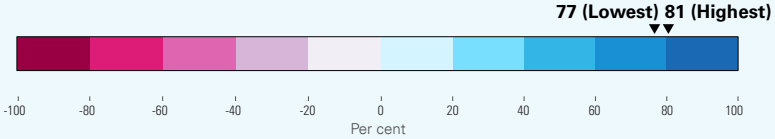


Administrative level 1

Under-five mortality rate, 2000 and 2021 (range)

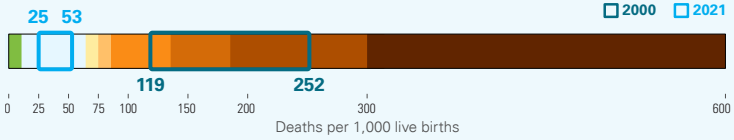


Percentage decline in under-five mortality rate, 2000–2021 (range)

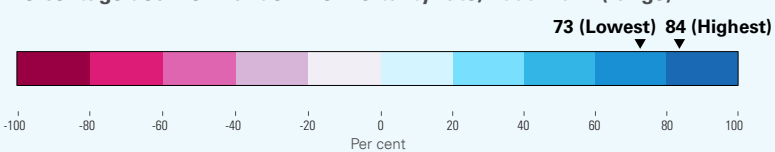


Administrative level 2

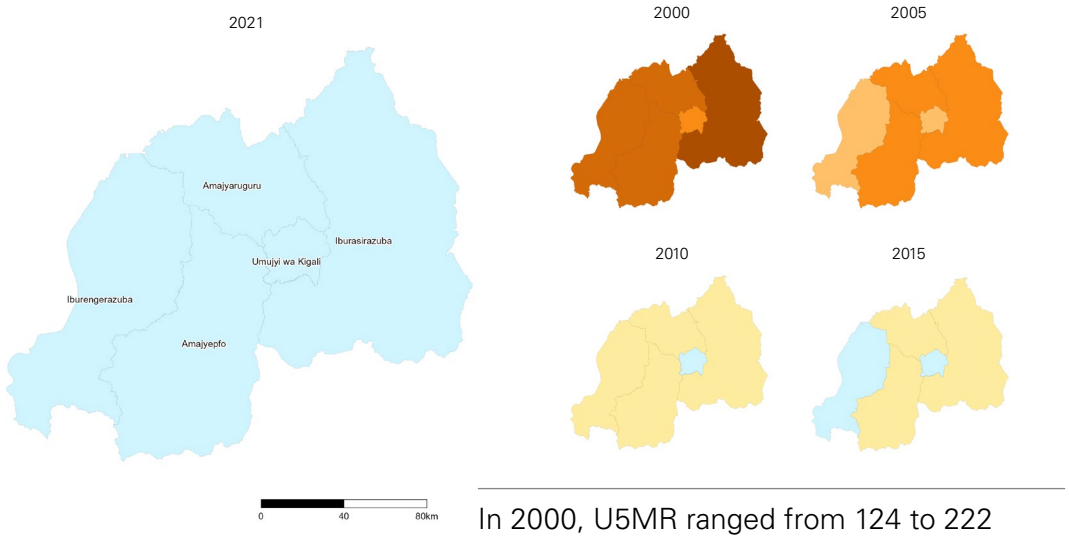
Under-five mortality rate, 2000 and 2021 (range)



Percentage decline in under-five mortality rate, 2000–2021 (range)

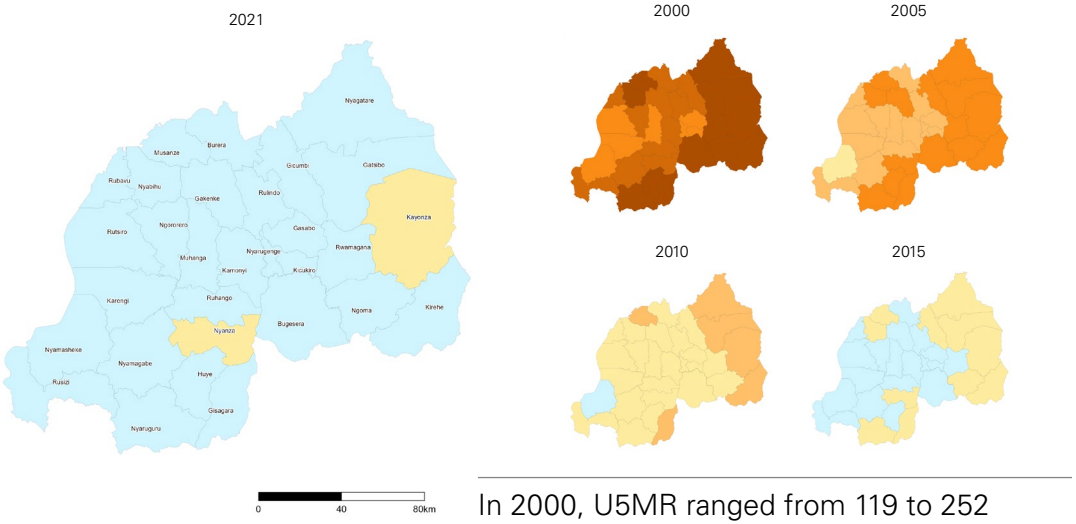


U5MR by administrative 1 area in Rwanda, 2000-2021

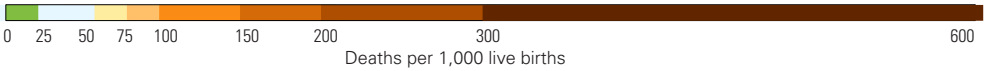


In 2000, U5MR ranged from 124 to 222 deaths per 1,000 live births. By 2021, U5MR ranged from 28 to 43 deaths per 1,000 live births.

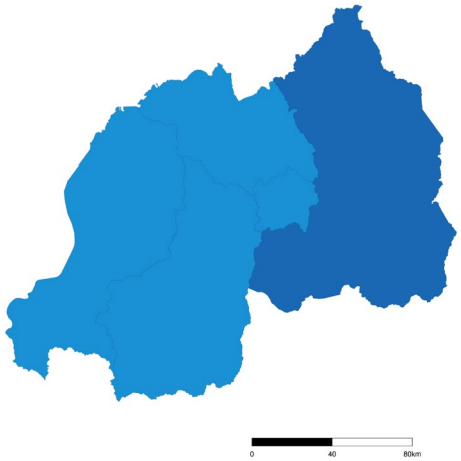
U5MR by administrative 2 area in Rwanda, 2000-2021



In 2000, U5MR ranged from 119 to 252 deaths per 1,000 live births. By 2021, U5MR ranged from 25 to 53 deaths per 1,000 live births.

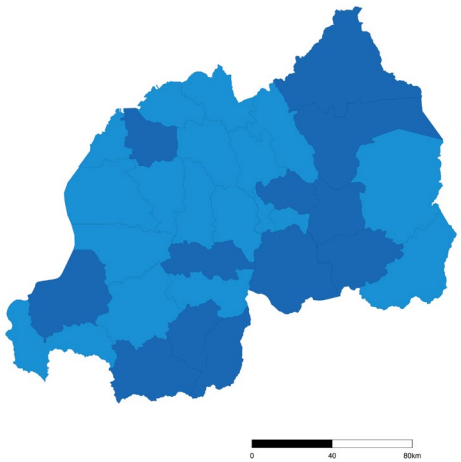


Percentage decline in administrative level 1 U5MR 2000-2021 in Rwanda

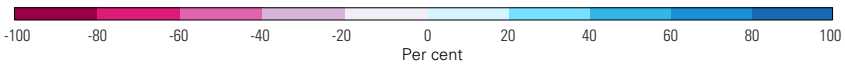


The percentage decline in under-five mortality at administrative level 1 ranged from a low of 77 per cent to a high of 81 per cent.

Percentage decline in administrative level 2 U5MR 2000-2021 in Rwanda

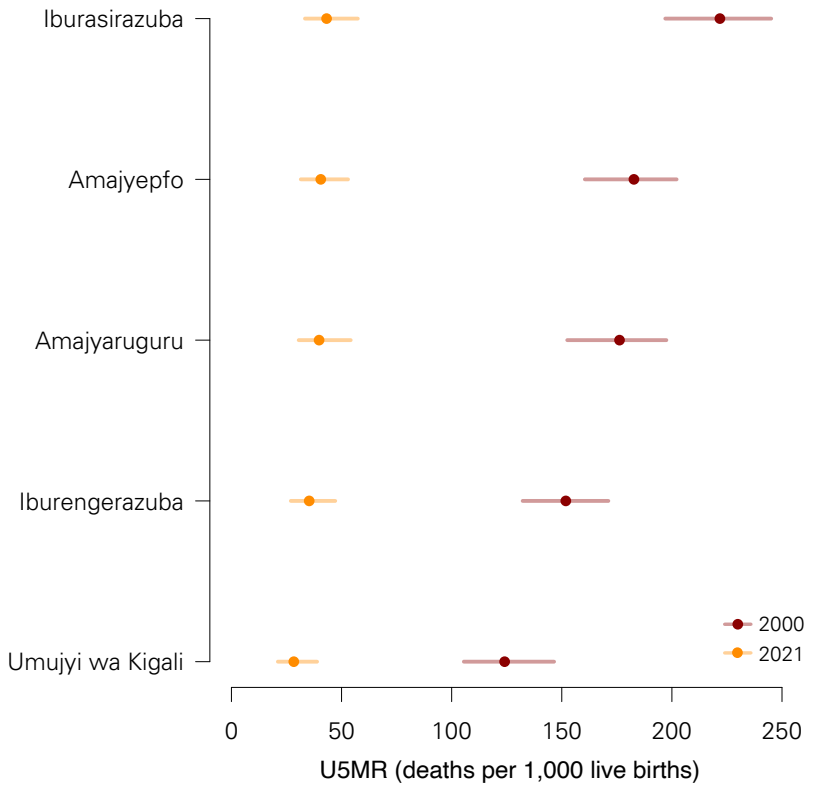


The percentage decline in under-five mortality at administrative level 2 ranged from a low of 73 per cent to a high of 84 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Rwanda, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Iburasirazuba, the highest mortality administrative level 1 area, was 1.8 times higher than in Umujyi wa Kigali, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Iburasirazuba, was 1.5 times higher than in the lowest mortality area, Umujyi wa Kigali.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Rwanda: Demographic and Health Survey 2010; Demographic and Health Survey 2014-2015; Demographic and Health Survey 2019-2020.

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RWANDA

NMR

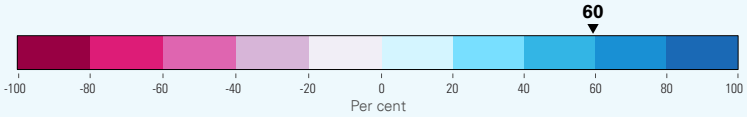
Administrative level 1 (Province): **5**

Administrative level 2 (District): **30**

National level

Neonatal mortality rate, 2000 and 2021

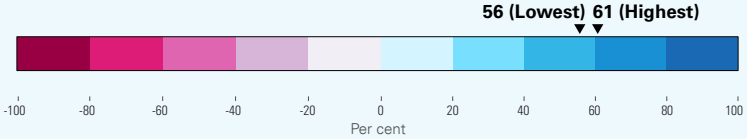
Percentage decline in neonatal mortality rate, 2000–2021



Administrative level 1

Neonatal mortality rate, 2000 and 2021 (range)

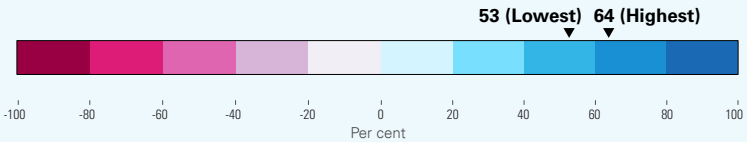
Percentage decline in neonatal mortality rate, 2000–2021 (range)



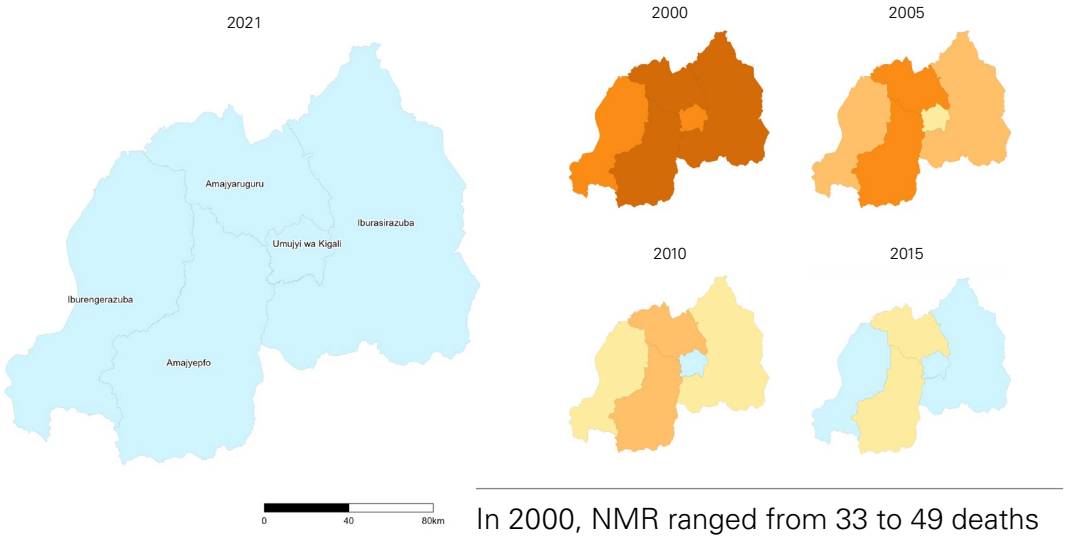
Administrative level 2

Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)

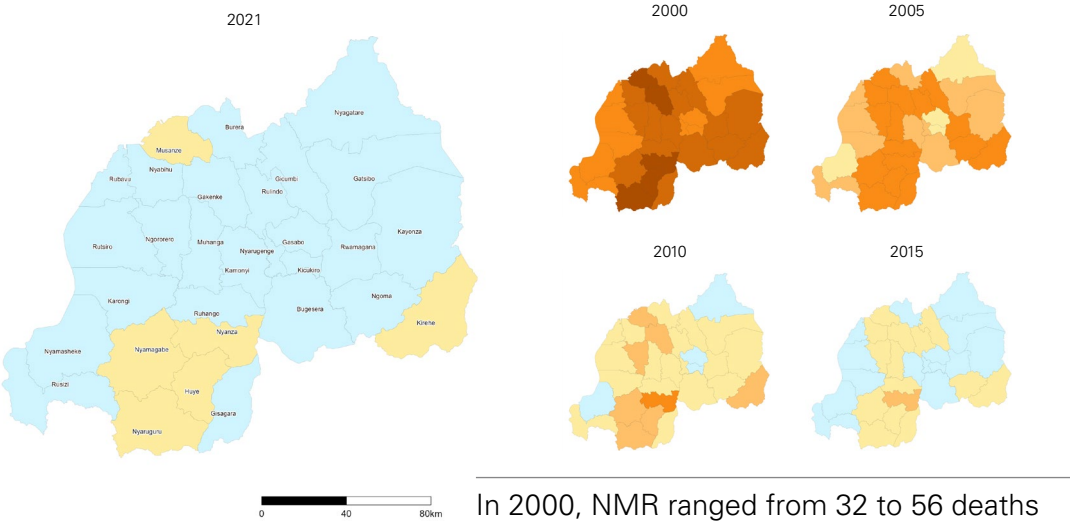


NMR by administrative 1 area in Rwanda, 2000-2021



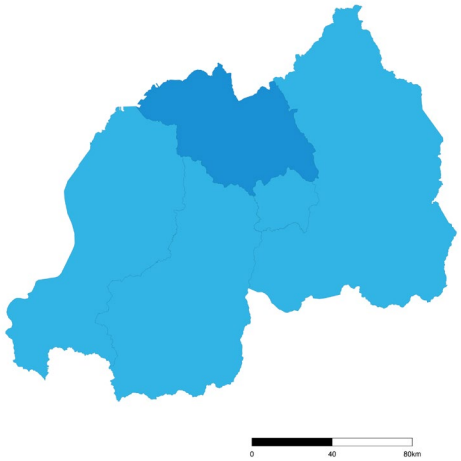
In 2000, NMR ranged from 33 to 49 deaths per 1,000 live births. By 2021, NMR ranged from 15 to 20 deaths per 1,000 live births.

NMR by administrative 2 area in Rwanda, 2000-2021



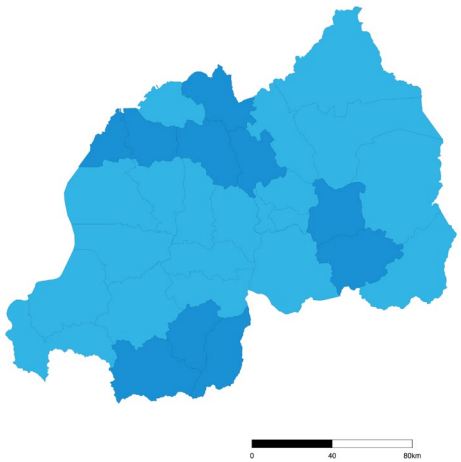
In 2000, NMR ranged from 32 to 56 deaths per 1,000 live births. By 2021, NMR ranged from 13 to 24 deaths per 1,000 live births.

Percentage decline in administrative level 1 NMR 2000-2021 in Rwanda

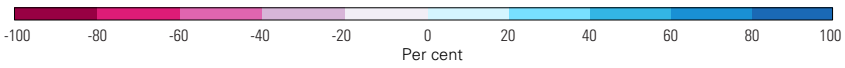


The percentage decline in neonatal mortality at administrative level 1 ranged from a low of 56 per cent to a high of 61 per cent.

Percentage decline in administrative level 2 NMR 2000-2021 in Rwanda

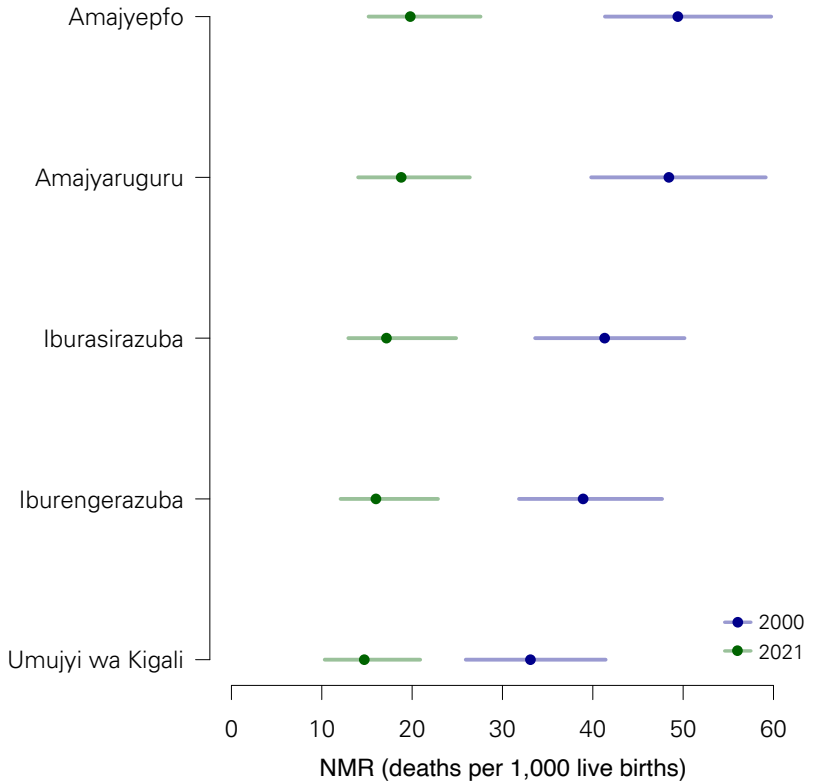


The percentage decline in neonatal mortality at administrative level 2 ranged from a low of 53 per cent to a high of 63 per cent.



NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Rwanda, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Amajyepfo, the highest mortality administrative level 1 area, was 1.5 times higher than in Umujyi wa Kigali, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, Amajyepfo, was 1.3 times higher than in the lowest mortality area, Umujyi wa Kigali.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

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Data sources for Rwanda: Demographic and Health Survey 2010; Demographic and Health Survey 2014-2015; Demographic and Health Survey 2019-2020.

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SENEGAL

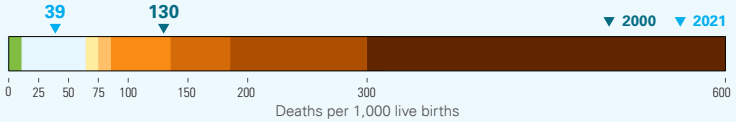
U5MR

Administrative level 1 (Region): **14**

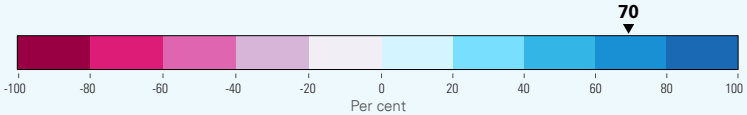
Administrative level 2 (Department): **45**

National level

Under-five mortality rate, 2000 and 2021

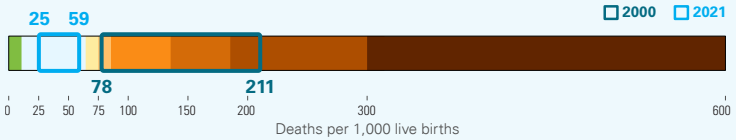


Percentage decline in under-five mortality rate, 2000–2021

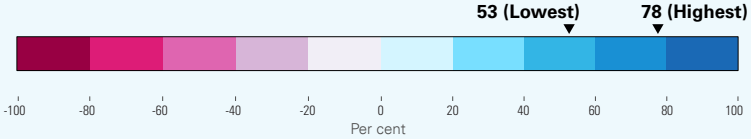


Administrative level 1

Under-five mortality rate, 2000 and 2021 (range)

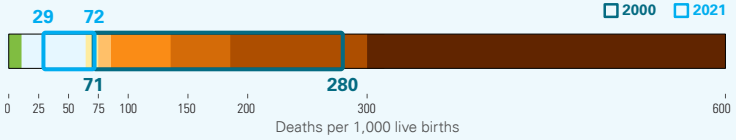


Percentage decline in under-five mortality rate, 2000–2021 (range)

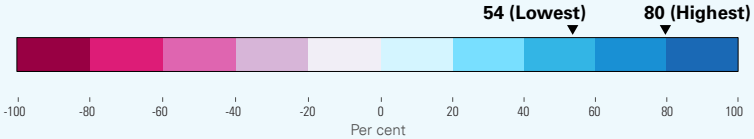


Administrative level 2

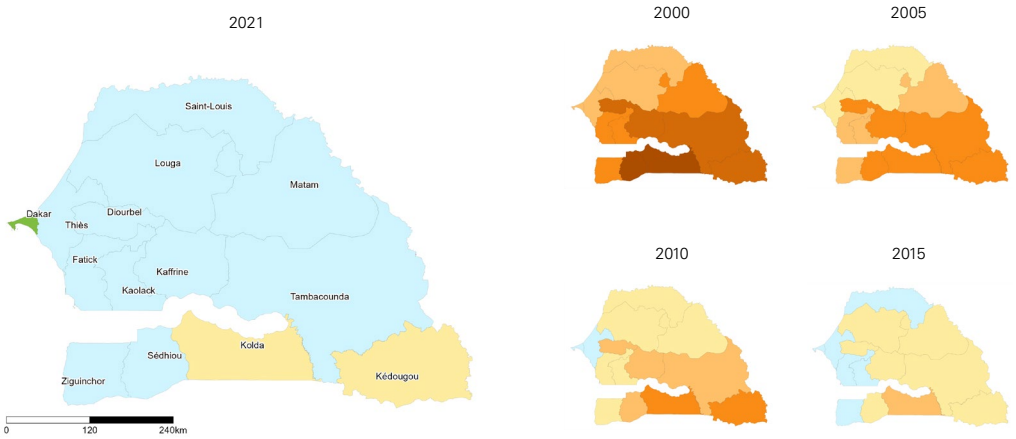
Under-five mortality rate, 2000 and 2021 (range)



Percentage decline in under-five mortality rate, 2000–2021 (range)

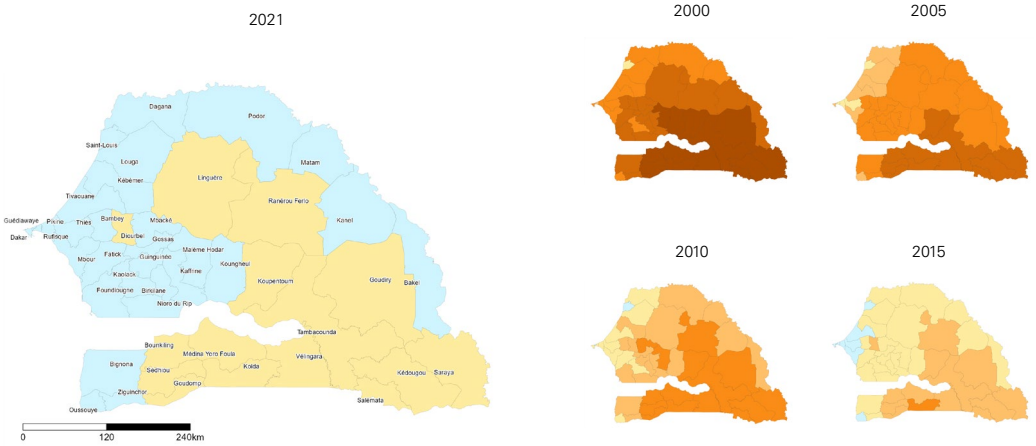


U5MR by administrative 1 area in Senegal, 2000-2021

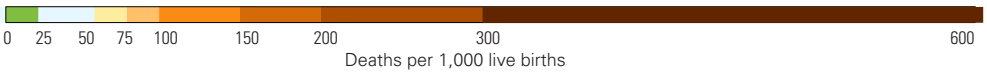


In 2000, U5MR ranged from 78 to 211 deaths per 1,000 live births. By 2021, U5MR ranged from 25 to 59 deaths per 1,000 live births.

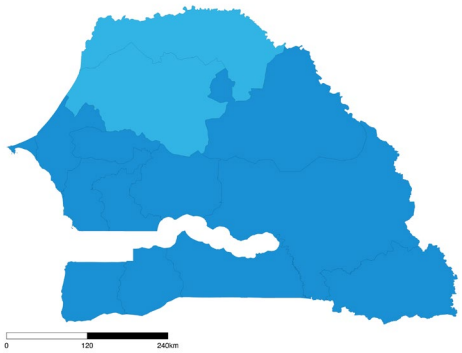
U5MR by administrative 2 area in Senegal, 2000-2021



In 2000, U5MR ranged from 71 to 280 deaths per 1,000 live births. By 2021, U5MR ranged from 29 to 72 deaths per 1,000 live births.

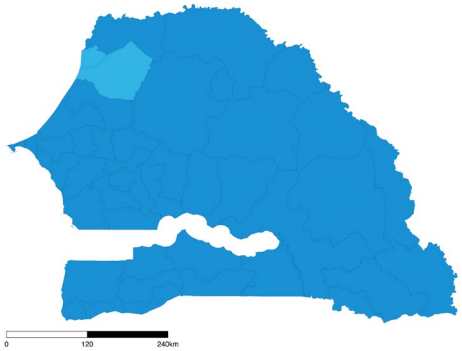


Percentage decline in administrative level 1 U5MR 2000-2021 in Senegal

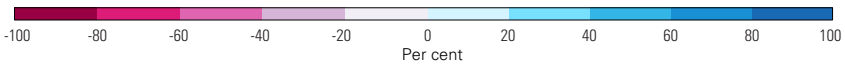


The percentage decline in under-five mortality at administrative level 1 ranged from a low of 53 per cent to a high of 78 per cent.

Percentage decline in administrative level 2 U5MR 2000-2021 in Senegal

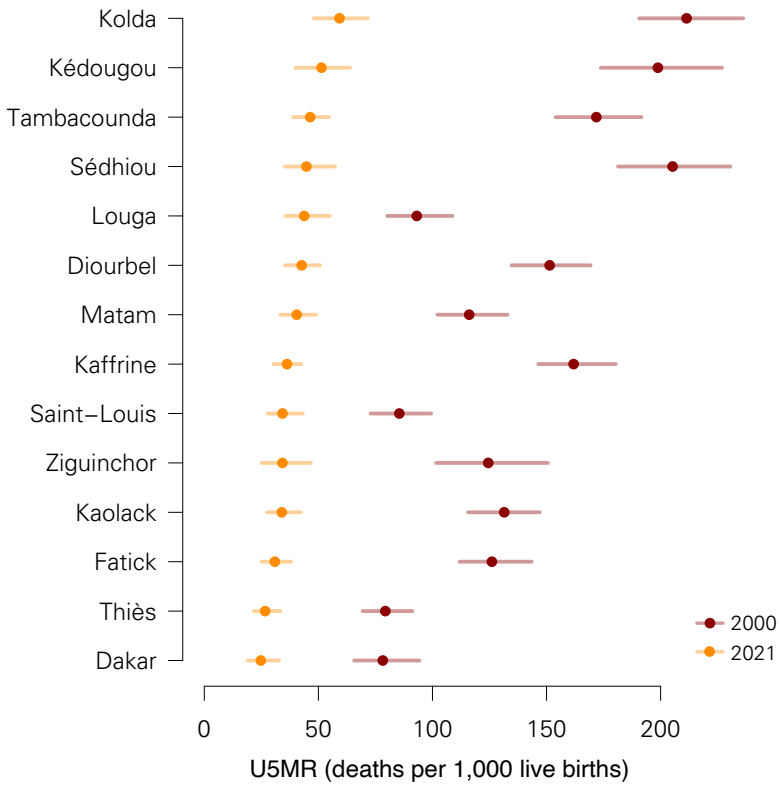


The percentage decline in under-five mortality at administrative level 2 ranged from a low of 54 per cent to a high of 80 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Senegal, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Kolda, the highest mortality administrative level 1 area, was 2.7 times higher than in Dakar, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Kolda, was 2.4 times higher than in the lowest mortality area, Dakar.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Senegal: Demographic and Health Survey 2015; Demographic and Health Survey 2016; Demographic and Health Survey 2017; Demographic and Health Survey 2018; Demographic and Health Survey 2019.

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SENEGAL

NMR

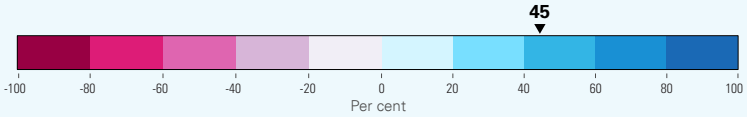
Administrative level 1 (Region): **14**

Administrative level 2 (Department): **45**

National level

Neonatal mortality rate, 2000 and 2021

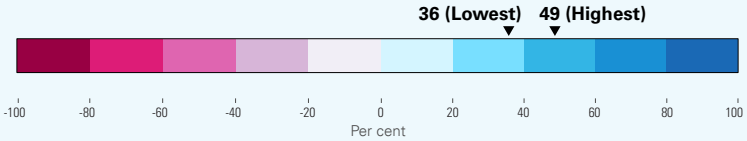
Percentage decline in neonatal mortality rate, 2000–2021



Administrative level 1

Neonatal mortality rate, 2000 and 2021 (range)

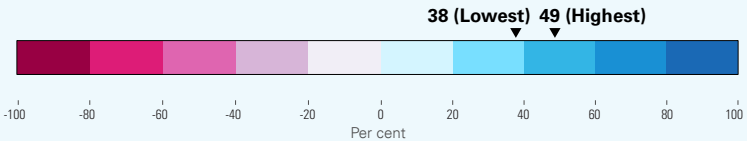
Percentage decline in neonatal mortality rate, 2000–2021 (range)



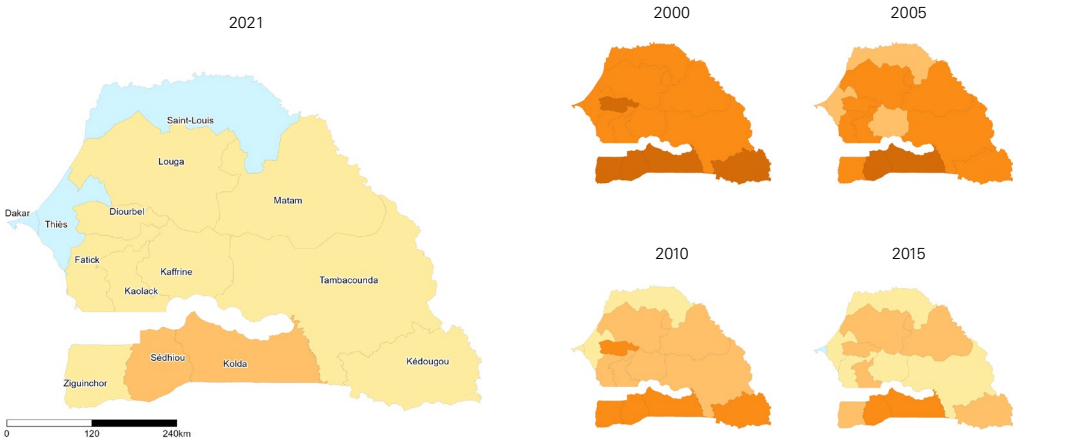
Administrative level 2

Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)

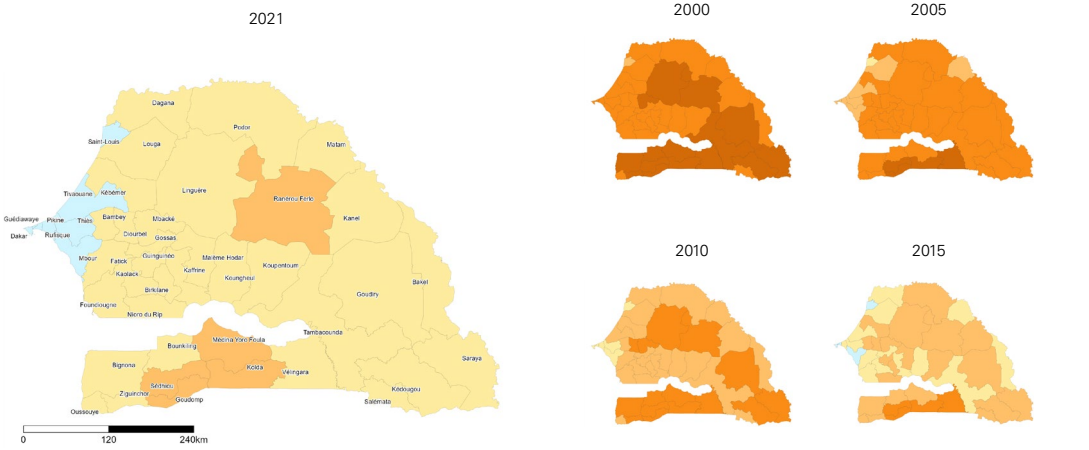


NMR by administrative 1 area in Senegal, 2000-2021



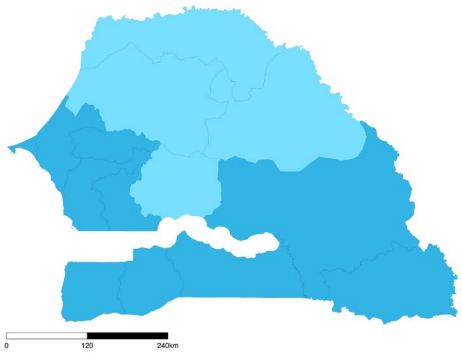
In 2000, NMR ranged from 30 to 47 deaths per 1,000 live births. By 2021, NMR ranged from 16 to 26 deaths per 1,000 live births.

NMR by administrative 2 area in Senegal, 2000-2021



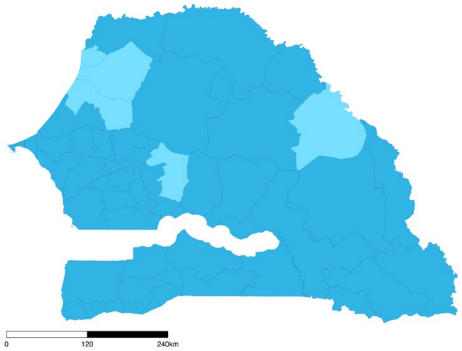
In 2000, NMR ranged from 26 to 50 deaths per 1,000 live births. By 2021, NMR ranged from 16 to 27 deaths per 1,000 live births.

Percentage decline in administrative level 1 NMR 2000-2021 in Senegal

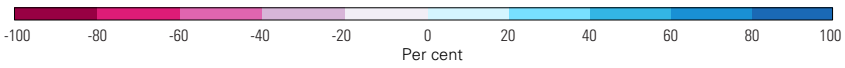


The percentage decline in neonatal mortality at administrative level 1 ranged from a low of 36 per cent to a high of 49 per cent.

Percentage decline in administrative level 2 NMR 2000-2021 in Senegal

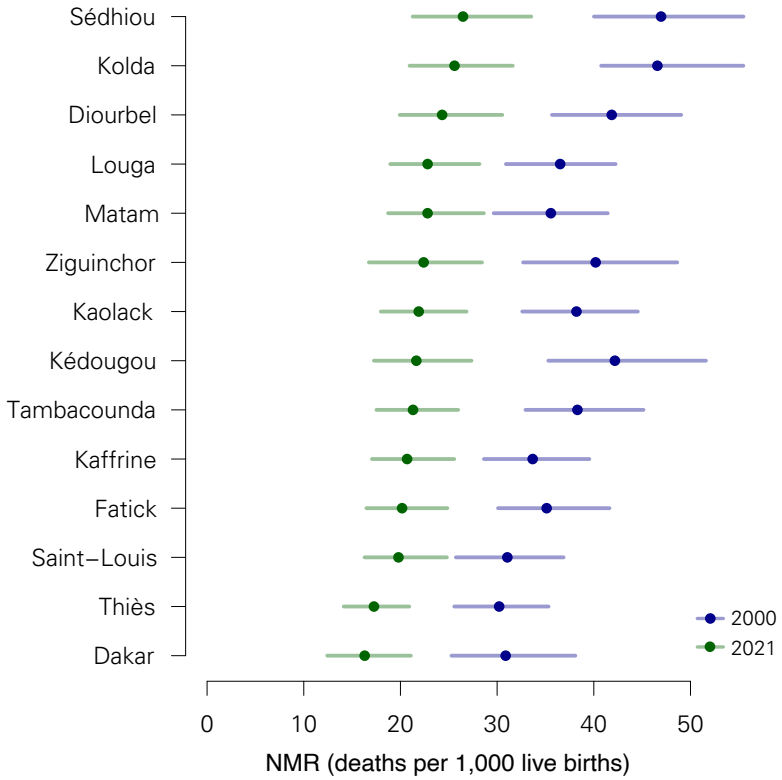


The percentage decline in neonatal mortality at administrative level 2 ranged from a low of 38 per cent to a high of 49 per cent.



NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Senegal, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Sédhiou, the highest mortality administrative level 1 area, was 1.6 times higher than in Thiès, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, Sédhiou, was 1.6 times higher than in the lowest mortality area, Dakar.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Senegal: Demographic and Health Survey 2015; Demographic and Health Survey 2016; Demographic and Health Survey 2017; Demographic and Health Survey 2018; Demographic and Health Survey 2019.

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SIERRA LEONE

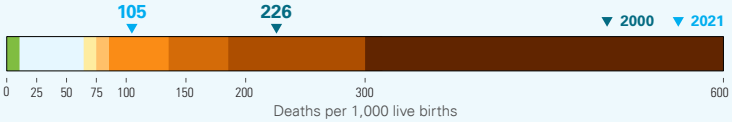
U5MR

Administrative level 1 (Province): **5**

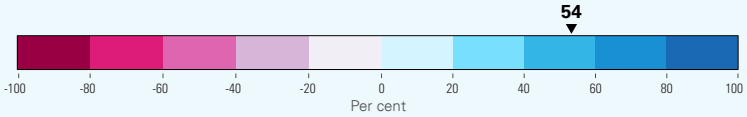
Administrative level 2 (District, Area): **16**

National level

Under-five mortality rate, 2000 and 2021

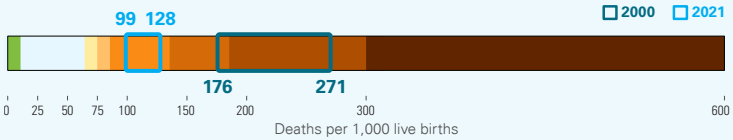


Percentage decline in under-five mortality rate, 2000–2021

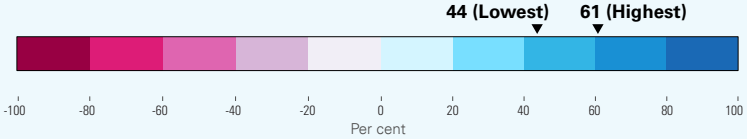


Administrative level 1

Under-five mortality rate, 2000 and 2021 (range)

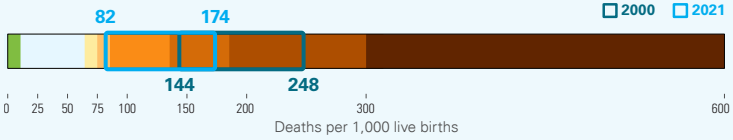


Percentage decline in under-five mortality rate, 2000–2021 (range)

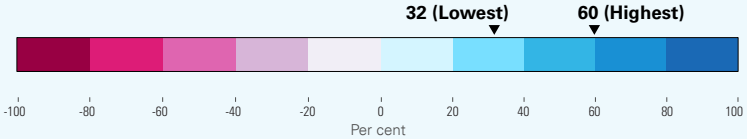


Administrative level 2

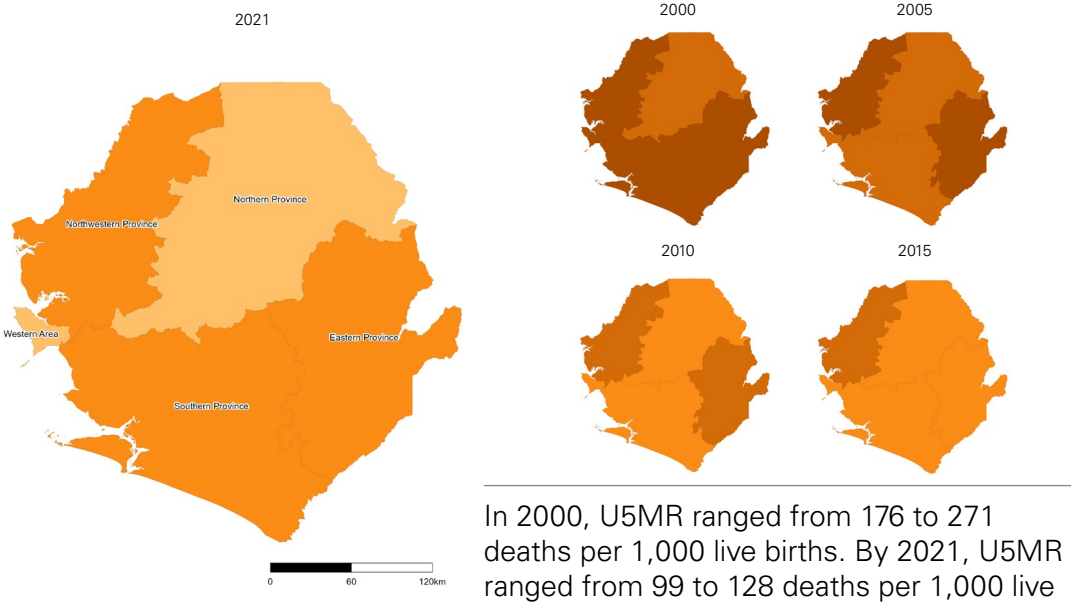
Under-five mortality rate, 2000 and 2021 (range)



Percentage decline in under-five mortality rate, 2000–2021 (range)

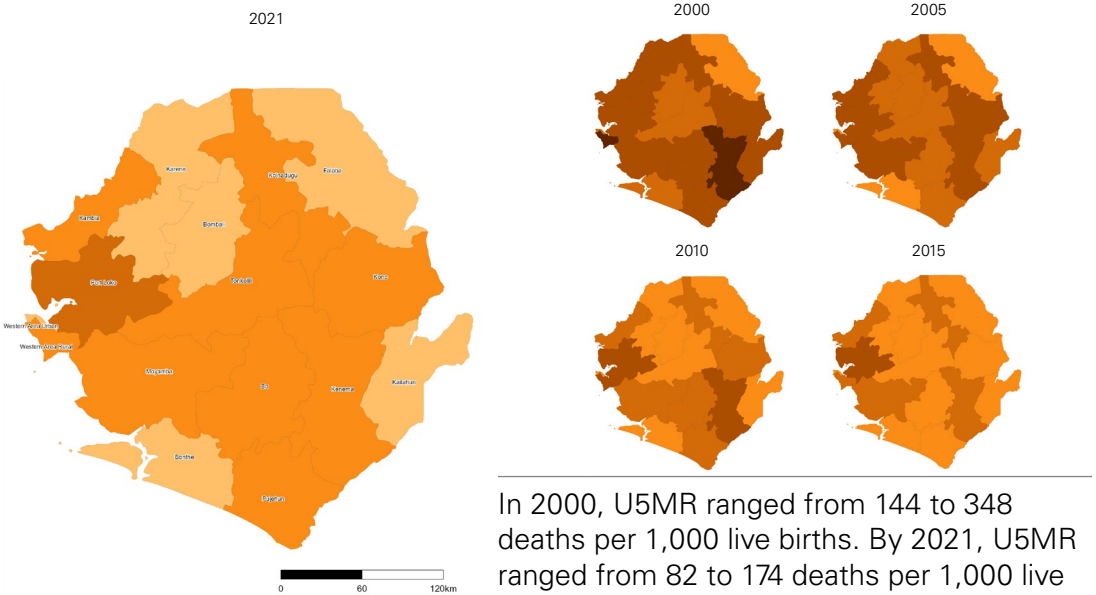


U5MR by administrative 1 area in Sierra Leone, 2000-2021

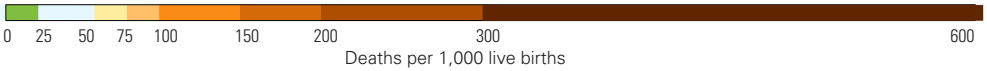


In 2000, U5MR ranged from 176 to 271 deaths per 1,000 live births. By 2021, U5MR ranged from 99 to 128 deaths per 1,000 live births.

U5MR by administrative 2 area in Sierra Leone, 2000-2021



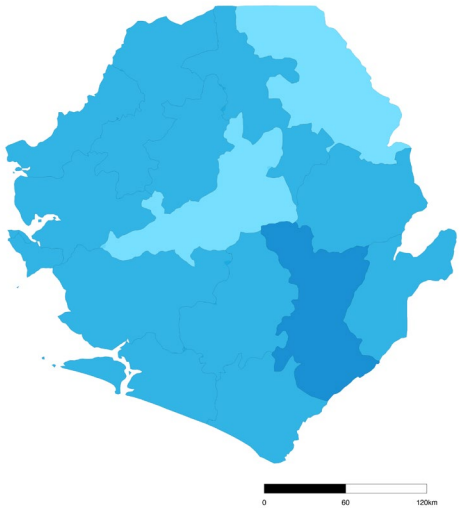
In 2000, U5MR ranged from 144 to 348 deaths per 1,000 live births. By 2021, U5MR ranged from 82 to 174 deaths per 1,000 live births.



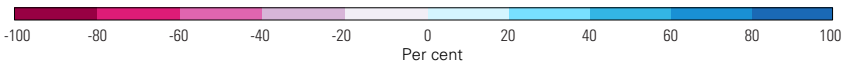
Percentage decline in administrative level 1 U5MR 2000-2021 in Sierra Leone

The percentage decline in under-five mortality at administrative level 1 ranged from a low of 44 per cent to a high of 61 per cent.

Percentage decline in administrative level 2 U5MR 2000-2021 in Sierra Leone

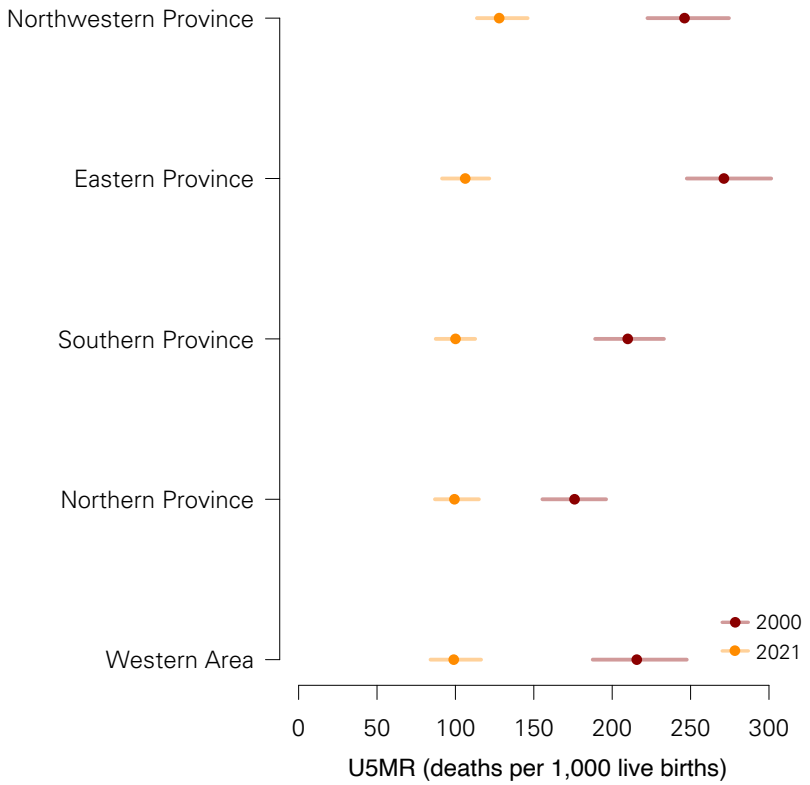


The percentage decline in under-five mortality at administrative level 2 ranged from a low of 32 per cent to a high of 60 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Sierra Leone, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Eastern Province, the highest mortality administrative level 1 area, was 1.5 times higher than in Northern Province, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Northwestern Province, was 1.3 times higher than in the lowest mortality area, Western Area.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on shapefiles provided during the country consultation process.

Data sources for Sierra Leone: Demographic and Health Survey 2019.

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SIERRA LEONE

NMR

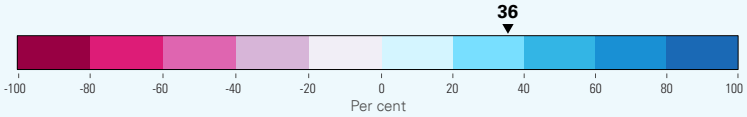
Administrative level 1 (Province): **5**

Administrative level 2 (District, Area): **16**

National level

Neonatal mortality rate, 2000 and 2021

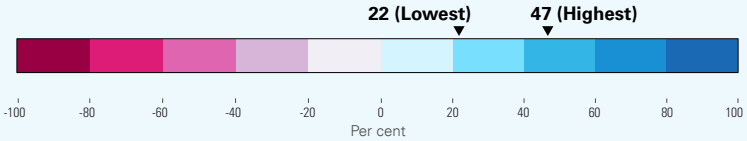
Percentage decline in neonatal mortality rate, 2000–2021



Administrative level 1

Neonatal mortality rate, 2000 and 2021 (range)

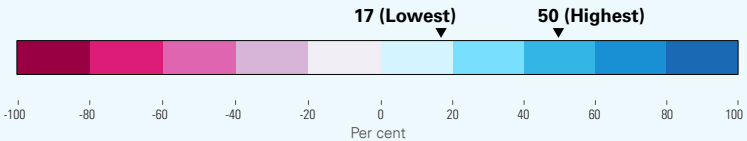
Percentage decline in neonatal mortality rate, 2000–2021 (range)



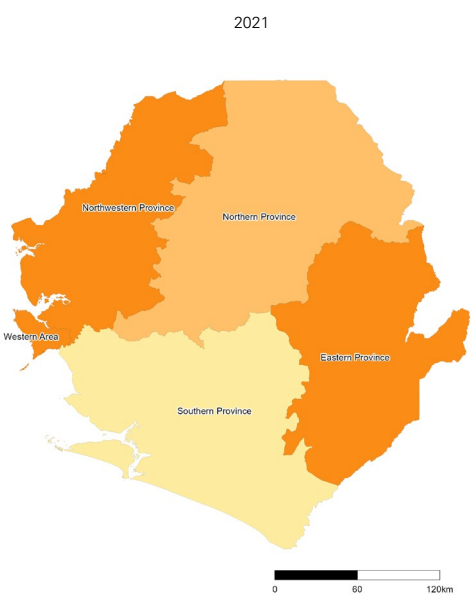
Administrative level 2

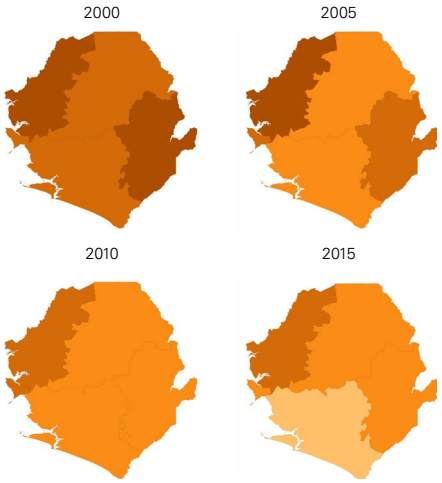
Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)



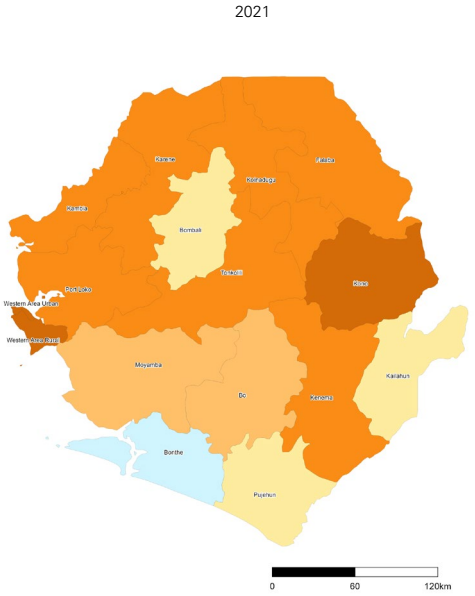
NMR by administrative 1 area in Sierra Leone, 2000-2021

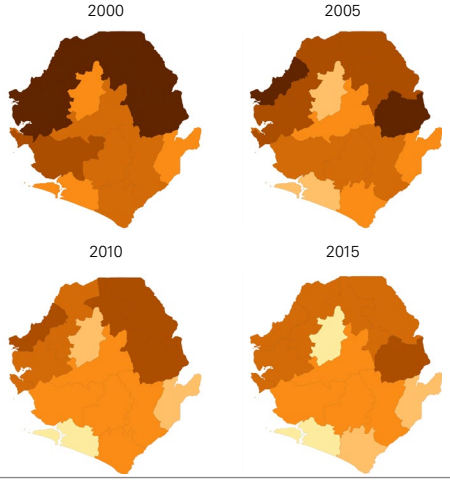




In 2000, NMR ranged from 42 to 59 deaths per 1,000 live births. By 2021, NMR ranged from 23 to 38 deaths per 1,000 live births.

NMR by administrative 2 area in Sierra Leone, 2000-2021



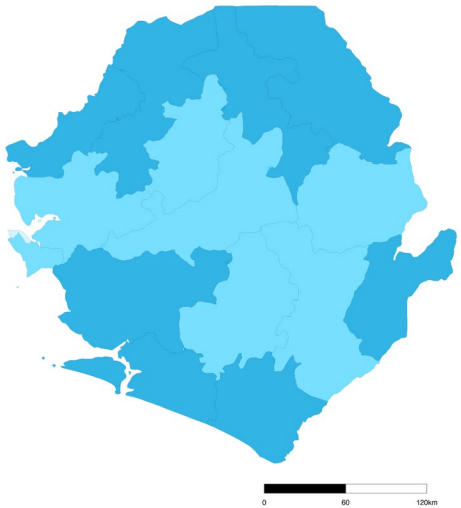


In 2000, NMR ranged from 31 to 72 deaths per 1,000 live births. By 2021, NMR ranged from 17 to 45 deaths per 1,000 live births.

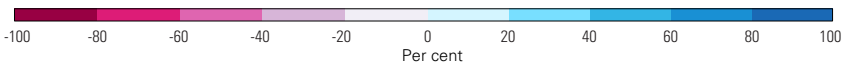
Percentage decline in administrative level 1 NMR 2000-2021 in Sierra Leone

The percentage decline in neonatal mortality at administrative level 1 ranged from a low of 22 per cent to a high of 47 per cent.

Percentage decline in administrative level 2 NMR 2000-2021 in Sierra Leone

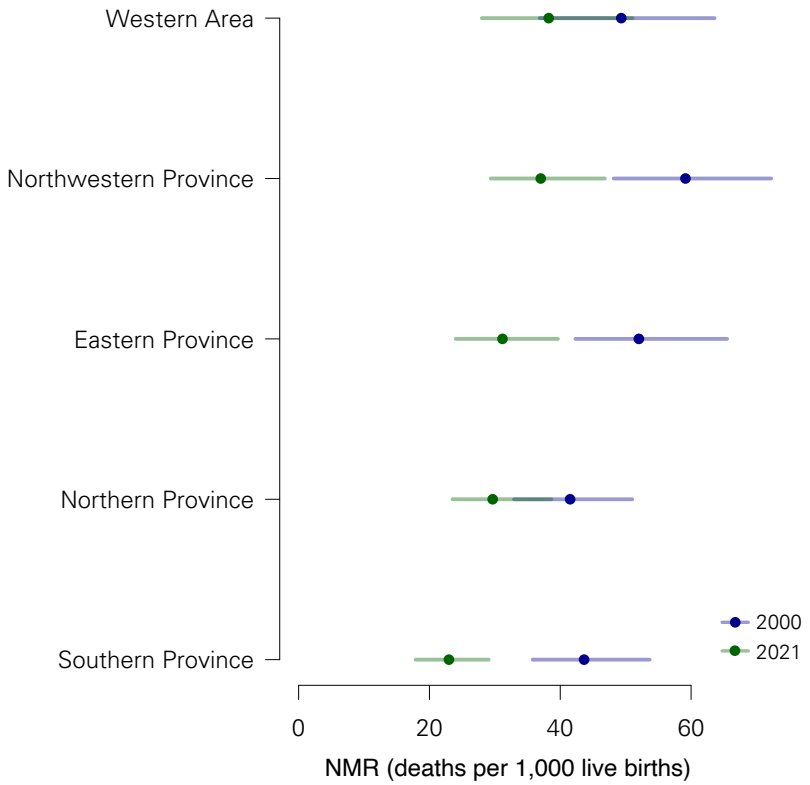


The percentage decline in neonatal mortality at administrative level 2 ranged from a low of 17 per cent to a high of 50 per cent.



NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Sierra Leone, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Northwestern Province, the highest mortality administrative level 1 area, was 1.4 times higher than in Northern Province, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, Western Area, was 1.7 times higher than in the lowest mortality area, Southern Province.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

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Data sources for Sierra Leone: Demographic and Health Survey 2019.

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TOGO

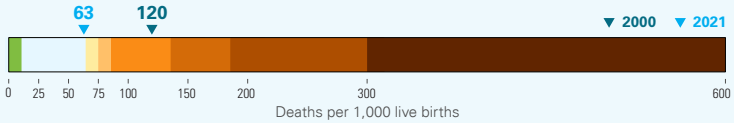
U5MR

Administrative level 1 (Region): **5**

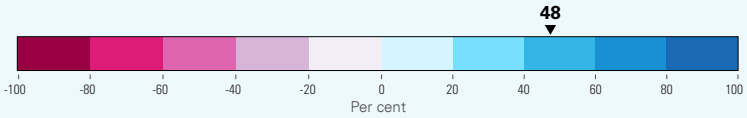
Administrative level 2: -

National level

Under-five mortality rate, 2000 and 2021

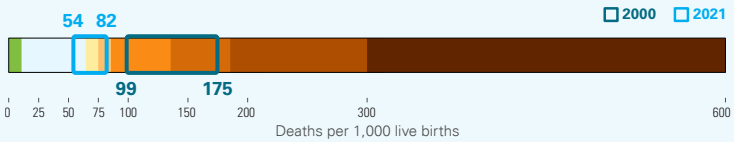


Percentage decline in under-five mortality rate, 2000–2021

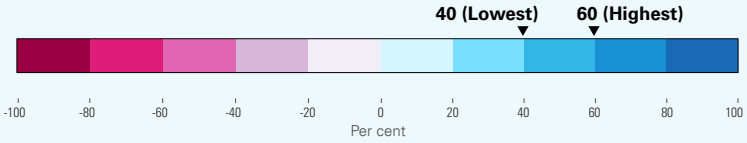


Administrative level 1

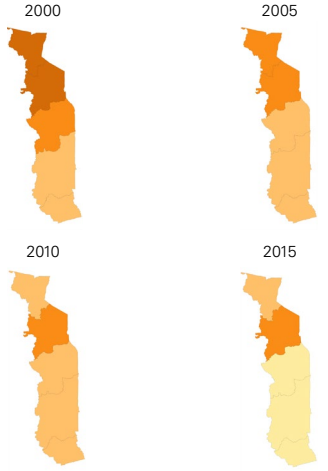
Under-five mortality rate, 2000 and 2021 (range)



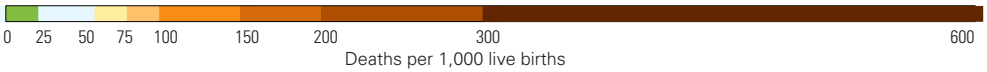
Percentage decline in under-five mortality rate, 2000–2021 (range)



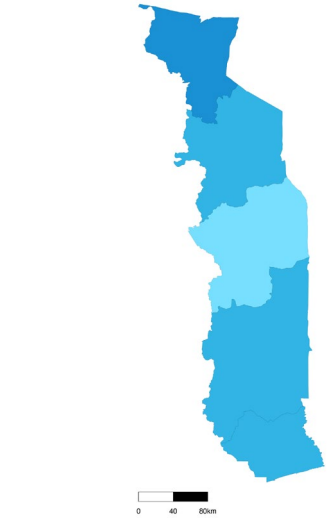
U5MR by administrative 1 area in Togo, 2000-2021



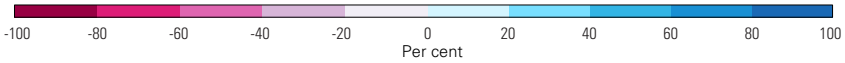
In 2000, U5MR ranged from 99 to 175 deaths per 1,000 live births. By 2021, U5MR ranged from 54 to 82 deaths per 1,000 live births.



Percentage decline in administrative level 1 U5MR 2000-2021 in Togo

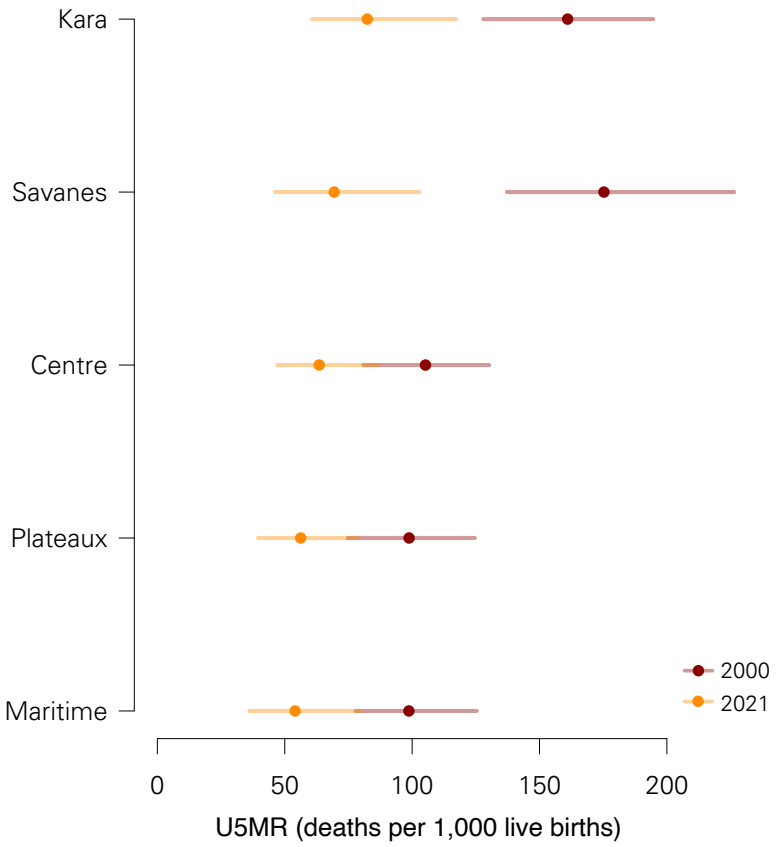


The percentage decline in under-five mortality at administrative level 1 ranged from a low of 40 per cent to a high of 60 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Togo, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Savanes, the highest mortality administrative level 1 area, was 1.8 times higher than in Maritime, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Kara, was 1.5 times higher than in the lowest mortality area, Maritime.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Togo: Multiple Indicator Cluster Survey 2017.

These maps do not reflect a position by UNICEF or UN IGME on the legal status of any country, territory, or administrative division or the delimitation of any frontiers.

TOGO

NMR

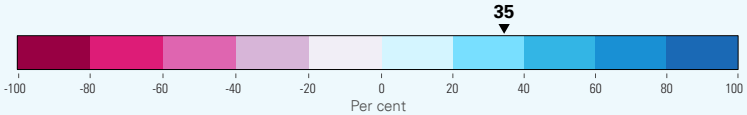
Administrative level 1 (Region): **5**

Administrative level 2: -

National level

Neonatal mortality rate, 2000 and 2021

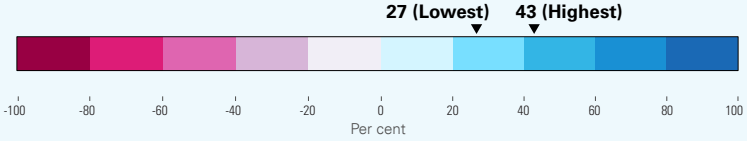
Percentage decline in neonatal mortality rate, 2000–2021



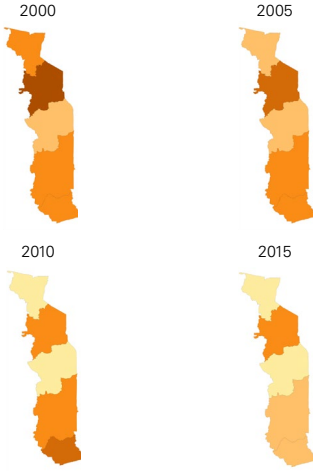
Administrative level 1

Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)

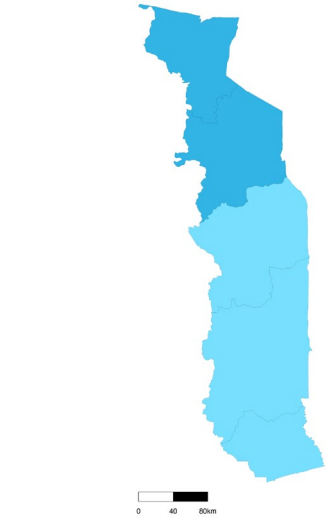


NMR by administrative 1 area in Togo, 2000-2021

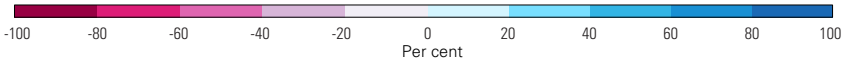


In 2000, NMR ranged from 29 to 54 deaths per 1,000 live births. By 2021, NMR ranged from 21 to 31 deaths per 1,000 live births.

Percentage decline in administrative level 1 NMR 2000-2021 in Togo

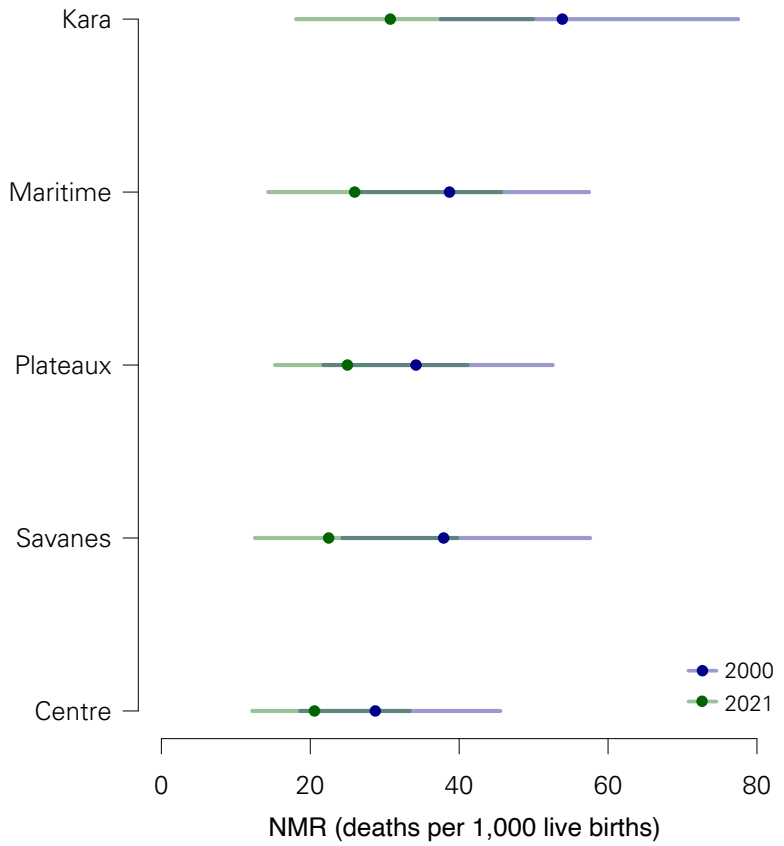


The percentage decline in neonatal mortality at administrative level 1 ranged from a low of 27 per cent to a high of 43 per cent.



NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Togo, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Kara, the highest mortality administrative level 1 area, was 1.9 times higher than in Centre, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, Kara, was 1.5 times higher than in the lowest mortality area, Centre.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Togo: Multiple Indicator Cluster Survey 2017.

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UGANDA

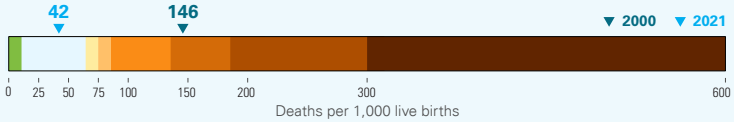
U5MR

Administrative level 1 (Region): **15**

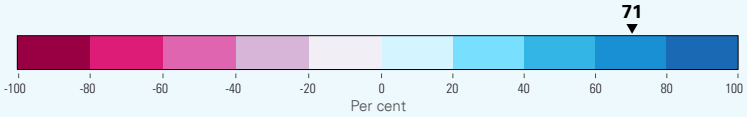
Administrative level 2 (District): **146**

National level

Under-five mortality rate, 2000 and 2021

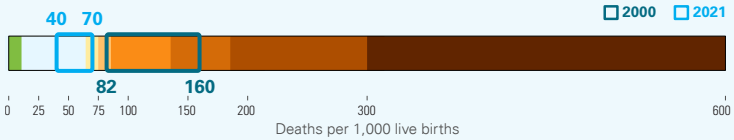


Percentage decline in under-five mortality rate, 2000–2021

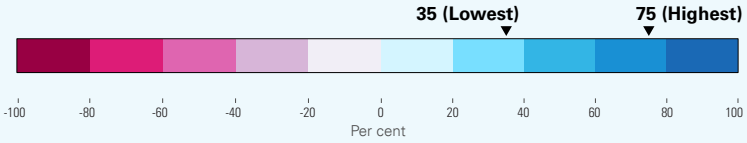


Administrative level 1

Under-five mortality rate, 2000 and 2021 (range)

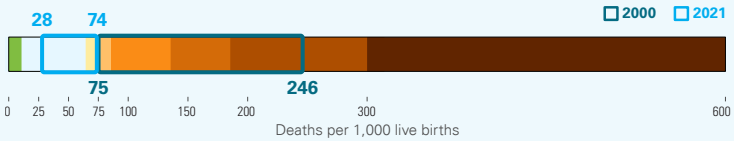


Percentage decline in under-five mortality rate, 2000–2021 (range)

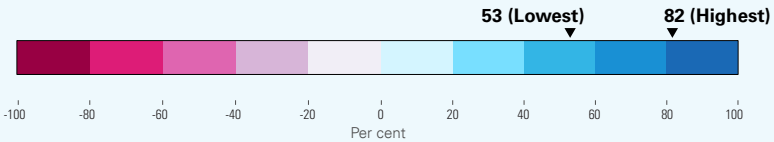


Administrative level 2

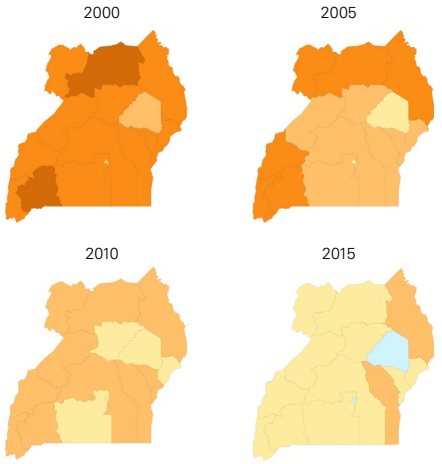
Under-five mortality rate, 2000 and 2021 (range)



Percentage decline in under-five mortality rate, 2000–2021 (range)

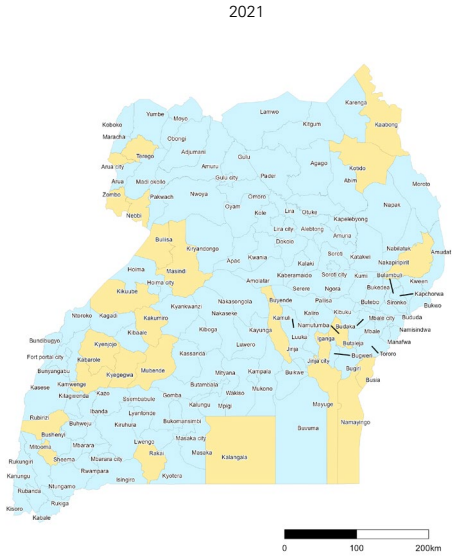


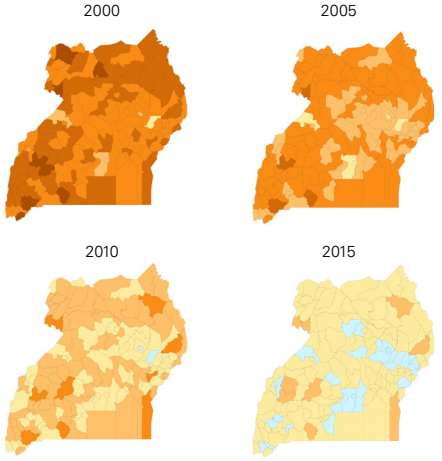
U5MR by administrative 1 area in Uganda, 2000-2021



In 2000, U5MR ranged from 82 to 160 deaths per 1,000 live births. By 2021, U5MR ranged from 40 to 70 deaths per 1,000 live births.

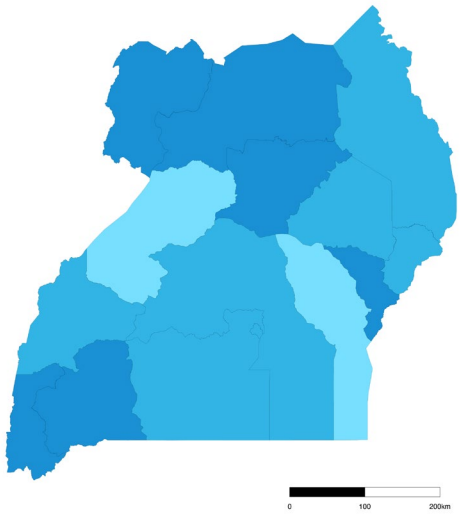
U5MR by administrative 2 area in Uganda, 2000-2021





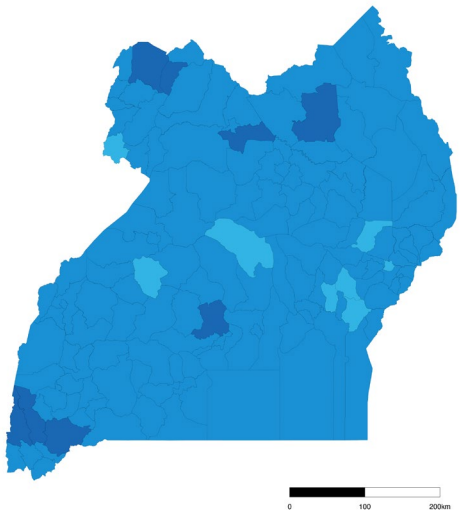
In 2000, U5MR ranged from 75 to 246 deaths per 1,000 live births. By 2021, U5MR ranged from 28 to 74 deaths per 1,000 live births.

Percentage decline in administrative level 1 U5MR 2000-2021 in Uganda

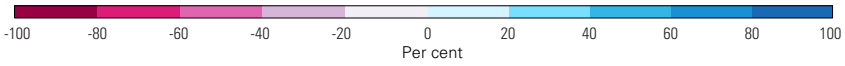


The percentage decline in under-five mortality at administrative level 1 ranged from a low of 35 per cent to a high of 75 per cent.

Percentage decline in administrative level 2 U5MR 2000-2021 in Uganda

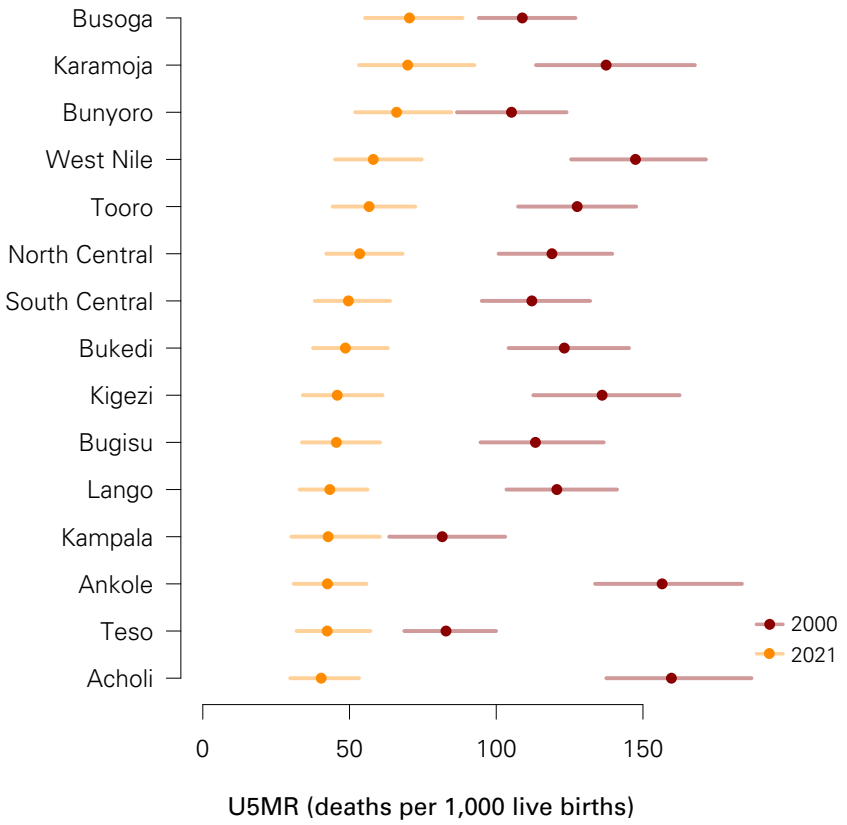


The percentage decline in under-five mortality at administrative level 2 ranged from a low of 53 per cent to a high of 82 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Uganda, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Acholi, the highest mortality administrative level 1 area, was 2 times higher than in Kampala, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Busoga, was 1.7 times higher than in the lowest mortality area, Acholi.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on shapefiles provided during the country consultation process.

Data sources for Uganda: Demographic and Health Survey 2016.

These maps do not reflect a position by UNICEF or UN IGME on the legal status of any country, territory, or administrative division or the delimitation of any frontiers.

UNITED REPUBLIC OF TANZANIA

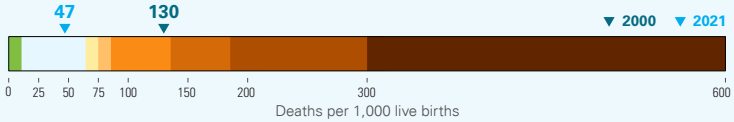
U5MR

Administrative level 1 (Region): **31**

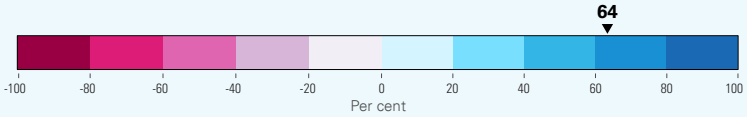
Administrative level 2 (District): **185**

National level

Under-five mortality rate, 2000 and 2021

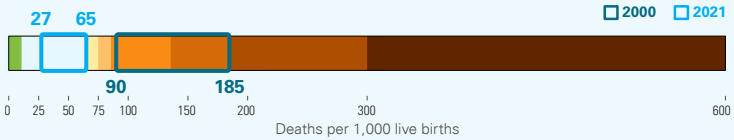


Percentage decline in under-five mortality rate, 2000–2021

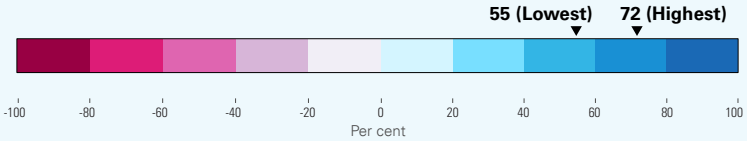


Administrative level 1

Under-five mortality rate, 2000 and 2021 (range)

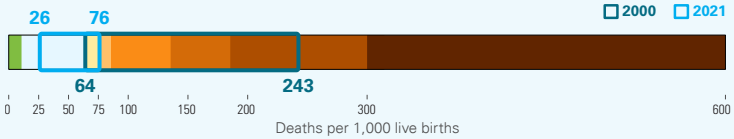


Percentage decline in under-five mortality rate, 2000–2021 (range)

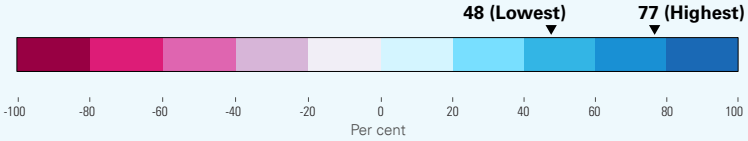


Administrative level 2

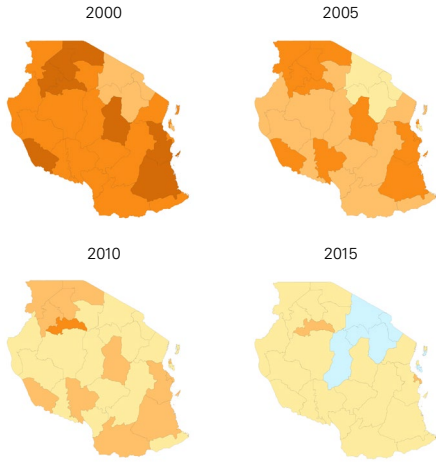
Under-five mortality rate, 2000 and 2021 (range)



Percentage decline in under-five mortality rate, 2000–2021 (range)

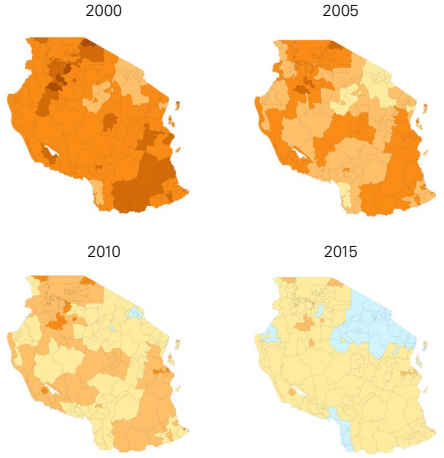


U5MR by administrative 1 area in United Republic of Tanzania, 2000-2021



In 2000, U5MR ranged from 90 to 185 deaths per 1,000 live births. By 2021, U5MR ranged from 27 to 65 deaths per 1,000 live births.

U5MR by administrative 2 area in United Republic of Tanzania, 2000-2021

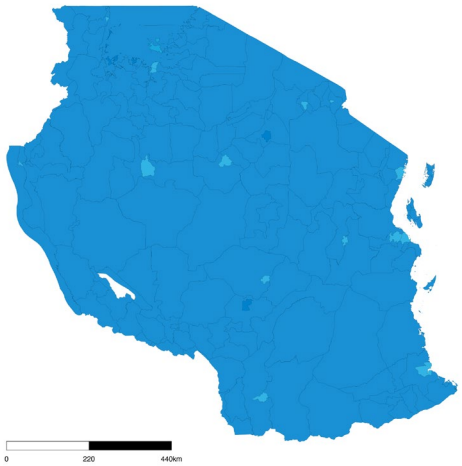


In 2000, U5MR ranged from 64 to 243 deaths per 1,000 live births. By 2021, U5MR ranged from 26 to 76 deaths per 1,000 live births.

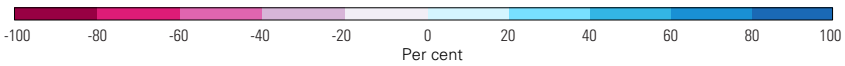
Percentage decline in administrative level 1 U5MR 2000-2021 in United Republic of Tanzania

The percentage decline in under-five mortality at administrative level 1 ranged from a low of 55 per cent to a high of 72 per cent.

Percentage decline in administrative level 2 U5MR 2000-2021 in United Republic of Tanzania

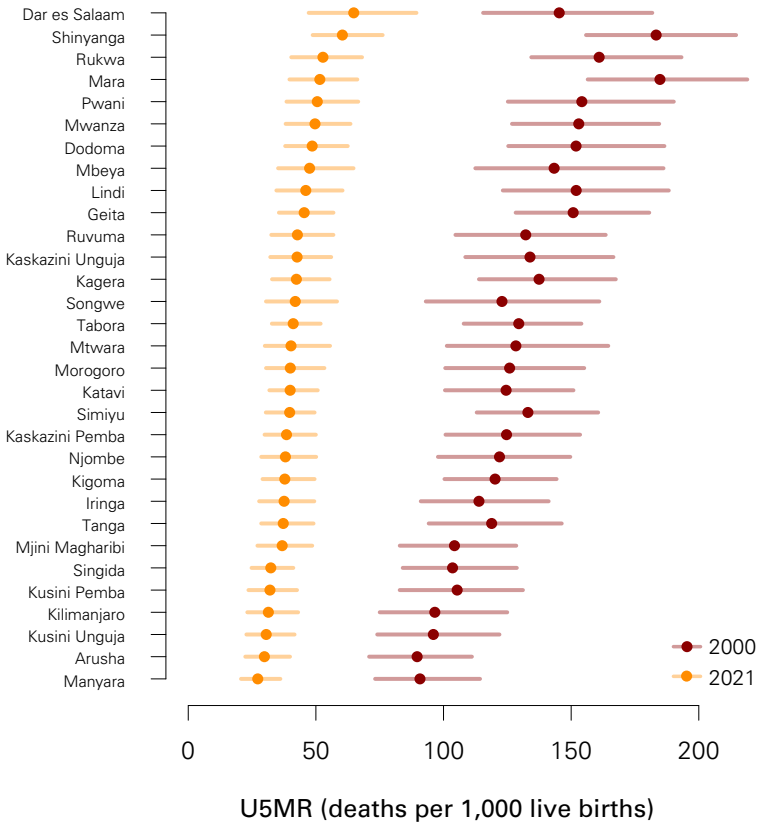


The percentage decline in under-five mortality at administrative level 2 ranged from a low of 48 per cent to a high of 77 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of United Republic of Tanzania, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Mara, the highest mortality administrative level 1 area, was 2.1 times higher than in Arusha, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Dar es Salaam, was 2.4 times higher than in the lowest mortality area, Manyara.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on shapefiles provided during the country consultation process.

Data sources for Tanzania: Demographic and Health Survey 2015-2016.

These maps do not reflect a position by UNICEF or UN IGME on the legal status of any country, territory, or administrative division or the delimitation of any frontiers.

UNITED REPUBLIC OF TANZANIA

NMR

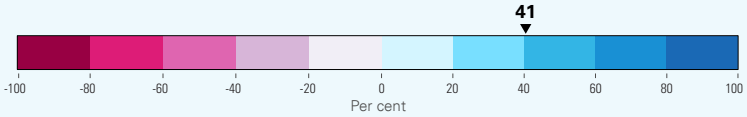
Administrative level 1 (Region): **31**

Administrative level 2 (District): **185**

National level

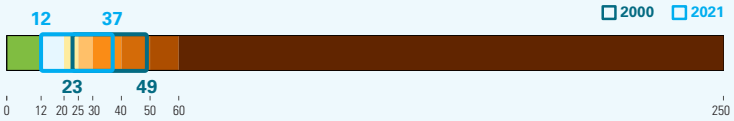
Neonatal mortality rate, 2000 and 2021

Percentage decline in neonatal mortality rate, 2000–2021

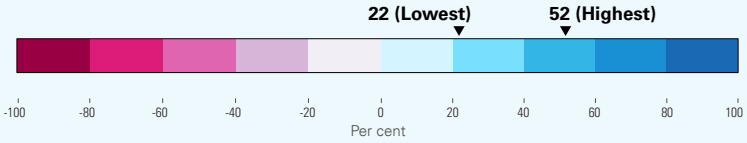


Administrative level 1

Neonatal mortality rate, 2000 and 2021 (range)



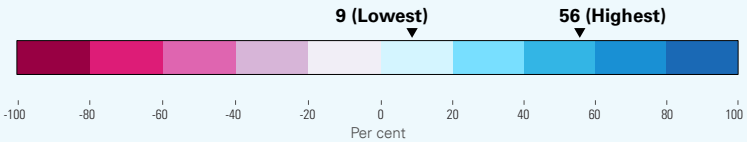
Percentage decline in neonatal mortality rate, 2000–2021 (range)



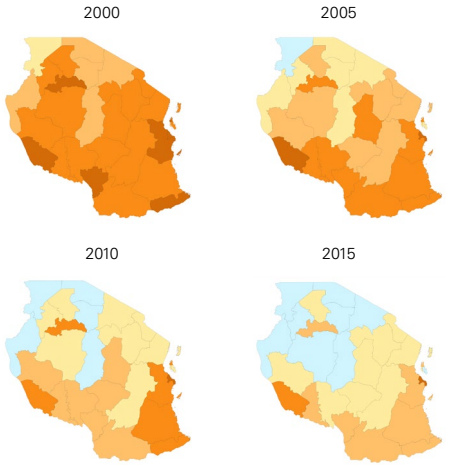
Administrative level 2

Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)

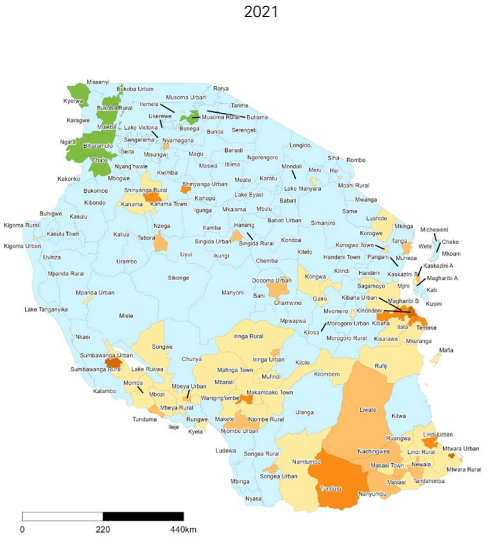


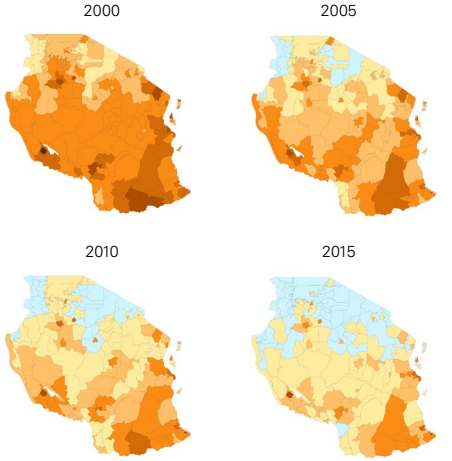
NMR by administrative 1 area in United Republic of Tanzania, 2000-2021



In 2000, NMR ranged from 23 to 49 deaths per 1,000 live births. By 2021, NMR ranged from 12 to 37 deaths per 1,000 live births.

NMR by administrative 2 area in United Republic of Tanzania, 2000-2021



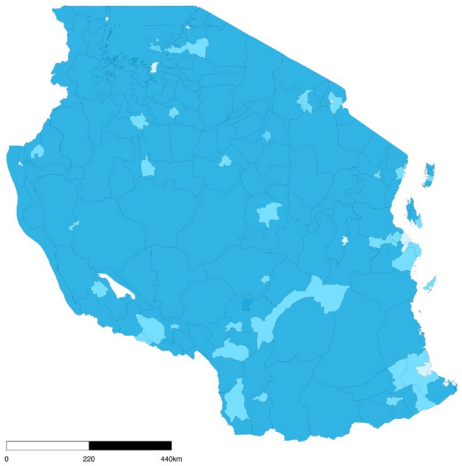


In 2000, NMR ranged from 21 to 61 deaths per 1,000 live births. By 2021, NMR ranged from 11 to 45 deaths per 1,000 live births.

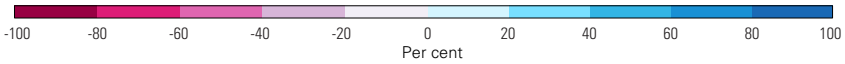
Percentage decline in administrative level 1 NMR 2000-2021 in United Republic of Tanzania

The percentage decline in neonatal mortality at administrative level 1 ranged from a low of 22 per cent to a high of 52 per cent.

Percentage decline in administrative level 2 NMR 2000-2021 in United Republic of Tanzania

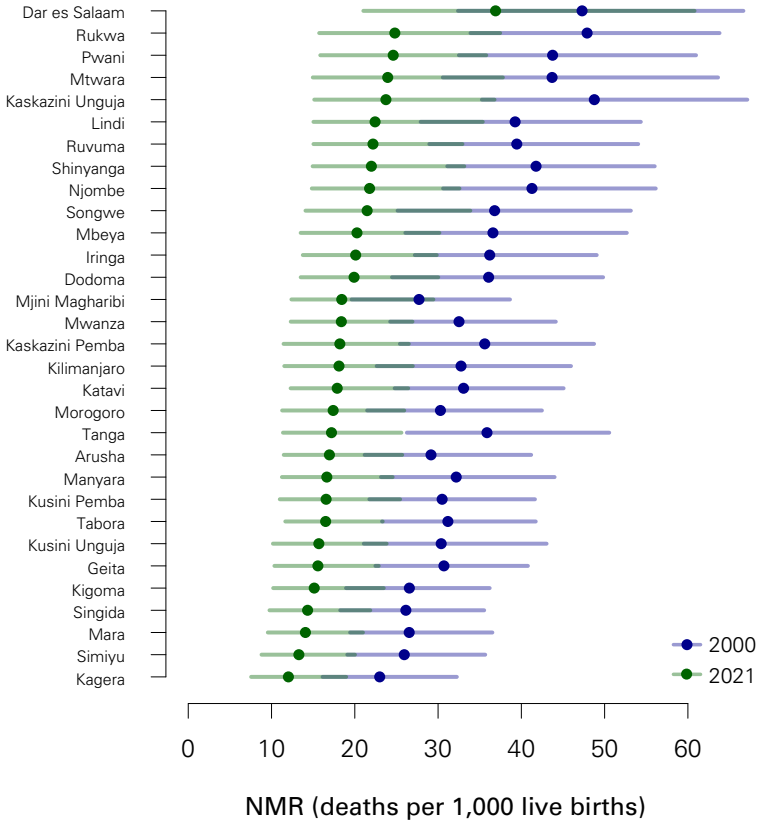


The percentage decline in neonatal mortality at administrative level 2 ranged from a low of 9 per cent to a high of 56 per cent.



NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of United Republic of Tanzania, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Kaskazini Unguja, the highest mortality administrative level 1 area, was 2.1 times higher than in Kagera, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, Dar es Salaam, was 3.1 times higher than in the lowest mortality area, Kagera.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Tanzania: Demographic and Health Survey 2015-2016.

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ZAMBIA

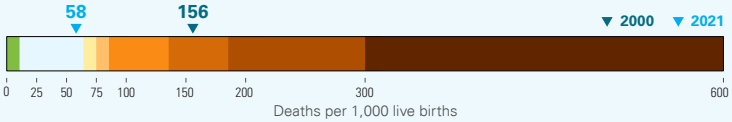
U5MR

Administrative level 1 (Province): **10**

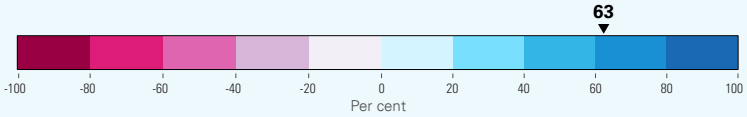
Administrative level 2 (District): **115**

National level

Under-five mortality rate, 2000 and 2021

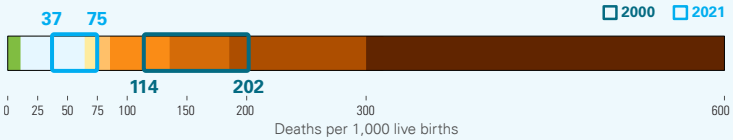


Percentage decline in under-five mortality rate, 2000–2021

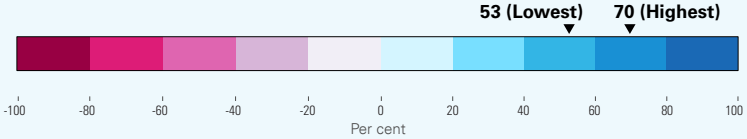


Administrative level 1

Under-five mortality rate, 2000 and 2021 (range)

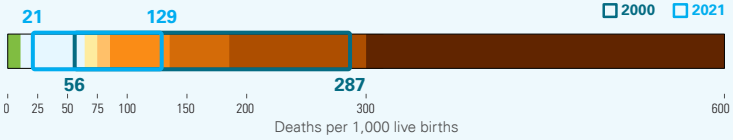


Percentage decline in under-five mortality rate, 2000–2021 (range)

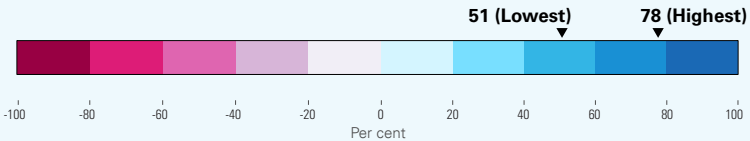


Administrative level 2

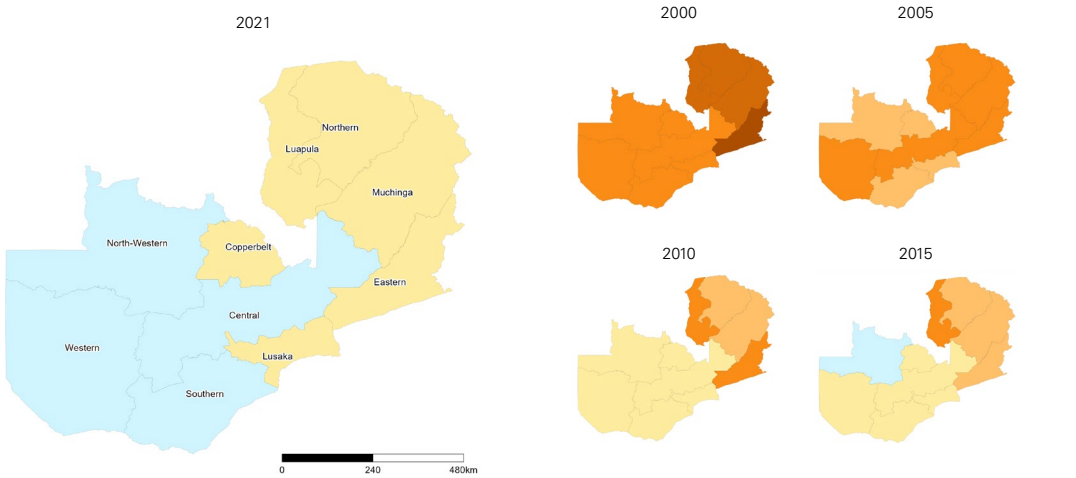
Under-five mortality rate, 2000 and 2021 (range)



Percentage decline in under-five mortality rate, 2000–2021 (range)

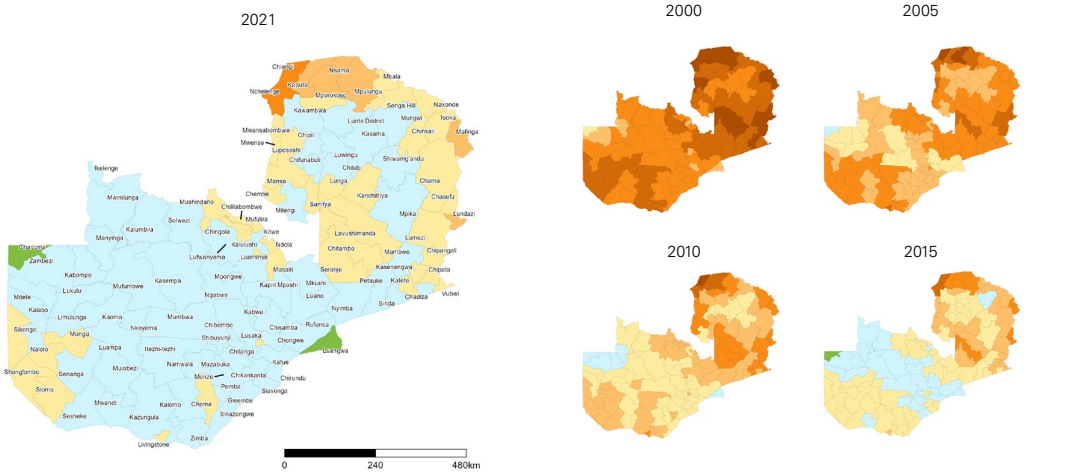


U5MR by administrative 1 area in Zambia, 2000-2021

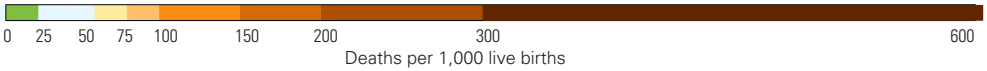


In 2000, U5MR ranged from 114 to 202 deaths per 1,000 live births. By 2021, U5MR ranged from 37 to 75 deaths per 1,000 live births.

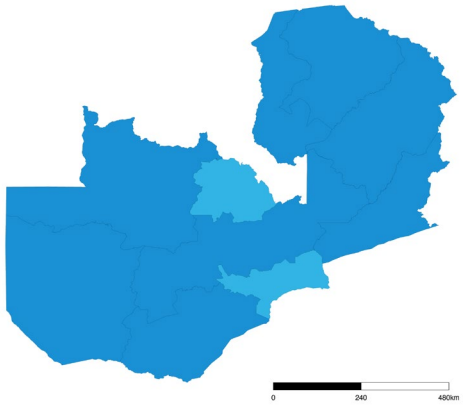
U5MR by administrative 2 area in Zambia, 2000-2021



In 2000, U5MR ranged from 56 to 287 deaths per 1,000 live births. By 2021, U5MR ranged from 21 to 129 deaths per 1,000 live births.

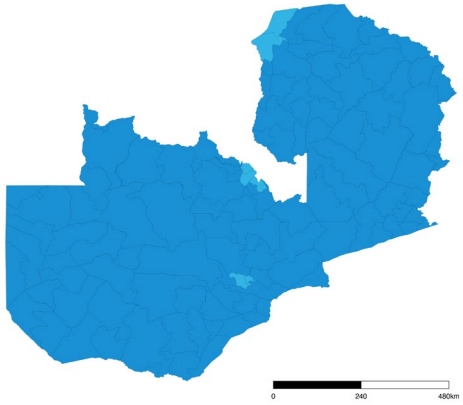


Percentage decline in administrative level 1 U5MR 2000-2021 in Zambia

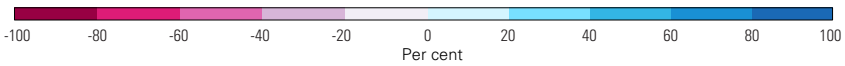


The percentage decline in under-five mortality at administrative level 1 ranged from a low of 53 per cent to a high of 70 per cent.

Percentage decline in administrative level 2 U5MR 2000-2021 in Zambia

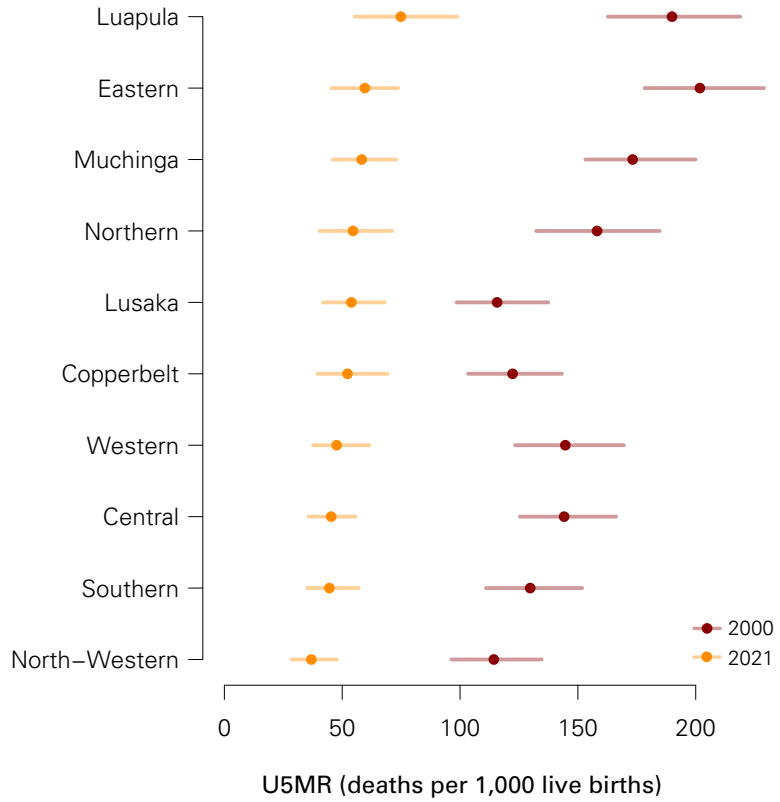


The percentage decline in under-five mortality at administrative level 2 ranged from a low of 51 per cent to a high of 78 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Zambia, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Eastern, the highest mortality administrative level 1 area, was 1.8 times higher than in North-Western, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Luapula, was 2 times higher than in the lowest mortality area, North-Western.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

Administrative boundaries are based on the GADM database of Global Administrative Areas, available at https://gadm.org/.

Data sources for Zambia: Demographic and Health Survey 2013-2014; Demographic and Health Survey 2018.

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ZIMBABWE

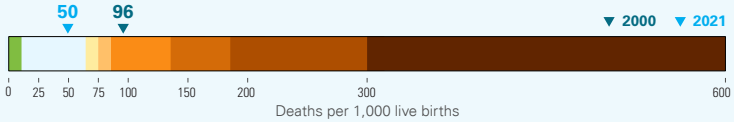
U5MR

Administrative level 1 (City, Province): **10**

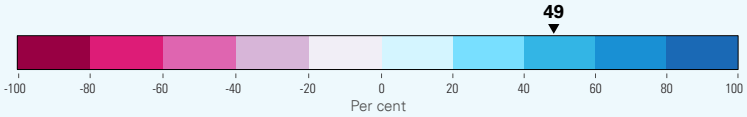
Administrative level 2 (District): **91**

National level

Under-five mortality rate, 2000 and 2021

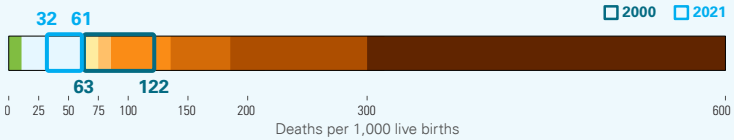


Percentage decline in under-five mortality rate, 2000–2021

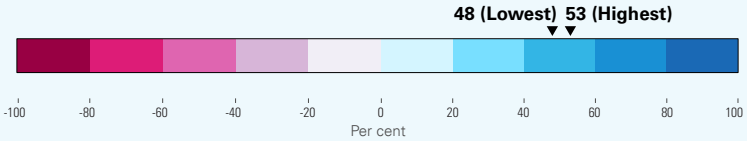


Administrative level 1

Under-five mortality rate, 2000 and 2021 (range)

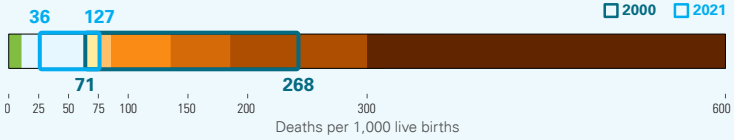


Percentage decline in under-five mortality rate, 2000–2021 (range)

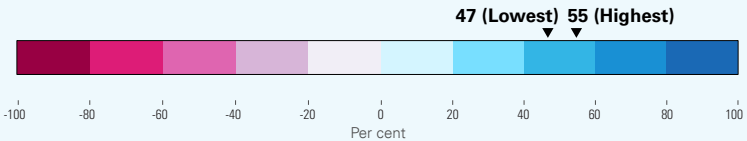


Administrative level 2

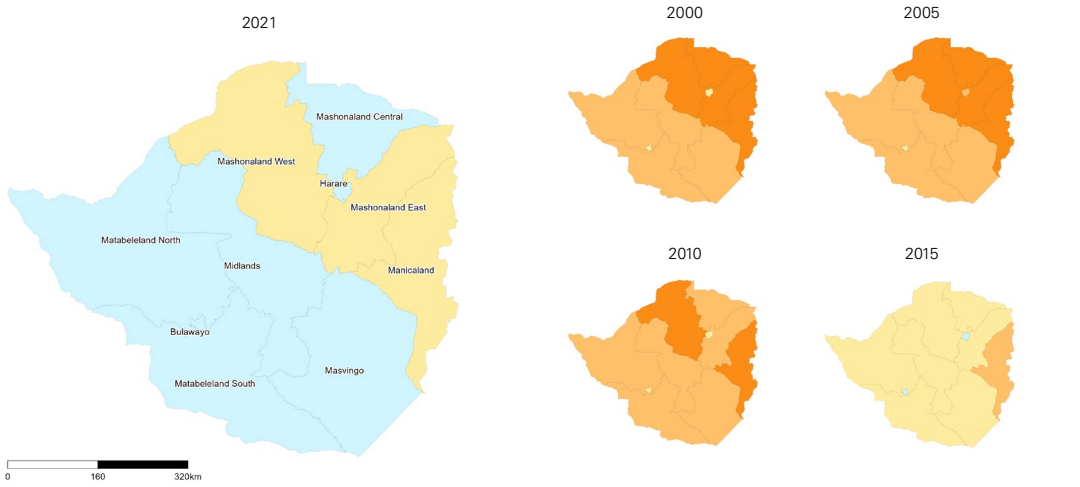
Under-five mortality rate, 2000 and 2021 (range)



Percentage decline in under-five mortality rate, 2000–2021 (range)

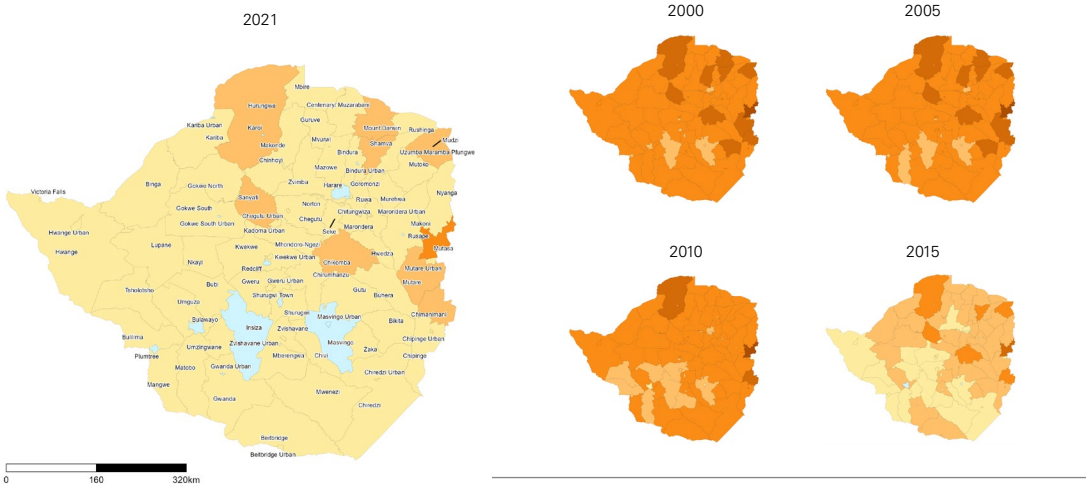


U5MR by administrative 1 area in Zimbabwe, 2000-2021

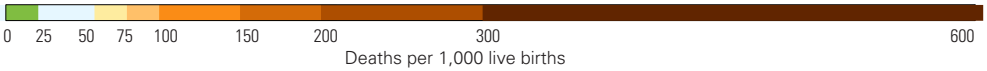


In 2000, U5MR ranged from 63 to 122 deaths per 1,000 live births. By 2021, U5MR ranged from 32 to 61 deaths per 1,000 live births.

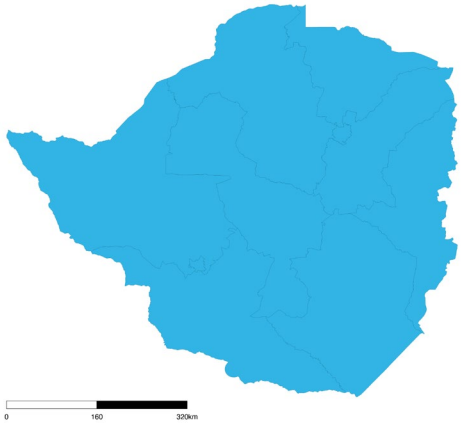
U5MR by administrative 2 area in Zimbabwe, 2000-2021



In 2000, U5MR ranged from 71 to 268 deaths per 1,000 live births. By 2021, U5MR ranged from 36 to 127 deaths per 1,000 live births.

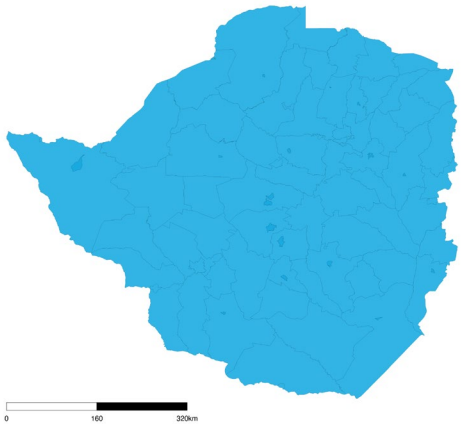


Percentage decline in administrative level 1 U5MR 2000-2021 in Zimbabwe

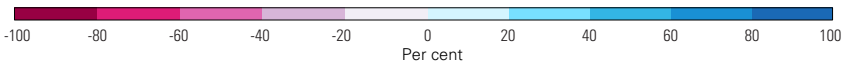


The percentage decline in under-five mortality at administrative level 1 ranged from a low of 48 per cent to a high of 53 per cent.

Percentage decline in administrative level 2 U5MR 2000-2021 in Zimbabwe

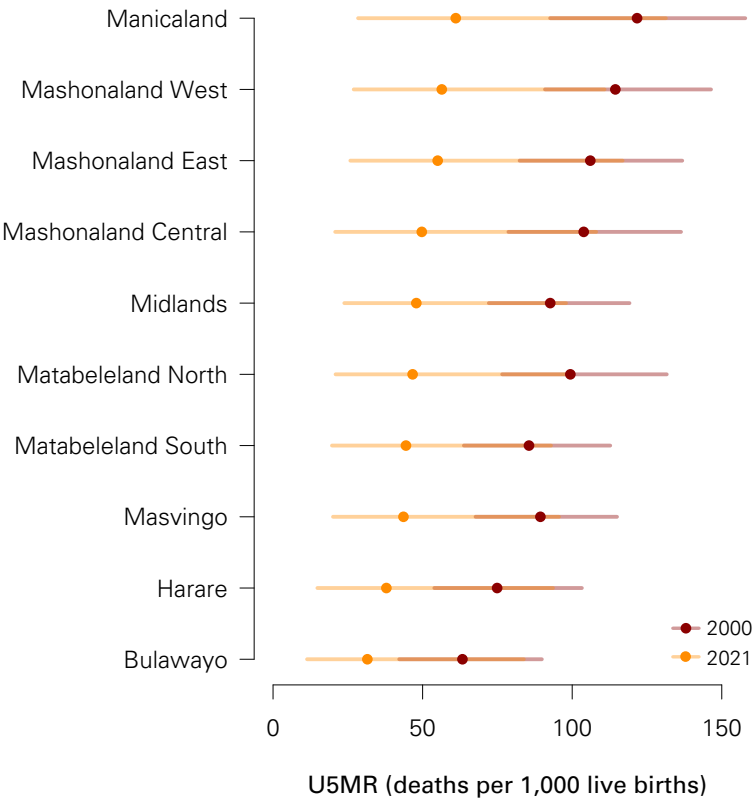


The percentage decline in under-five mortality at administrative level 2 ranged from a low of 47 per cent to a high of 55 per cent.



U5MR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Zimbabwe, 2000 and 2021

In 2000, the risk of dying before reaching age 5 for a child born in Manicaland, the highest mortality administrative level 1 area, was 1.9 times higher than in Bulawayo, the lowest mortality area. In 2021, U5MR in the highest mortality administrative level 1 area, Manicaland, was 1.9 times higher than in the lowest mortality area, Bulawayo.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

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Data sources for Zimbabwe: Demographic and Health Survey 2015.

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ZIMBABWE

NMR

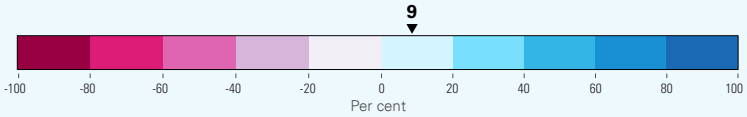
Administrative level 1 (City, Province): **10**

Administrative level 2 (District): **91**

National level

Neonatal mortality rate, 2000 and 2021

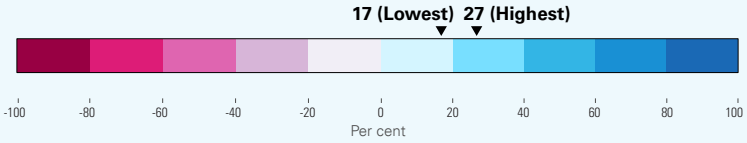
Percentage decline in neonatal mortality rate, 2000–2021



Administrative level 1

Neonatal mortality rate, 2000 and 2021 (range)

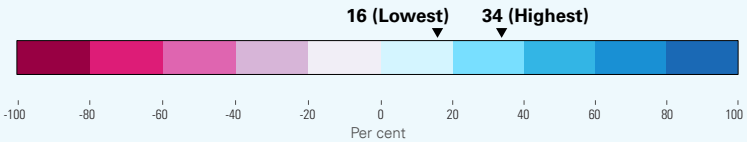
Percentage decline in neonatal mortality rate, 2000–2021 (range)



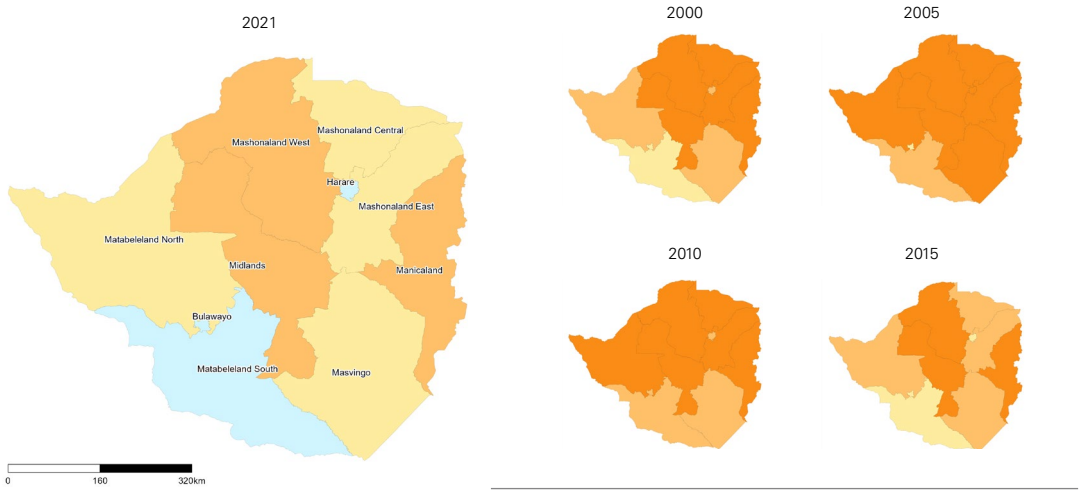
Administrative level 2

Neonatal mortality rate, 2000 and 2021 (range)

Percentage decline in neonatal mortality rate, 2000–2021 (range)

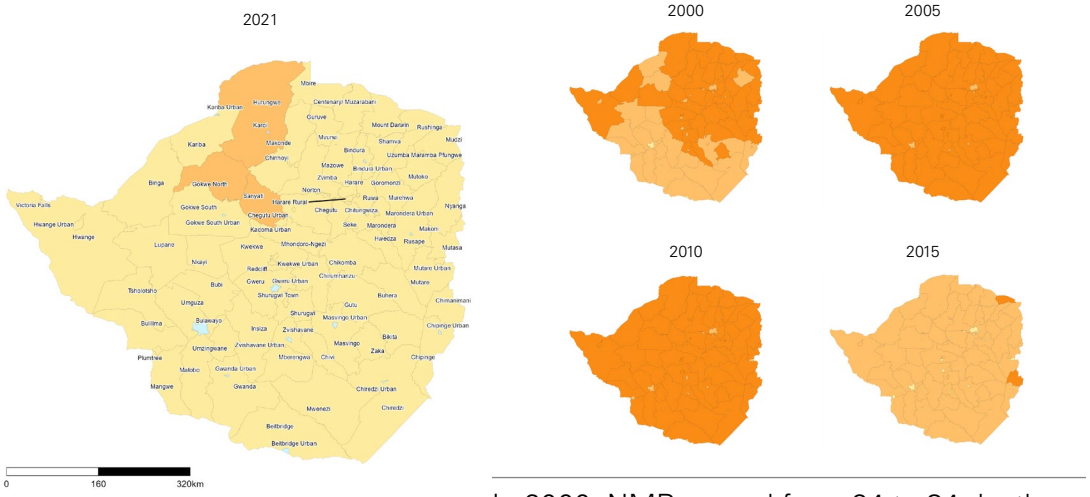


NMR by administrative 1 area in Zimbabwe, 2000-2021



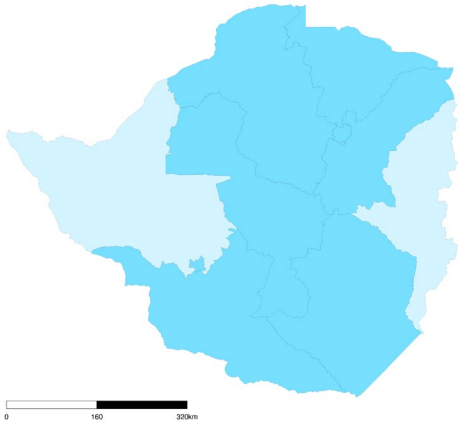
In 2000, NMR ranged from 22 to 35 deaths per 1,000 live births. By 2021, NMR ranged from 17 to 26 deaths per 1,000 live births.

NMR by administrative 2 area in Zimbabwe, 2000-2021



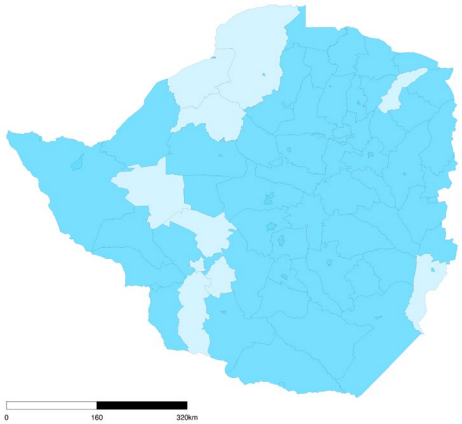
In 2000, NMR ranged from 24 to 34 deaths per 1,000 live births. By 2021, NMR ranged from 18 to 26 deaths per 1,000 live births.

Percentage decline in administrative level 1 NMR 2000-2021 in Zimbabwe

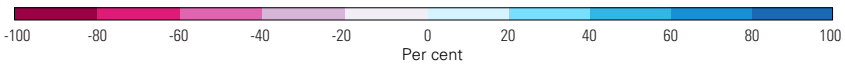


The percentage decline in neonatal mortality at administrative level 1 ranged from a low of 17 per cent to a high of 27 per cent.

Percentage decline in administrative level 2 NMR 2000-2021 in Zimbabwe

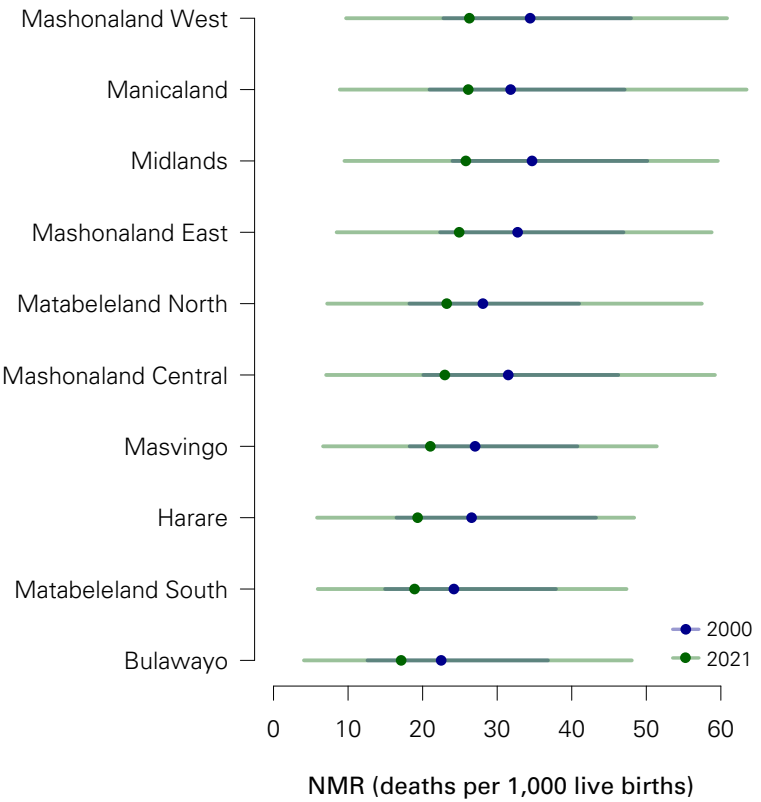


The percentage decline in neonatal mortality at administrative level 2 ranged from a low of 16 per cent to a high of 34 per cent.



NMR with 90 per cent uncertainty intervals (shaded bar) for administrative 1 areas of Zimbabwe, 2000 and 2021

In 2000, the risk of dying before reaching age 28 days for a child born in Midlands, the highest mortality administrative level 1 area, was 1.5 times higher than in Bulawayo, the lowest mortality area. In 2021, NMR in the highest mortality administrative level 1 area, Mashonaland West, was 1.5 times higher than in the lowest mortality area, Bulawayo.



Note: The dots represent the median estimates, and the lines represent the 90 per cent uncertainty intervals.

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Technical notes

Subnational Estimation of Under-five Mortality Rates (U5MR) and Neonatal Mortality Rates (NMR): The BB8 Model

Estimating subnational variation in child mortality is of great importance to flag areas with high rates and to track progress towards targets such as the Sustainable Development Goals, which explicitly mention monitoring subnational child mortality. In the absence of vital registration systems, obtaining estimates at subnational levels—national level is denoted by Admin0, with increasingly granular subnational levels being denoted Admin1, Admin2, and so on—is a challenge, because the most reliable data in many countries come from household surveys, which are not generally designed to collect sufficient clusters to characterize U5MR at the Admin2 level, which is the level at which health interventions and decisions on resource allocation are typically made.

Subnational U5MR and NMR are estimated for 2000-2021 using a BetaBinomial sampling model with:

1. Cluster-level modeling
2. Space-time smoothing
3. Urban-rural stratification
4. Bayesian inference
5. Overdispersion
6. Benchmarking to UN IGME national estimates
7. an HIV adjustment
8. Informative visualization.

Hence, the model is referred to as BB8.

To overcome sparse data problems, U5MR and NMR are modeled at the cluster-level directly using a Bayesian space-time model. Subnational U5MR and NMR are estimated using household survey data from Demographic and Health Surveys (DHS) and Multiple Indicator Surveys (MICS), which both typically use stratified two-stage cluster sampling with strata that are urban/rural crossed with some set of geographical (often Admin1) areas.

Mortality risk is assumed to be similar at locations that are close together because of shared risk factors, thus the risk of mortality is assumed to have spatial structure. The model contains spatial terms to account for such structure.

The betabinomial distribution is used in the model since it appropriately characterizes the binary outcome (non-death/death) distribution and has an additional parameter to accommodate overdispersion or excess binomial variation.

For neonatal mortality, the model is,

$$Y_c \mid p_c \sim \text{Beta-binomial}(n_c, p_c, d), \text{ for } c=1,\ldots,C$$

where Y_c is the number of deaths out of nc births, and $p_c = p(s_c)$ is the probability of a death at location sc for c=1,…,C clusters. The parameter d allows for overdispersion and is related to the within-cluster correlation between the nc different responses.

The probability is modeled as,

$$p(s_c) = \text{expit}(\alpha + S_{c[i]} + e_{c[i]})$$
for rural clusters c and

$$p(s_c) = \text{expit}(\gamma + S_{c[i]} + e_{c[i]})$$
for urban clusters c

where $S_{c[i]}$ and $e_{c[i]}$ are spatial and independent random effects, respectively, specified at the Admin2 level, which is indexed by *i*; the notation c[i] here should be read as the Admin2 area i that cluster c resides in. Hence, all clusters in Admin2 area i receive the same

random effects. The spatial terms are assumed to follow an intrinsic conditional autoregressive (ICAR) model[1]. The latter is the most popular model for disease mapping in epidemiology, since it is straightforward to fit and has been shown in a multitude of studies to provide reliable estimates. The model is fit using the fast and accurate integrated nested Laplace approximation (INLA) approach[2]. The separate intercept terms for urban (α) and rural (γ), along with the S_i and e_i terms, accommodate the stratified sampling.

Aggregation of the cluster probabilities to Admin2 area *i* is aided by the assumption of a constant spatial term within each Admin2 area. Specifically, the probability of a neonatal death in Admin2 area *i* is

$$p_i = q_i \, \text{expit}(\alpha + S_i + e_i) + (1-q_i) \, \text{expit}(\gamma + S_i + e_i)$$

where q_i is the probability of dying in a rural cluster in Admin2 area *i*. The probability q_i is taken as the proportion of children aged 0-4 who reside in the urban portion of area *i*. These proportions are estimated using data from WorldPop[3].

For the U5MR and NMR estimation over time, the model is more complex since it is necessary to consider how the risks change over time and with age, in addition to space.

As with previous work[4,5], a discrete hazards model is assumed with 6 hazards for each of the age groups (in months): 0-1, 2-11, 12-23, 24-35, 36-47, 48- 59. A flexible random walk of order 2 (RW2) as the main temporal term is also assumed, with separate random walks for the age groups 0-1, 2-11, 12-59. This model carries out local linear smoothing using the previous two time periods (which correspond to years in the model). For the main spatial term an ICAR model is assumed. We also assume a space-time interaction. Depending on the country, either a RW2 and ICAR model are combined, or an autoregressive of order 1 (AR1) model and an ICAR are combined. The RW2, ICAR and AR1 models are described in more detail elsewhere[6]. The interaction terms allow local deviations from the main spatial and temporal patterns. All available, high quality survey data covering the estimation period, 2000-2021, were considered for model inclusion, however, because in some countries ignoring the urban/rural stratification can lead to bias, we have developed methods to adjust for the stratification. Currently, the methods are only available for surveys that use the same sampling frame, though this aspect will be revisited in future rounds of UN IGME subnational estimates.

Survey data are adjusted to account for mothers who have died from AIDS, and whose children are at greater risk of death using the same method used in the U5MR B3 model (See the explanatory notes 'Child and youth mortality trend series to 2021'[7] for a description of the methods to generate national U5MR estimates with the B3 model (section 3) and a description of the HIV/AIDS adjustment (section 2.4)). In general, the B3 model uses more data (for example from censuses and vital registration systems, when available), thus the estimates are benchmarked to the B3 estimates at the national level, for consistency.

The model is fitted in the R programming environment using the SUMMER package[8].

There are numerous ways to present and visualize summaries of the subnational estimates over time. It should be noted here that the subnational estimates also have uncertainty intervals via Bayesian inference, however they are not well conveyed on colour-coded maps. Estimates for all areas with uncertainty can be found at the UN IGME web portal, www.childmortality.org.

UN IGME under-five and neonatal mortality rates by subnational areas are produced in consultation with countries.

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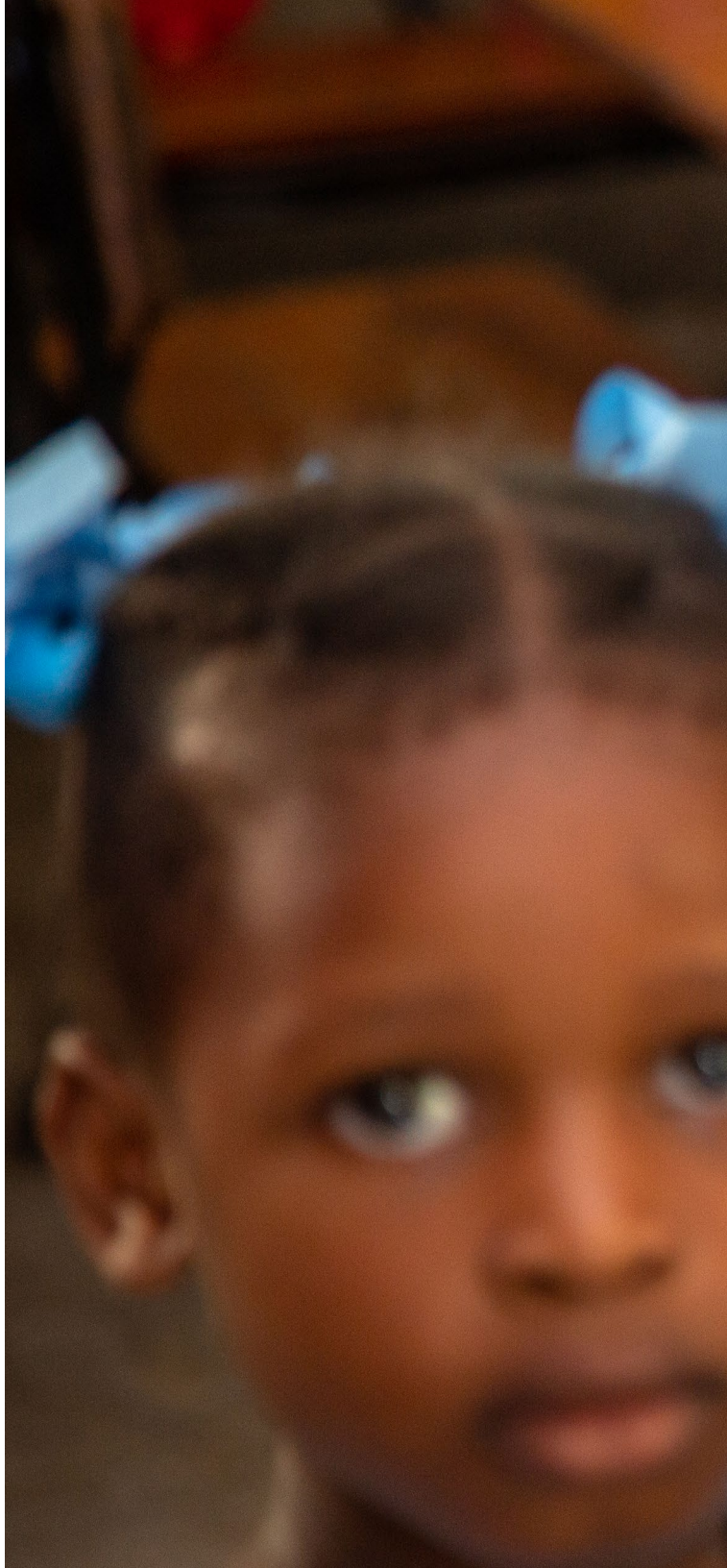

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