

S2 Appendix

Table of contents of S3 Appendix

Figure's Number	Title	Page
S1 Fig.	<p>The flow-chart for estimation of non-fatal health outcome of infective endocarditis by the Institute for Health Metrics and Evaluation (IHME)</p> <p><i>Reference: Diseases GBD, Injuries C. Global burden of 369 diseases and injuries in 204 countries and territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019. Lancet. 2020;396(10258):1204-22. doi: 10.1016/S0140-6736(20)30925-9. PubMed PMID: 33069326; PubMed Central PMCID: PMC7567026.</i></p>	1
S2 Fig.	<p>The flow-chart for estimation of fatal outcome of infective endocarditis The flow-chart for estimation of fatal outcome of infective endocarditis by The Institute for Health Metrics and Evaluation (IHME)</p> <p><i>Reference: Diseases GBD, Injuries C. Global burden of 369 diseases and injuries in 204 countries and territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019. Lancet. 2020;396(10258):1204-22. doi: 10.1016/S0140-6736(20)30925-9. PubMed PMID: 33069326; PubMed Central PMCID: PMC7567026.</i></p>	3
S3 Fig.	<p>The temporal trend of age-standardized incidence, prevalence, deaths, and DALYs of infective endocarditis in North Africa and the Middle East between 1990 and 2019 in the three eras (1990–1997, 1998–2007, and 2008–2019)</p>	5

Table of contents of S3 Appendix

Figure's Number	Title	Page
S4 Fig.	The temporal trend of age-standardized incidence, prevalence, deaths, and DALYs of infective endocarditis in North Africa and the Middle East between 1990 and 2019 in the three eras (1990–1997, 1998–2007, and 2008–2019) according to sex	7
S5 Fig.	Upper panel: Age-standardized incidence rate (per 100,000) of infective endocarditis for the nations of North Africa and the Middle East in 1990, 1997, 2007, and 2019; Lower panel: percentage changes (%) in the age-standardized incidence rate for the countries of North Africa and the Middle East from 1990 to 1997, 1998 to 2007, and 2008 to 2019	9
S6 Fig.	Upper panel: Age-standardized prevalence rate (per 100,000) of infective endocarditis for the nations of North Africa and the Middle East in 1990, 1997, 2007, and 2019; Lower panel: percentage changes (%) in age-standardized prevalence rate for the countries of North Africa and the Middle East from 1990 to 1997, 1998 to 2007, and 2008 to 2019	11
S7 Fig.	Upper panel: Age-standardized death rate (per 100,000) of infective endocarditis for the nations of North Africa and the Middle East in 1990, 1997, 2007, and 2019; Lower panel: percentage changes (%) in age-standardized death rate for the countries of North Africa and the Middle East from 1990 to 1997, 1998 to 2007, and 2008 to 2019	13

Table of contents of S3 Appendix

Figure's Number	Title	Page
S8 Fig.	Upper panel: Age-standardized rate of disability-adjusted life years (DALY) (per 100,000) of infective endocarditis for the nations of North Africa and the Middle East in 1990, 1997, 2007, and 2019; Lower panel: percentage changes (%) in age-standardized death rate for the countries of North Africa and the Middle East from 1990 to 1997, 1998 to 2007, and 2008 to 2019	
S9 Fig.	Upper panel: Age-standardized rate (per 100, 000) of YLLs of infective endocarditis for the nations of North Africa and the Middle East in 1990, 1997, 2007, and 2019; Lower panel: Percentage changes (%) in age-standardized rate (per 100, 000) of YLLs in North Africa and the Middle East from 1990 to 1997, 1998 to 2007, and 2008 to 2019	17
S10 Fig.	Upper panel: Age-standardized rate (per 100, 000) of YLDs of infective endocarditis for the nations of North Africa and the Middle East in 1990, 1997, 2007, and 2019; Lower panel: Percentage changes (%) in age-standardized rate (per 100, 000) of YLDs in North Africa and the Middle East from 1990 to 1997, 1998 to 2007, and 2008 to 2019	19
S11 Fig.	Comparison of rates (per 100,000) of incidence, prevalence, deaths, and DALYs of infective endocarditis in North Africa and the Middle East in 1990 and 2019 according to eighteen agegroups and sex	21

Table of contents of S3 Appendix

Figure's Number	Title	Page
S12 Fig.	Rankings of 21 countries of North African and Middle Eastern countries based on age-standardized rates of incidence, prevalence, deaths, and DALYs of infective endocarditis in 1990 and 2019	23
S13 Fig.	Age-standardized rates (per 100,000) of YLDs and YLLs of infective endocarditis in 21 North African and Middle Eastern countries in 2019 by quintiles of the countries' sociodemographic index (SDI)	25
S14 Fig.	The temporal trend of age-standardized incidence, prevalence, deaths, and DALYs of infective endocarditis in 21 countries of North Africa and the Middle East between 1990 and 2019 in the three eras (1990–1997, 1998–2007, and 2008–2019)	27
S15 Fig.	Percent changes (%) in age-standardized rates (per 100,000) of incidence, prevalence, deaths, and DALYs of infective endocarditis between 1997 and 2007, and 2007 and 2019 in 21 countries of North Africa and the Middle East	29
S16 Fig.	Age-standardized rates (per 100,000) of incidence, prevalence, deaths, and disability-adjusted life years (DALYs) of infective endocarditis in 21 North African and Middle Eastern countries in 1990, 1997, 2007, and 2019 by quintiles of the countries' sociodemographic index (SDI)	31

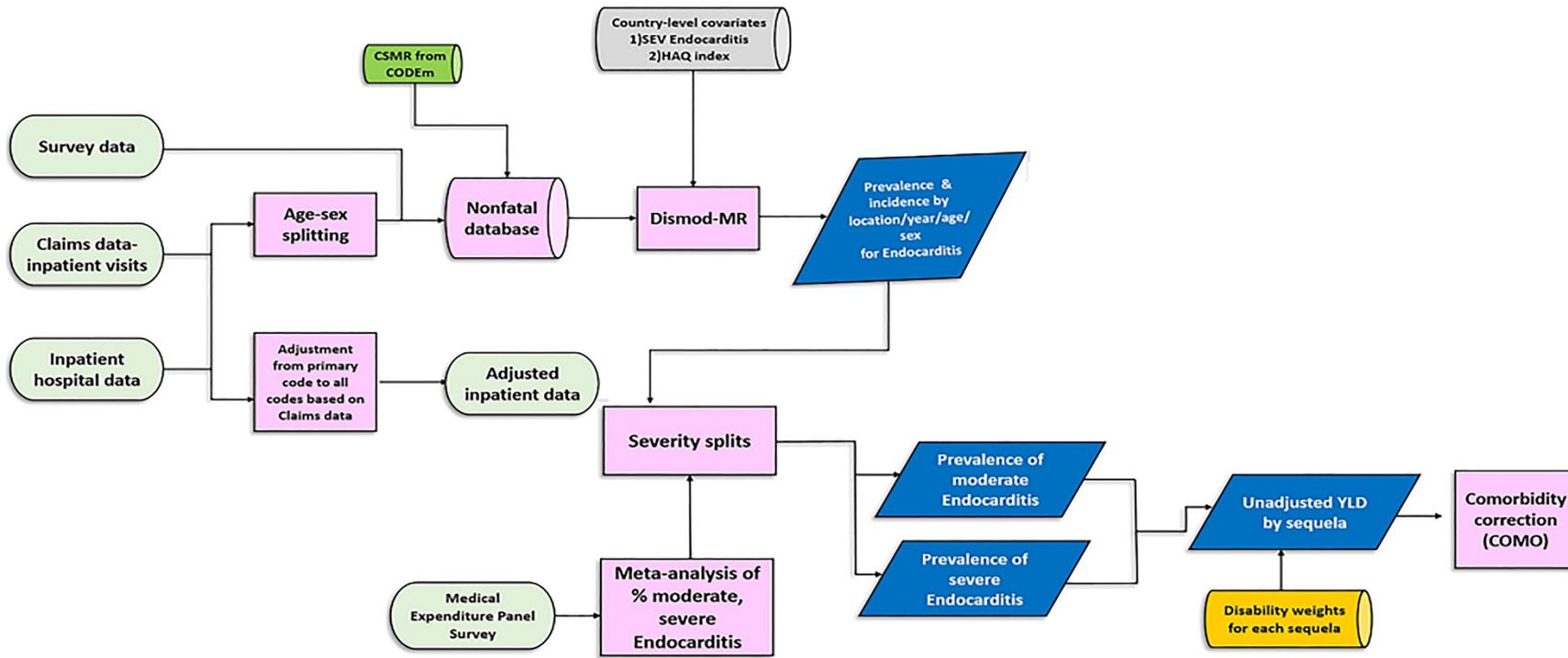
Table of contents of S3 Appendix

Figure's Number	Title	Page
S17 Fig.	Age-standardized rates (per 100,000) of incidence, prevalence, deaths, and disability-adjusted life years (DALYs) of infective endocarditis in 21 North African and Middle Eastern nations from 1990 to 2019 at three-year intervals (1990, 1993, 1996, 1999, 2002, 2005, 2008, 2011, 2014, 2017 and 2019) by quintiles of the countries' sociodemographic index (SDI)	33
S18 Fig.	Rates (per 100,000) of incidence, prevalence, deaths, and DALYs of infective endocarditis in 21 countries of North Africa and the Middle East in 1990 compared with 1997, in 1998 versus 2007, and in 2008 versus 2019 according to eighteen age groups and sex	35
S19 Fig.	Rates (per 100,000) of incidence, prevalence, deaths, and DALYs of infective endocarditis in 21 countries of North Africa and the Middle East in 1990 compared with 2019 according to eighteen age groups and sex	57
S20 Fig.	Temporal trend of age-standardized incidence rate per 100,000 in North Africa and the Middle East region and the 21 countries of this region	79

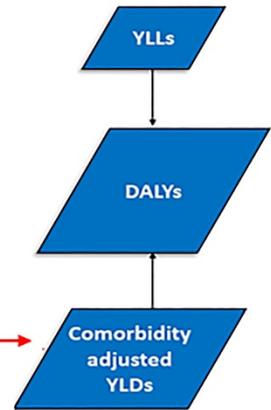
S1 Fig.

The flow-chart for estimation of non-fatal health outcome of infective endocarditis by The Institute for Health Metrics and Evaluation (IHME)

Non-fatal health outcome estimation



Final burden estimation



Legend

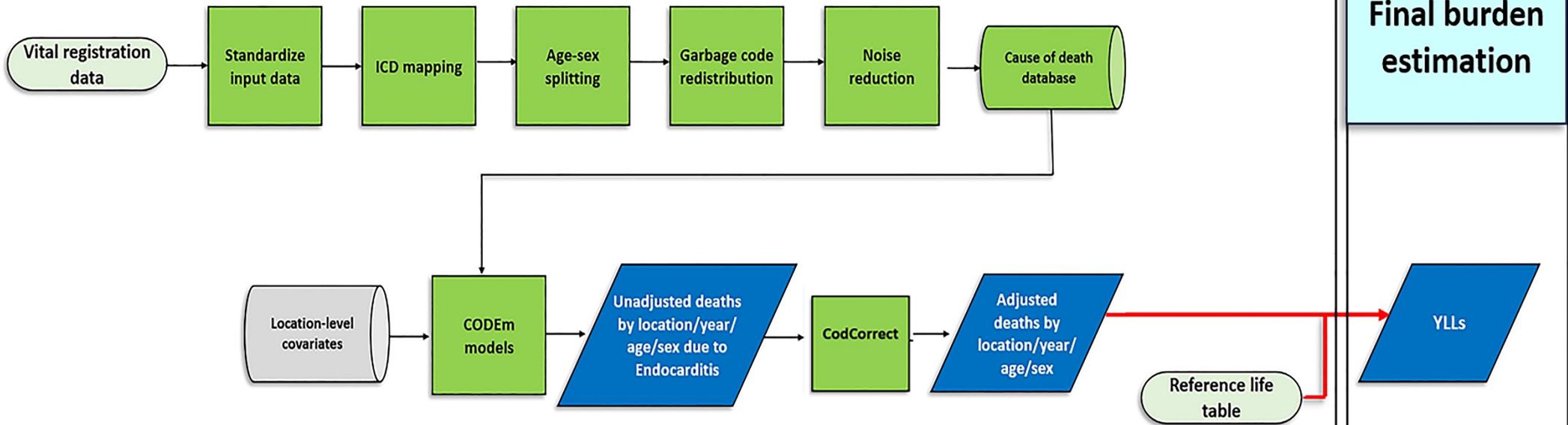


- Cause of death (green circle)
- Nonfatal (pink circle)
- Disability weights (yellow circle)
- Burden estimation (blue circle)
- Covariates (grey circle)

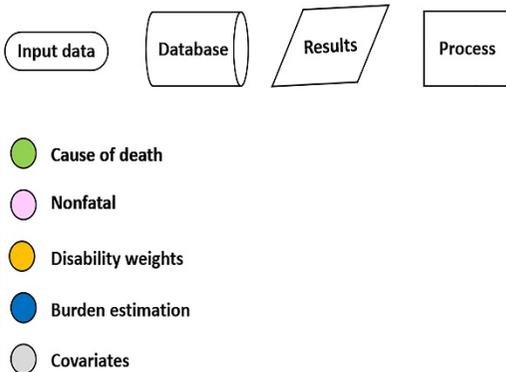
S2 Fig.

The flow-chart for estimation of fatal outcome of infective endocarditis by The Institute for Health Metrics and Evaluation (IHME)

Cause of death estimation



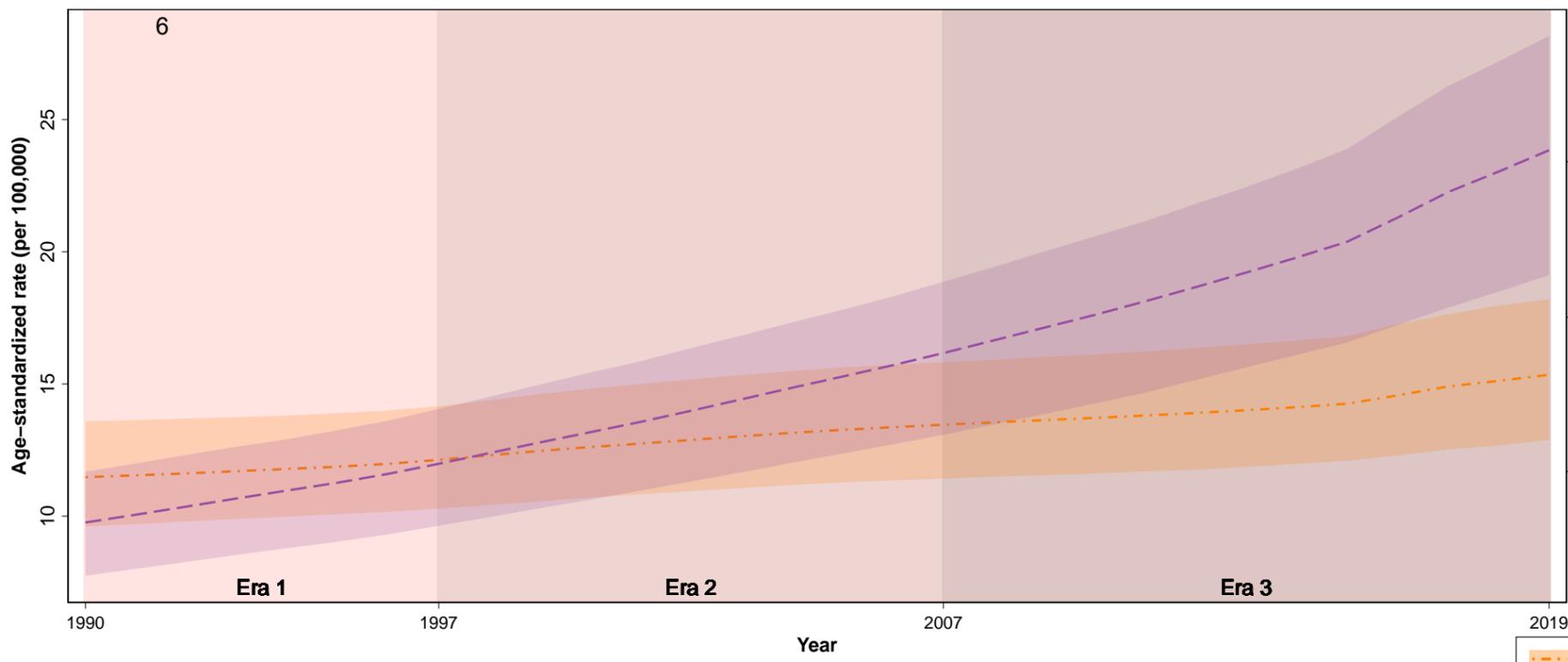
Legend



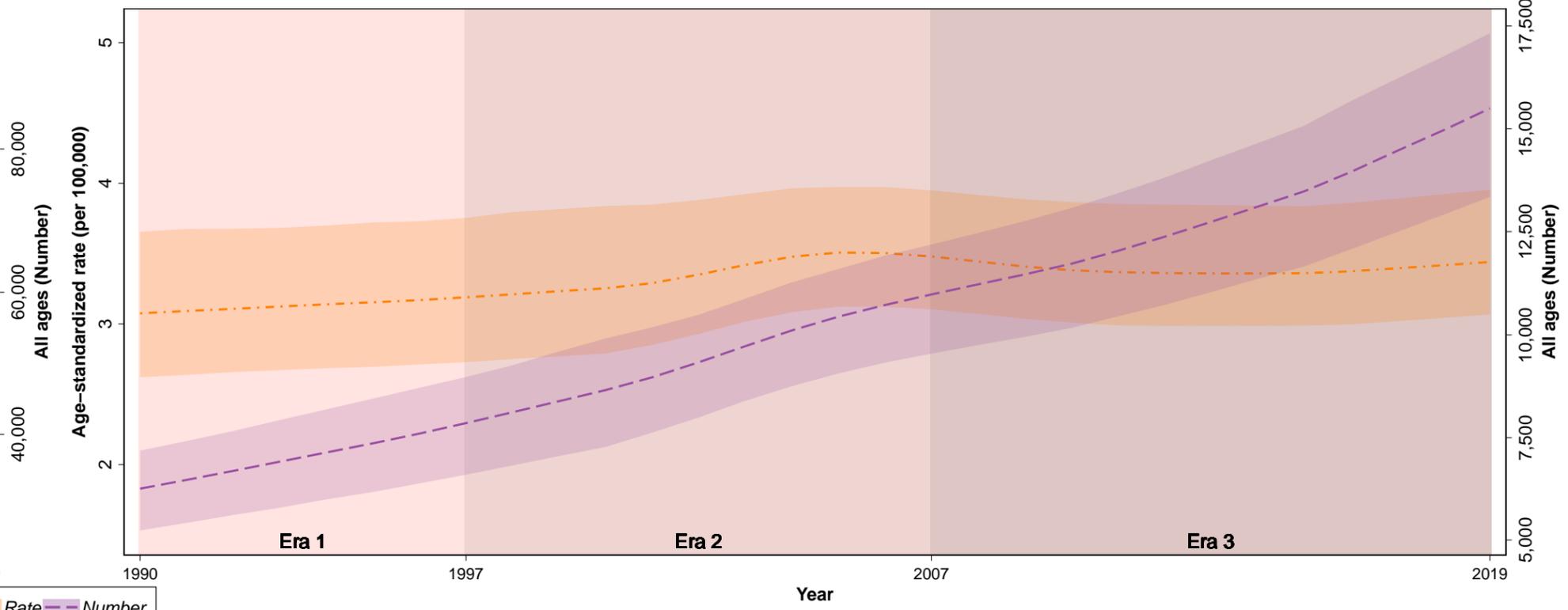
S3 Fig.

The temporal trend of age-standardized incidence, prevalence, deaths, and DALYs of infective endocarditis in North Africa and the Middle East between 1990 and 2019 in the three eras (1990–1997, 1998–2007, and 2008–2019).

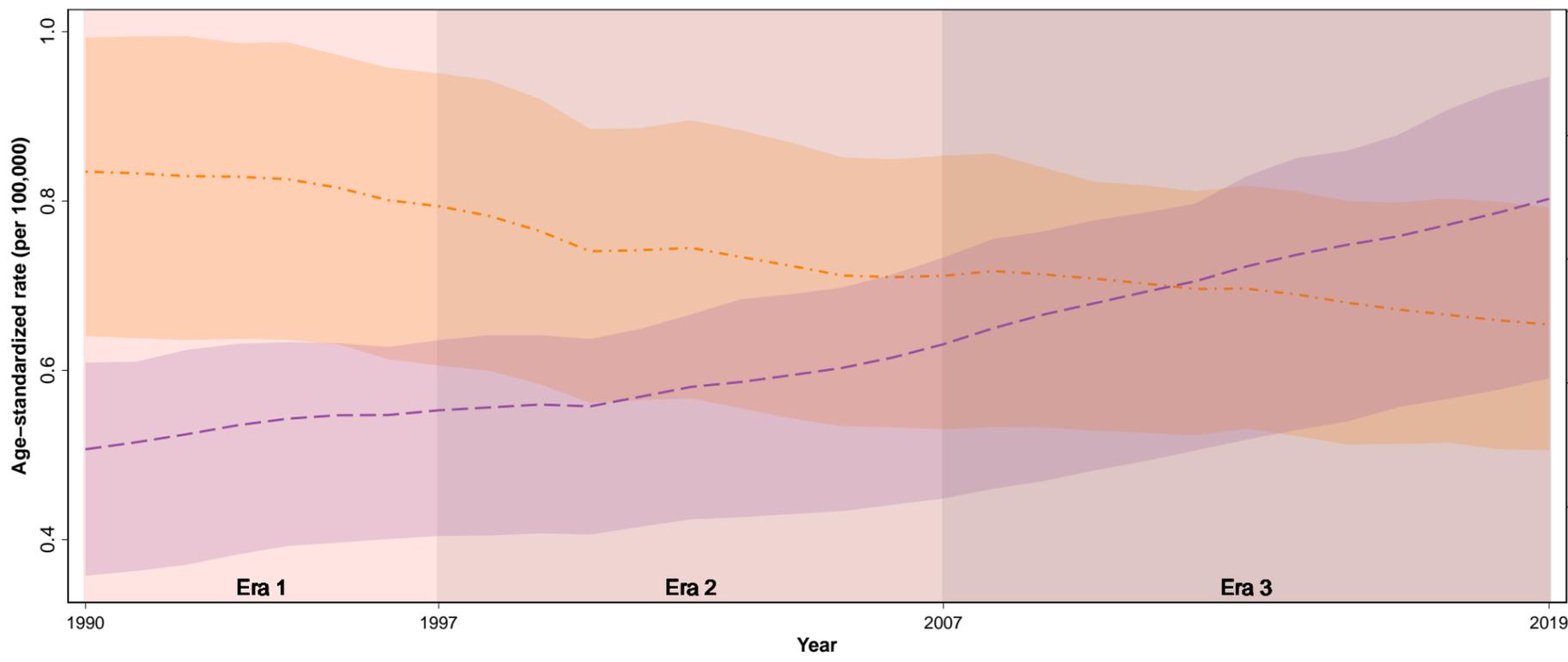
Incidence



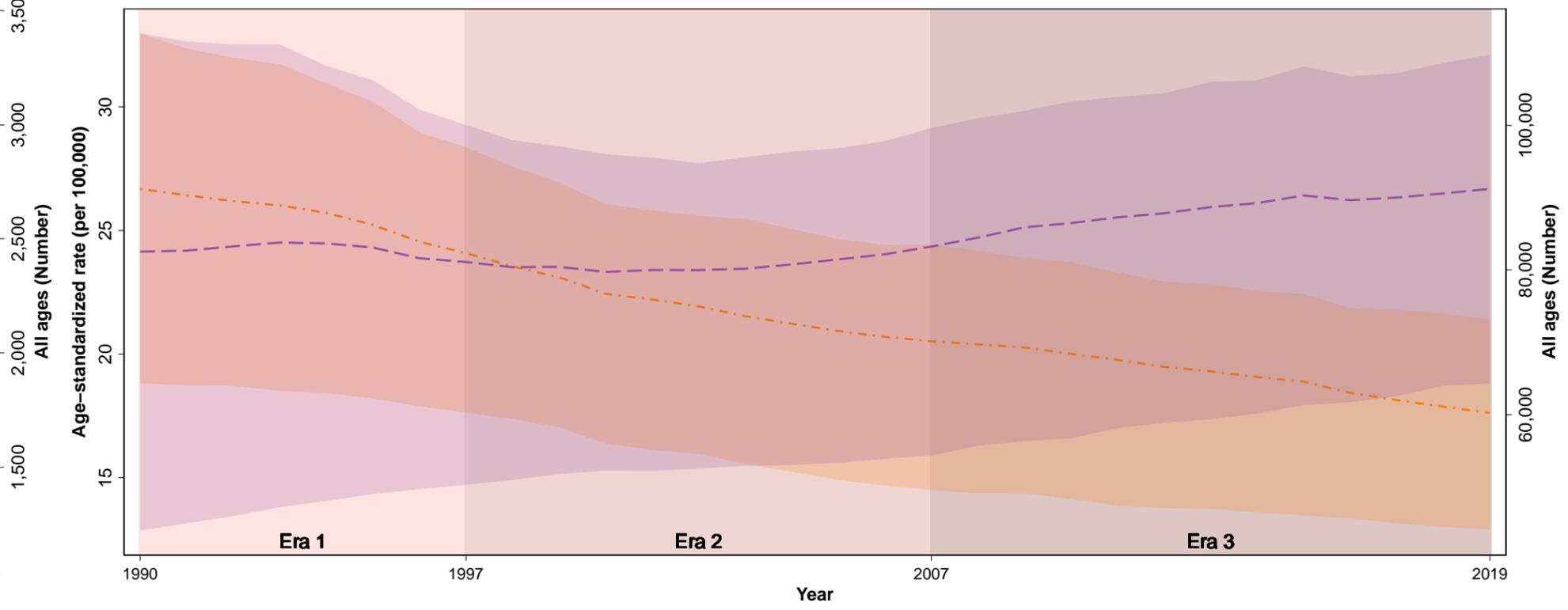
Prevalence



Deaths

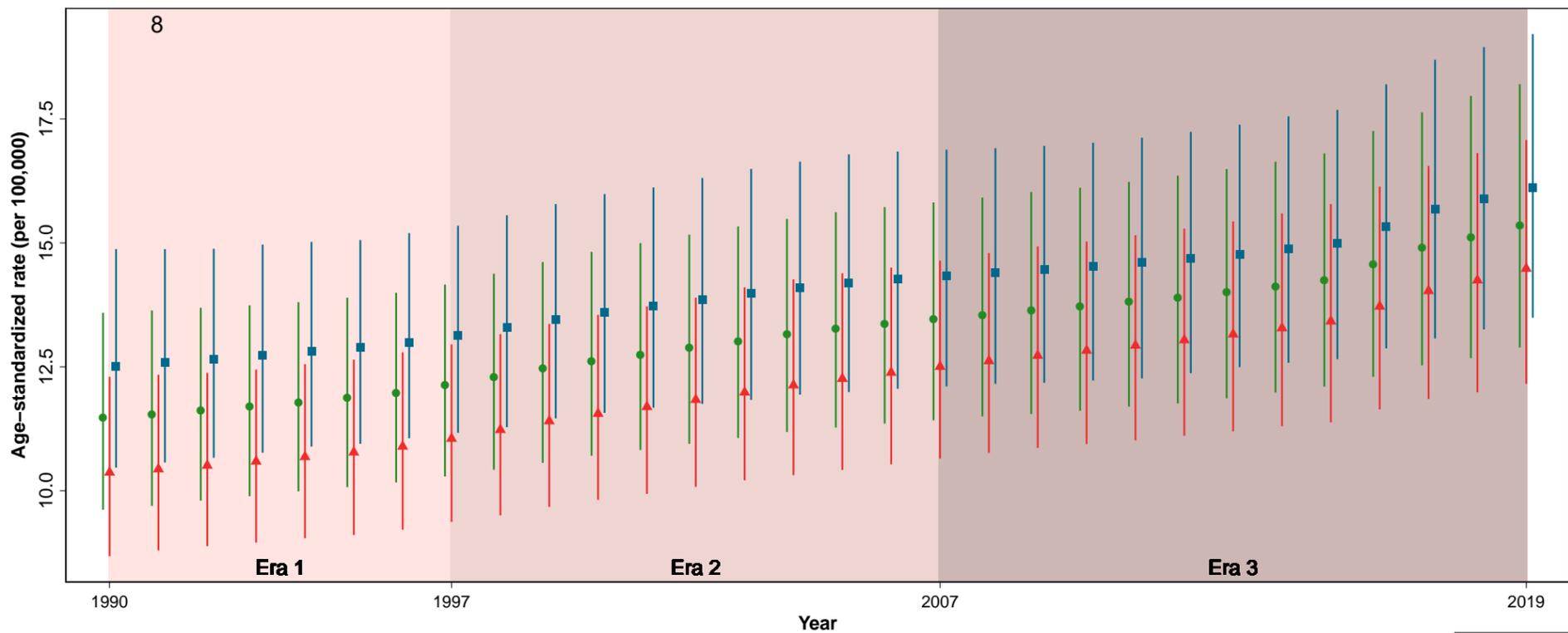
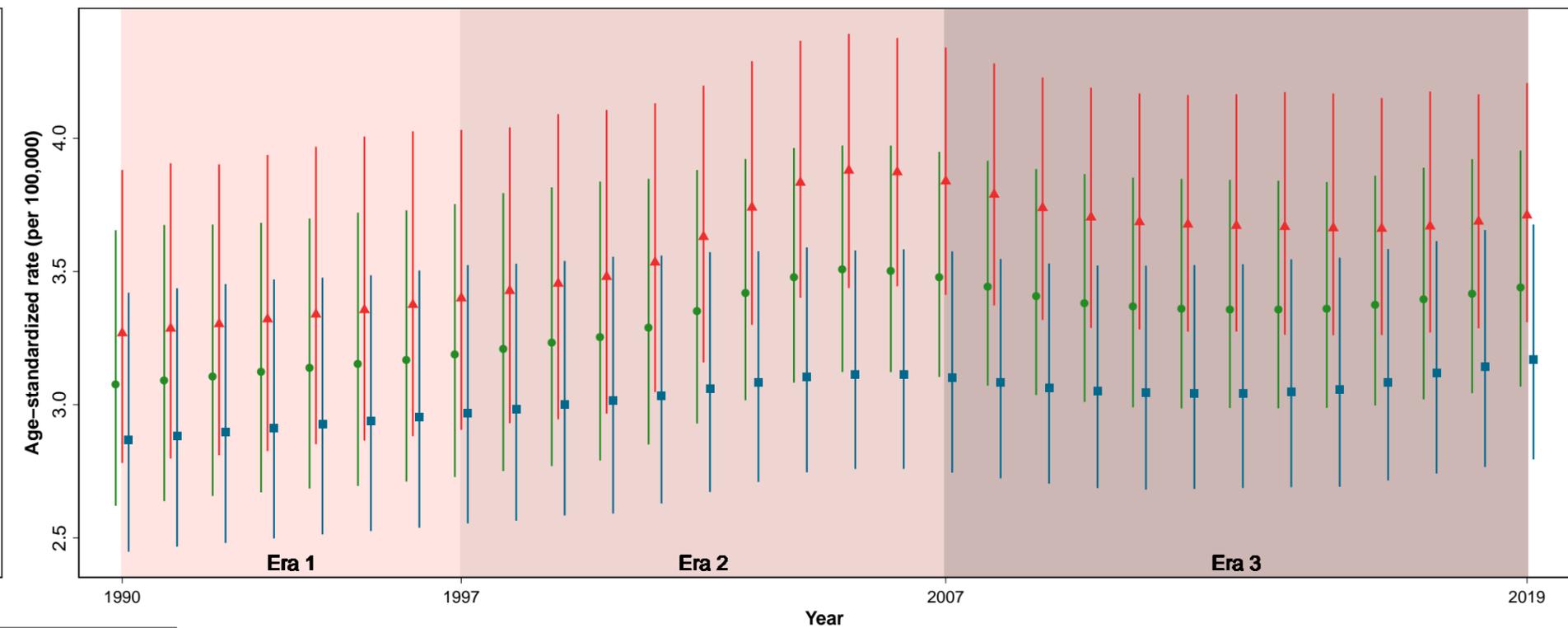
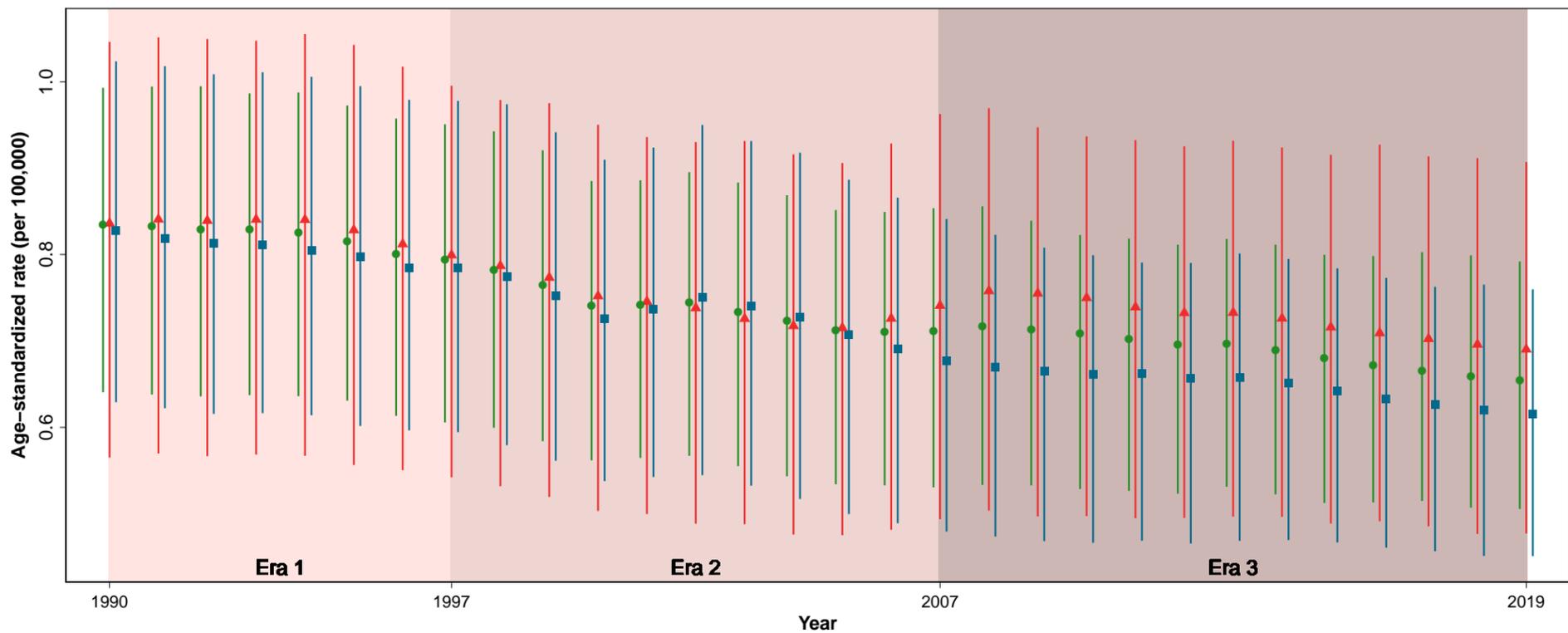
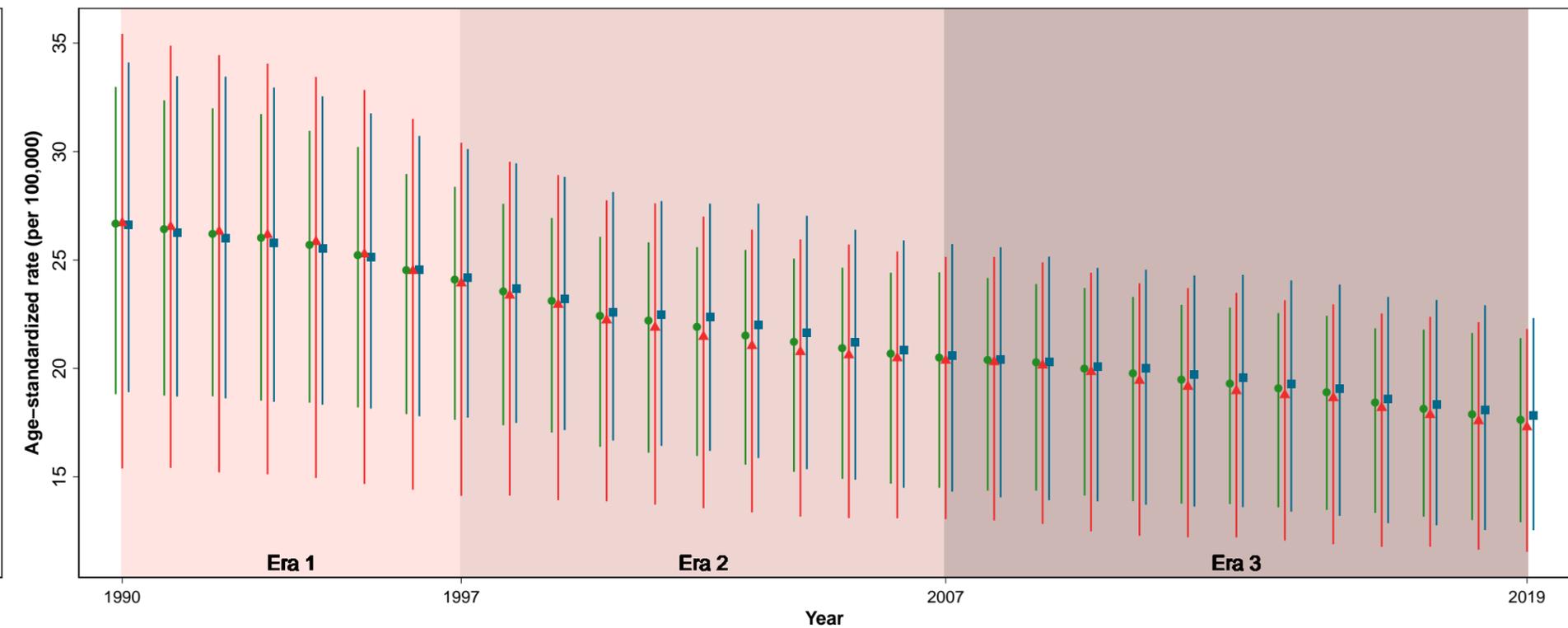


DALYs



S4 Fig.

The temporal trend of age-standardized incidence, prevalence, deaths, and DALYs of infective endocarditis in North Africa and the Middle East between 1990 and 2019 in the three eras (1990–1997, 1998–2007, and 2008–2019) according to sex

Incidence**Prevalence****Deaths****DALYs**

—●— Both —▲— Female —■— Male

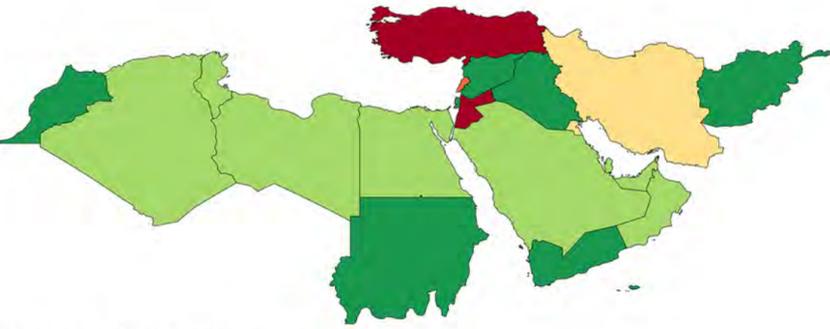
S5 Fig.

Upper panel: Age-standardized incidence rate (per 100,000) of infective endocarditis for the nations of North Africa and the Middle East in 1990, 1997, 2007, and 2019; Lower panel: percentage changes (%) in the age-standardized incidence rate for the countries of North Africa and the Middle East from 1990 to 1997, 1998 to 2007, and 2008 to 2019

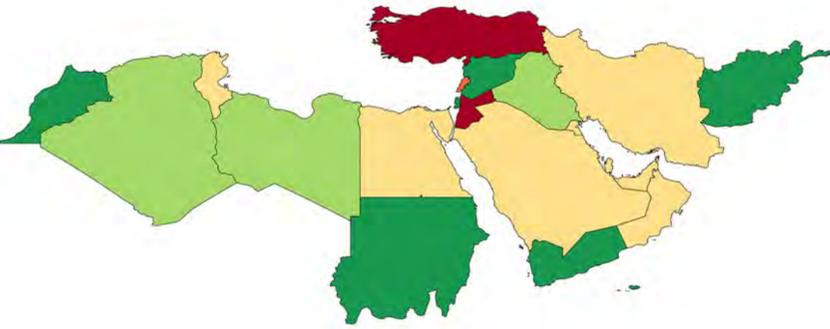
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Incidence

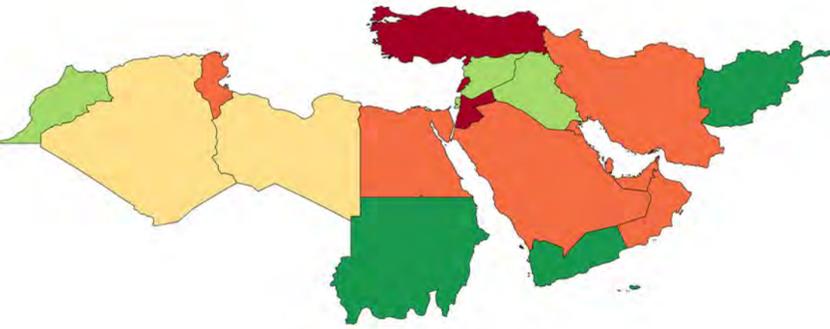
1990



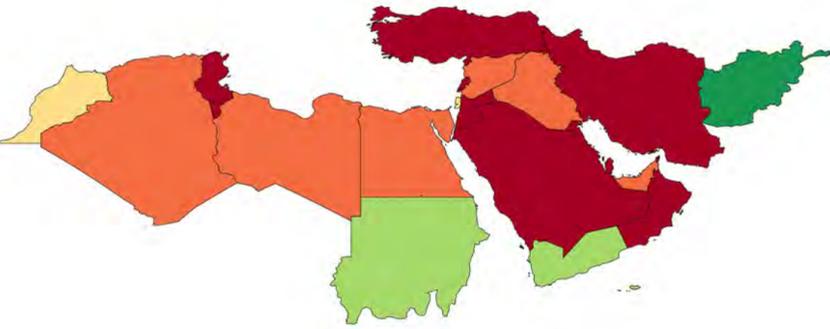
1997



2007



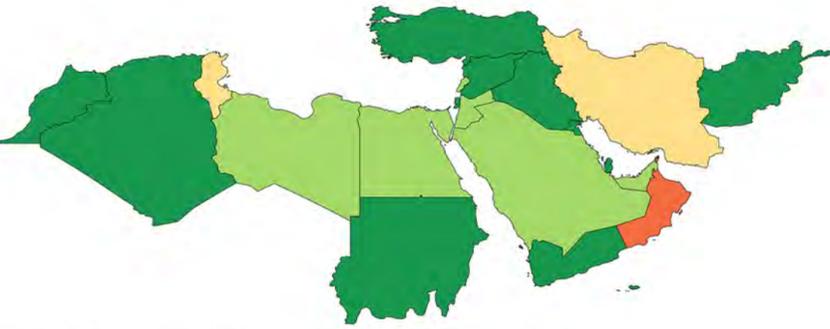
2019



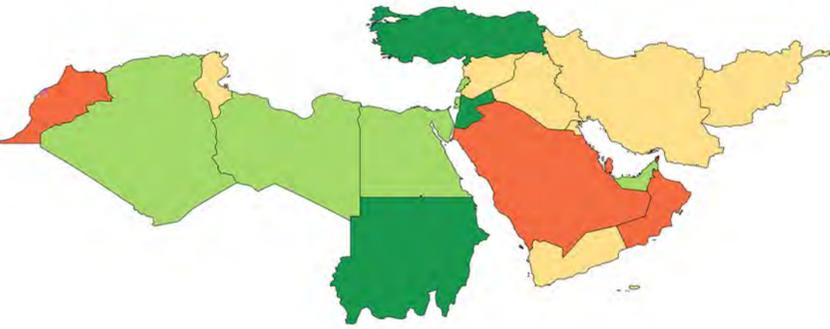
Age-standardized rate (per 100,000)

- < 10.34
- [10.34 to 11.62)
- [11.62 to 13.22)
- [13.22 to 15.24)
- ≥ 15.24

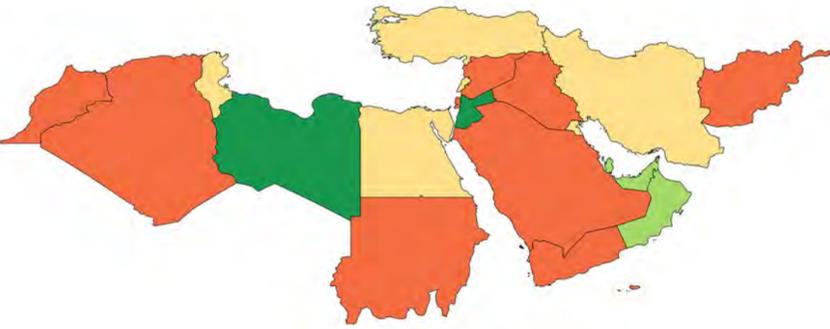
1990 to 1997



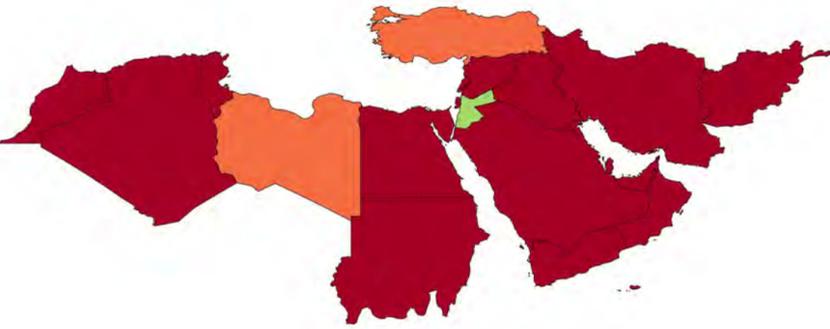
1998 to 2007



2008 to 2019



1990 to 2019



Percent change (%) in age-standardized rate

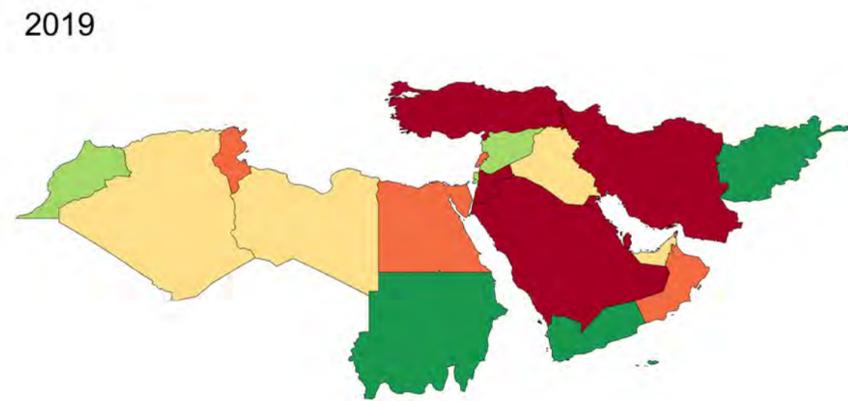
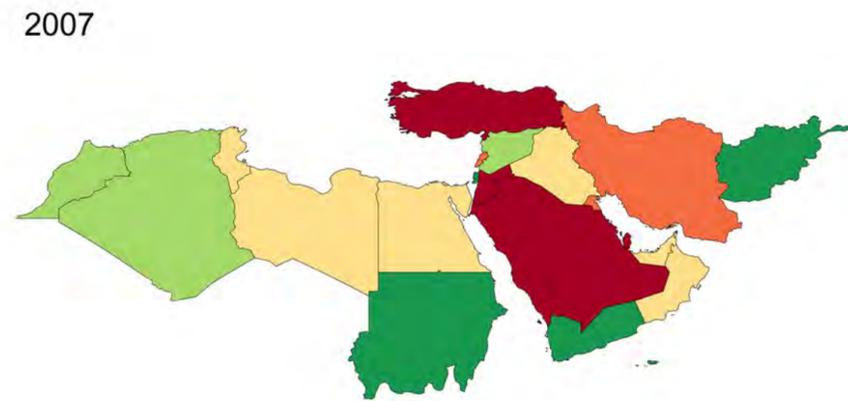
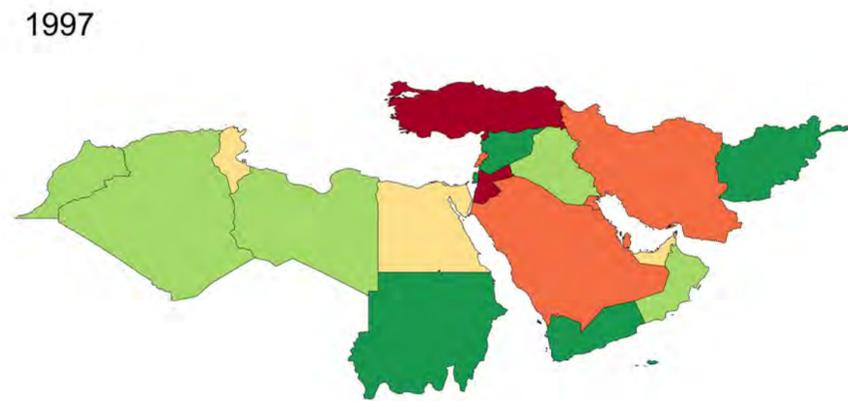
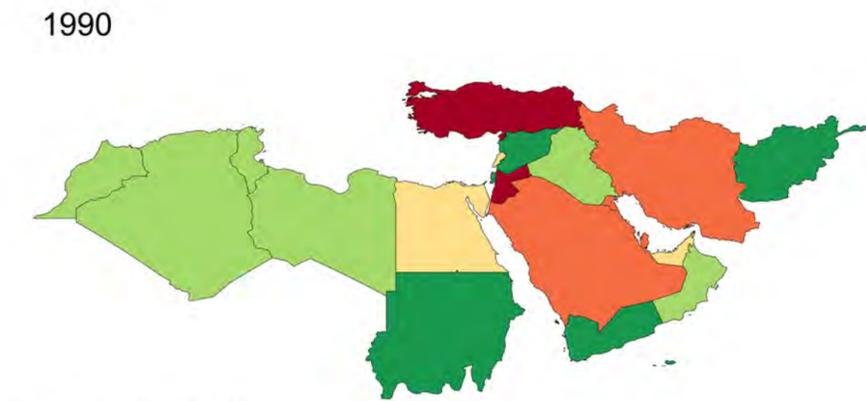
- < 6.07
- [6.07 to 10.14)
- [10.14 to 13.81)
- [13.81 to 27.21)
- ≥ 27.21

S6 Fig.

Upper panel: Age-standardized prevalence rate (per 100,000) of infective endocarditis for the nations of North Africa and the Middle East in 1990, 1997, 2007, and 2019; Lower panel: percentage changes (%) in age-standardized prevalence rate for the countries of North Africa and the Middle East from 1990 to 1997, 1998 to 2007, and 2008 to 2019

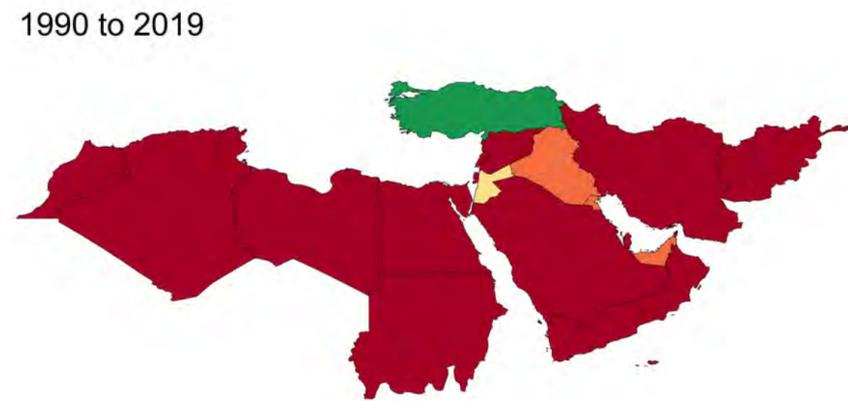
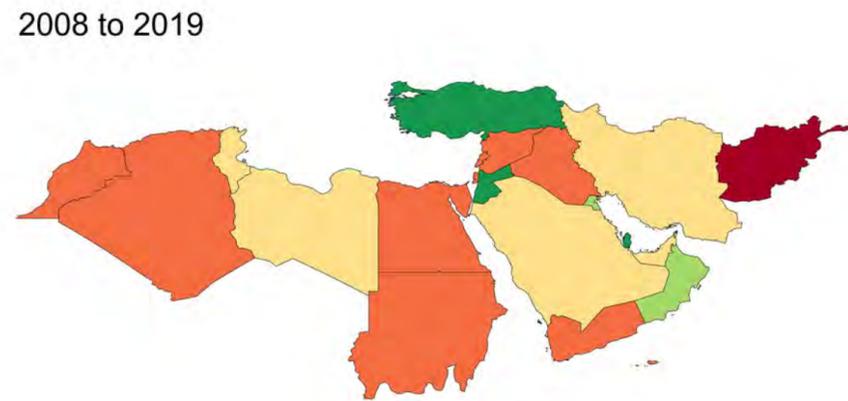
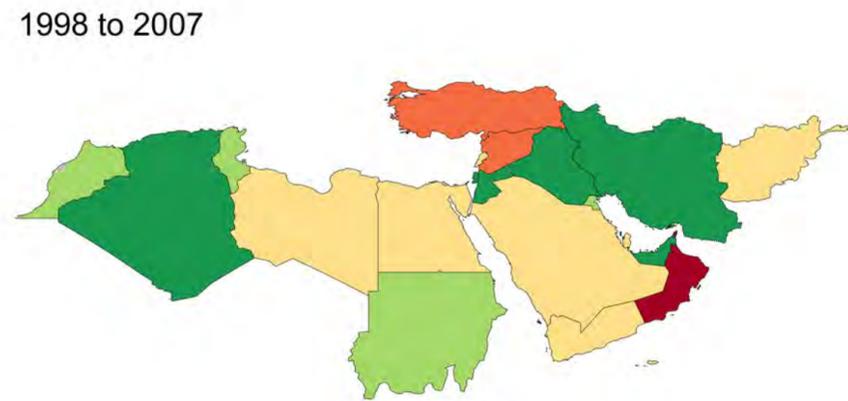
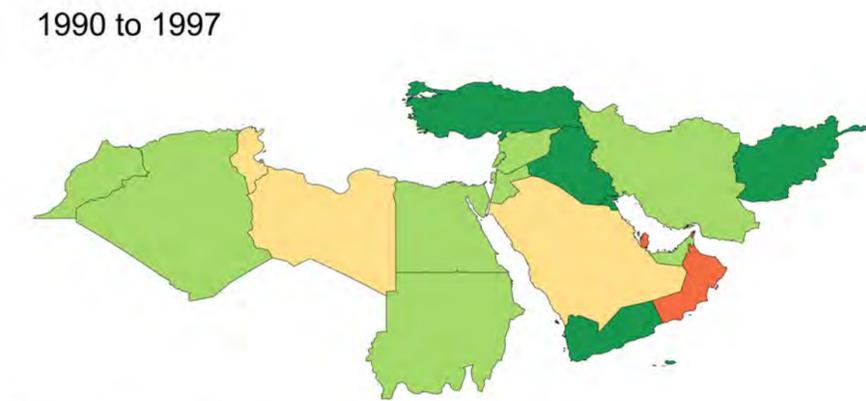
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Prevalence



Age-standardized rate (per 100,000)

- < 1.76
- [1.76 to 2.39)
- [2.39 to 2.80)
- [2.80 to 3.32)
- ≥ 3.32



Percent change (%) in age-standardized rate

- < 2.98
- [2.98 to 5.52)
- [5.52 to 8.29)
- [8.29 to 13.85)
- ≥ 13.85

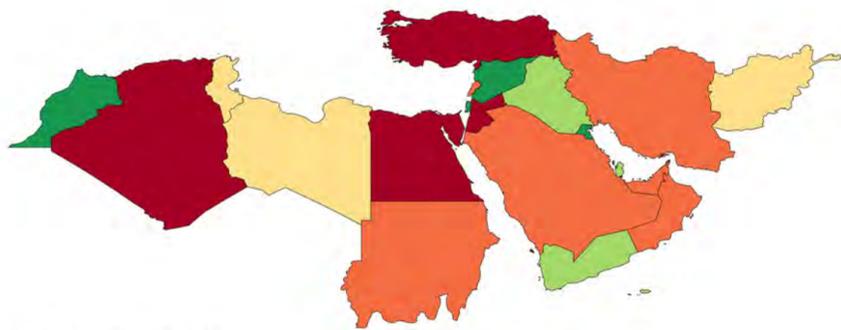
S7 Fig.

Upper panel: Age-standardized death rate (per 100,000) of infective endocarditis for the nations of North Africa and the Middle East in 1990, 1997, 2007, and 2019; Lower panel: percentage changes (%) in age-standardized death rate for the countries of North Africa and the Middle East from 1990 to 1997, 1998 to 2007, and 2008 to 2019

Contains information from OpenStreetMap and OpenStreetMap Foundation, which is made available under the Open Database License.

Deaths

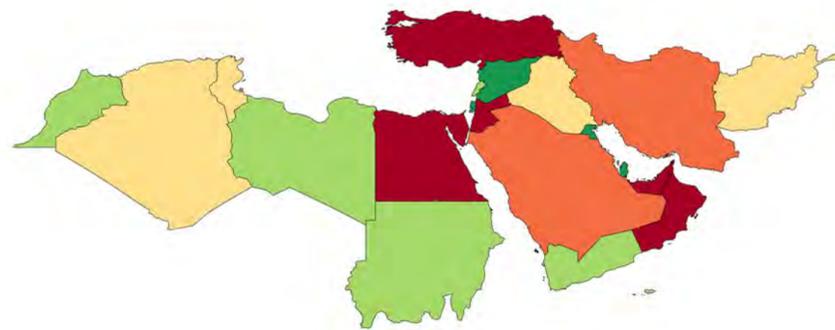
1990



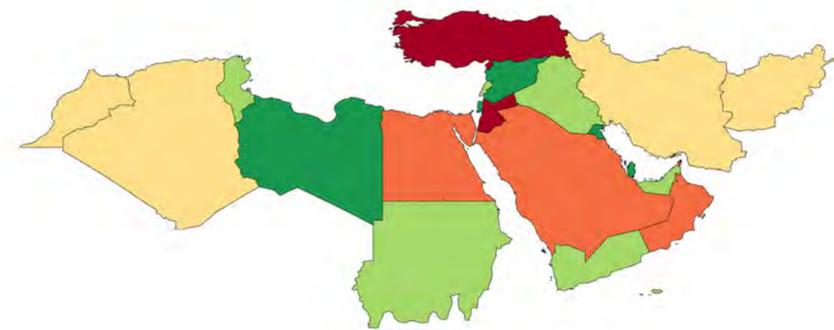
1997



2007



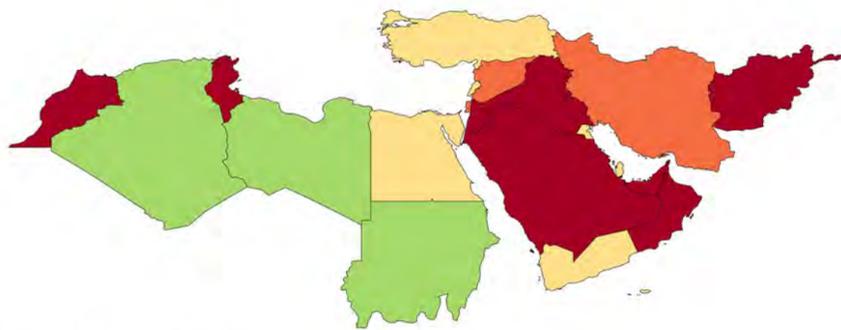
2019



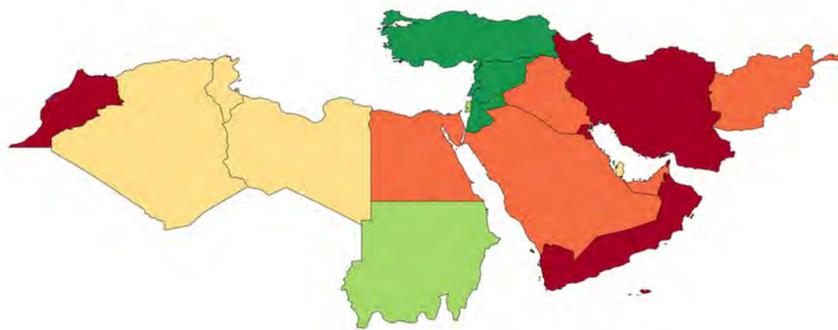
Age-standardized rate (per 100,000)

- < 0.49
- [0.49 to 0.54)
- [0.54 to 0.65)
- [0.65 to 0.78)
- ≥ 0.78

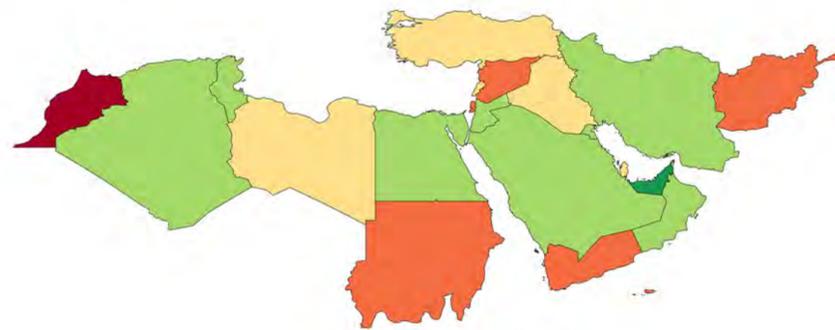
1990 to 1997



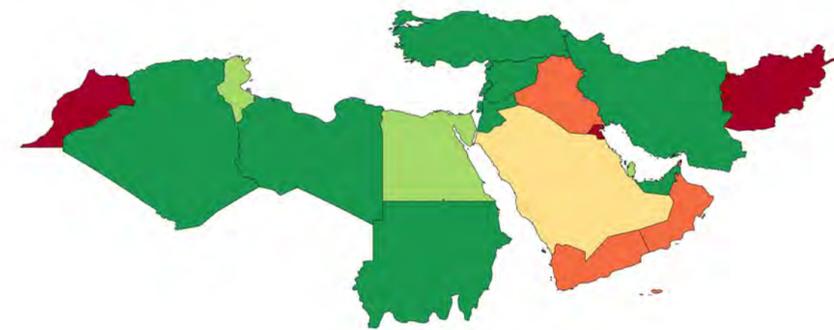
1998 to 2007



2008 to 2019



1990 to 2019



Percent change (%) in age-standardized rate

- < -19.25
- [-19.25 to -9.15)
- [-9.15 to -4.73)
- [-4.73 to 1.77)
- ≥ 1.77

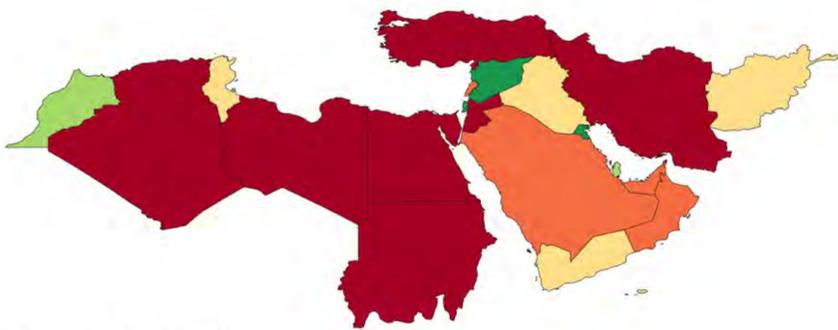
S8 Fig.

Upper panel: Age-standardized rate (per 100, 000) of DALYs of infective endocarditis for the nations of North Africa and the Middle East in 1990, 1997, 2007, and 2019; Lower panel: Percentage changes (%) in age-standardized rate (per 100, 000) of DALYs in North Africa and the Middle East from 1990 to 1997, 1998 to 2007, and 2008 to 2019

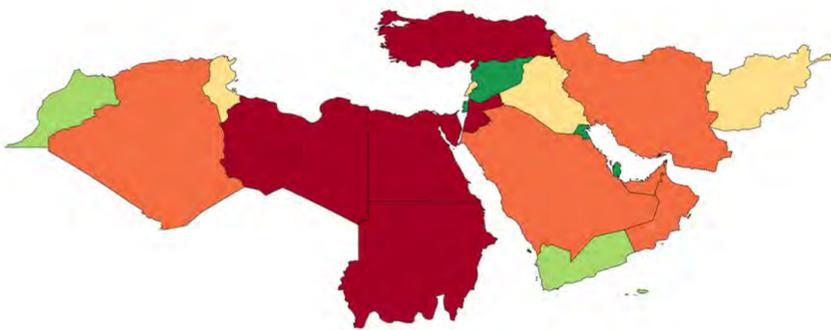
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DALYs

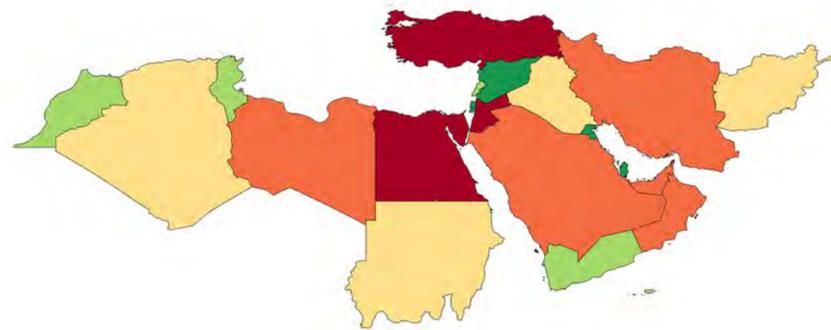
1990



1997



2007



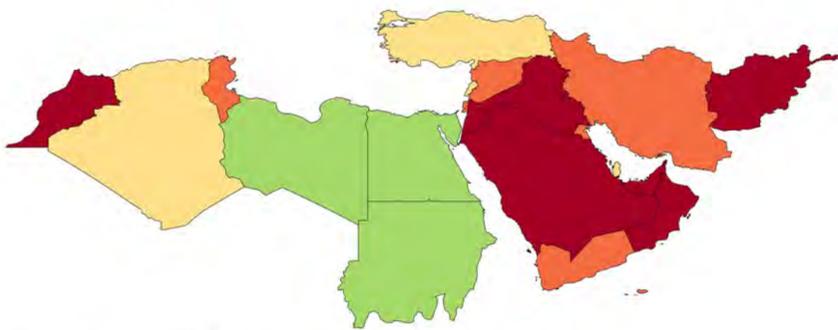
2019



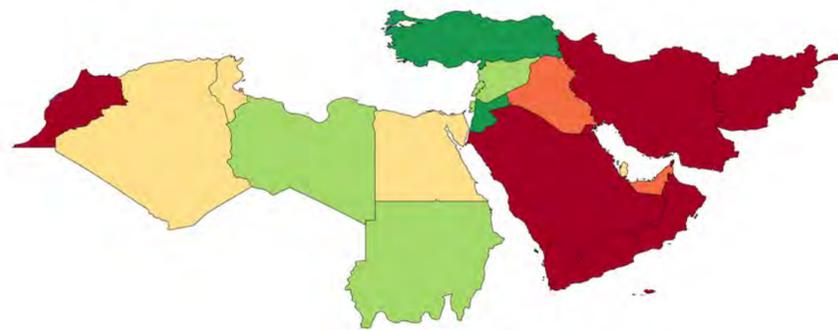
Age-standardized rate (per 100,000)

- < 12.89
- [12.89 to 15.16)
- [15.16 to 17.76)
- [17.76 to 21.42)
- ≥ 21.42

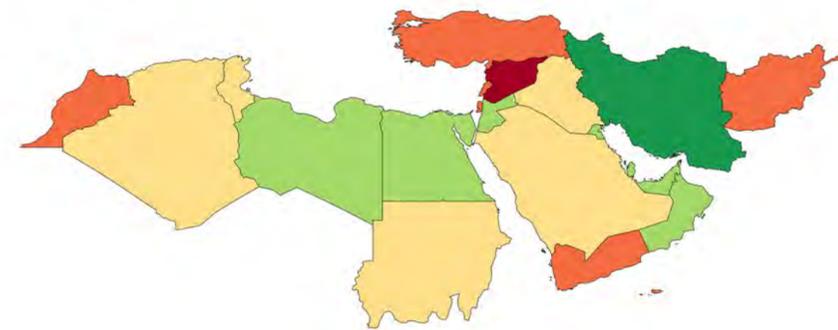
1990 to 1997



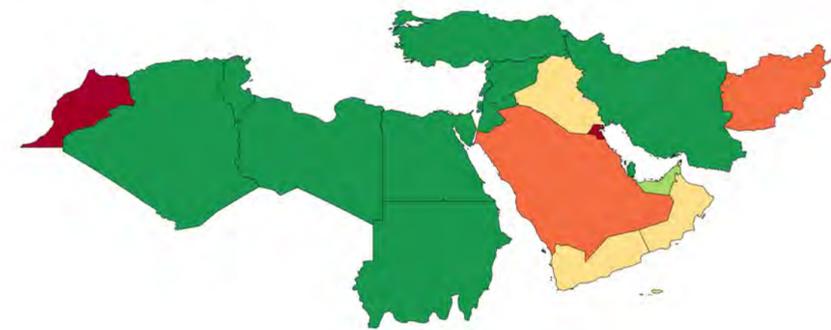
1998 to 2007



2008 to 2019



1990 to 2019



Percent change (%) in age-standardized rate

- < -24.98
- [-24.98 to -15.44)
- [-15.44 to -8.73)
- [-8.73 to -1.96)
- ≥ -1.96

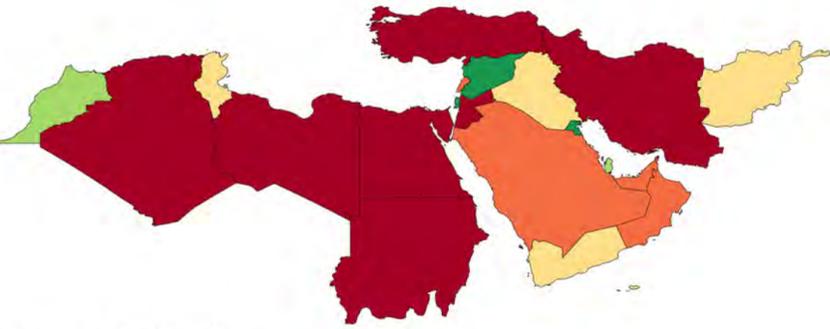
S9 Fig.

Upper panel: Age-standardized rate (per 100, 000) of YLLs of infective endocarditis for the nations of North Africa and the Middle East in 1990, 1997, 2007, and 2019; Lower panel: Percentage changes (%) in age-standardized rate (per 100, 000) of YLLs in North Africa and the Middle East from 1990 to 1997, 1998 to 2007, and 2008 to 2019

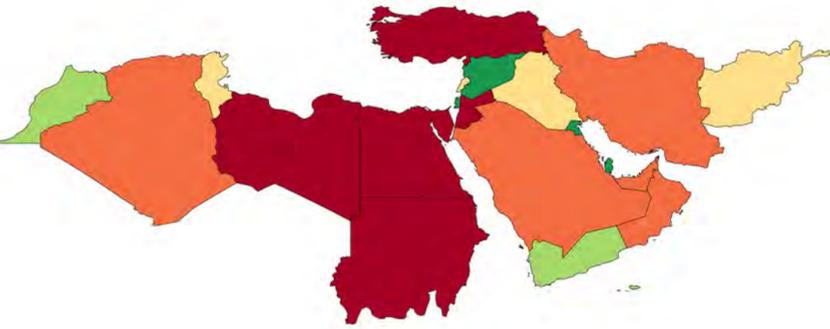
Contains information from OpenStreetMap and OpenStreetMap Foundation, which is made available under the Open Database License.

YLLs

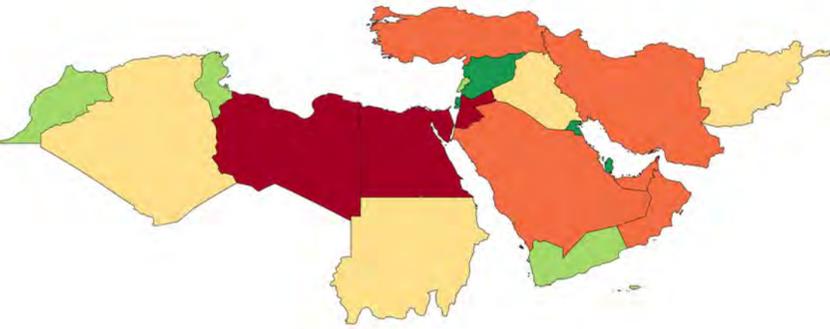
1990



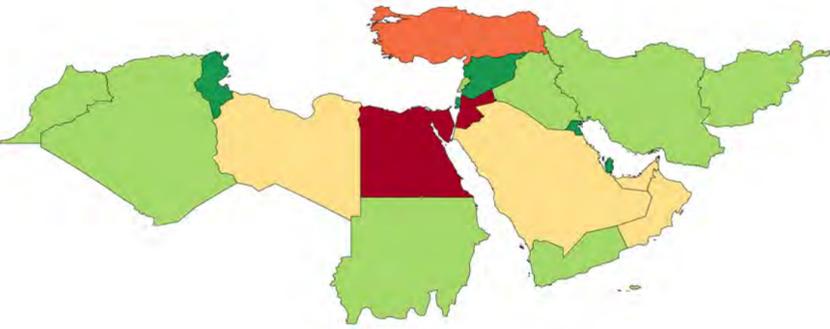
1997



2007



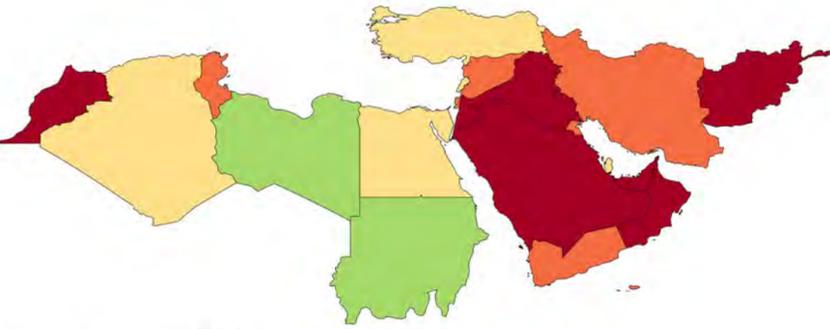
2019



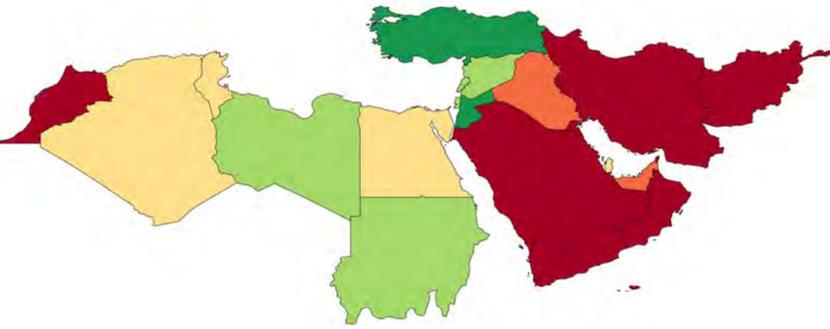
Age-standardized rate (per 100,000)

- < 12.69
- [12.69 to 15.01)
- [15.01 to 17.51)
- [17.51 to 21.19)
- ≥ 21.19

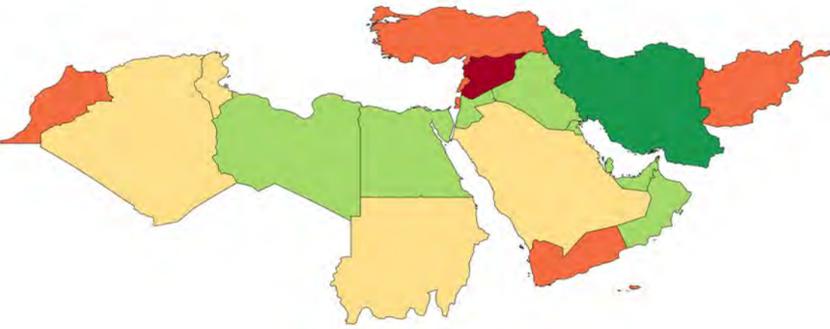
1990 to 1997



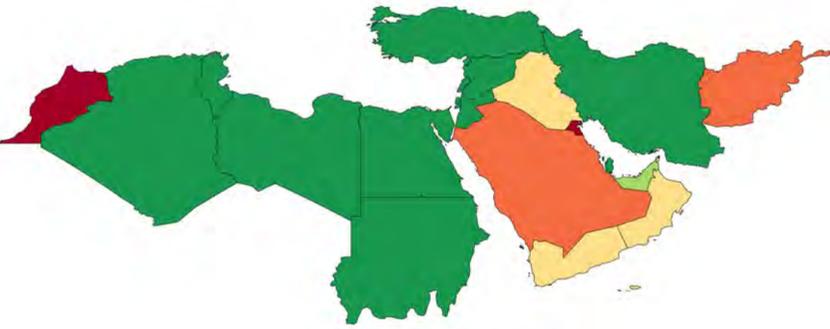
1998 to 2007



2008 to 2019



1990 to 2019



Percent change (%) in age-standardized rate

- < -25.35
- [-25.35 to -15.60)
- [-15.60 to -8.67)
- [-8.67 to -2.10)
- ≥ -2.10

S10 Fig.

Upper panel: Age-standardized rate (per 100, 000) of YLDs of infective endocarditis for the nations of North Africa and the Middle East in 1990, 1997, 2007, and 2019; Lower panel: Percentage changes (%) in age-standardized rate (per 100, 000) of YLDs in North Africa and the Middle East from 1990 to 1997, 1998 to 2007, and 2008 to 2019

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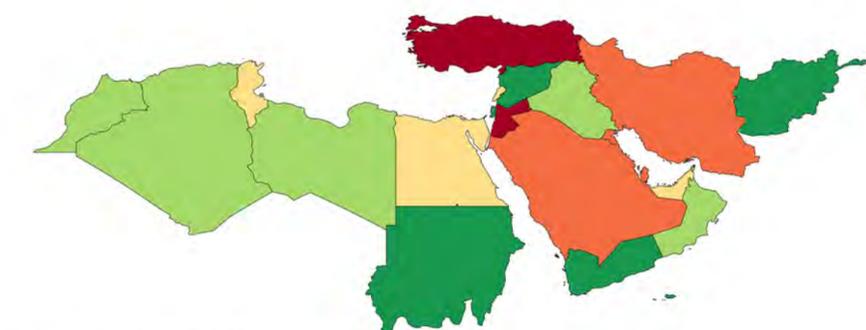
YLDs

1990

1997

2007

2019



Age-standardized rate (per 100,000)

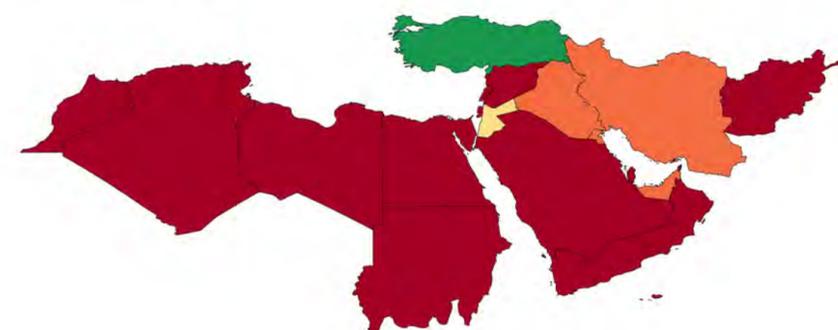
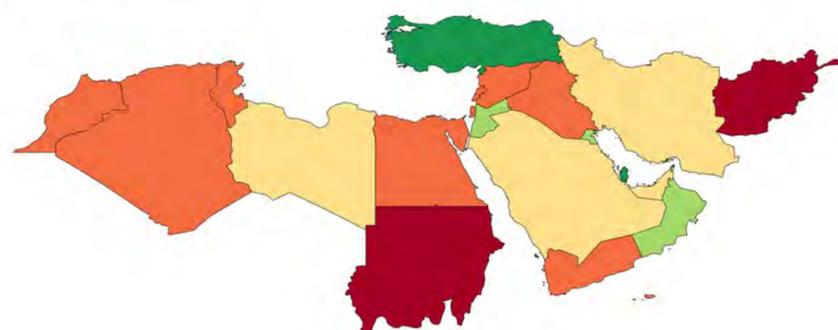
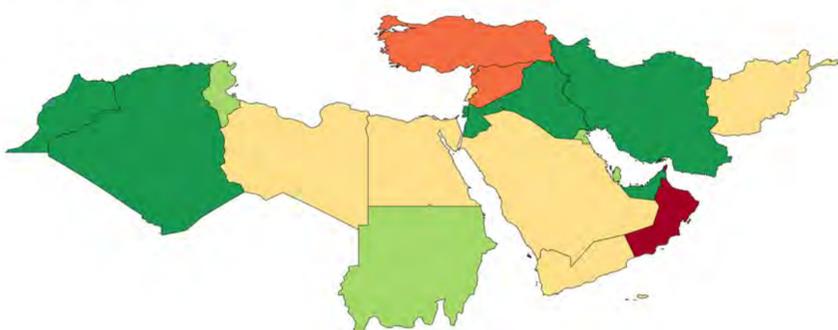
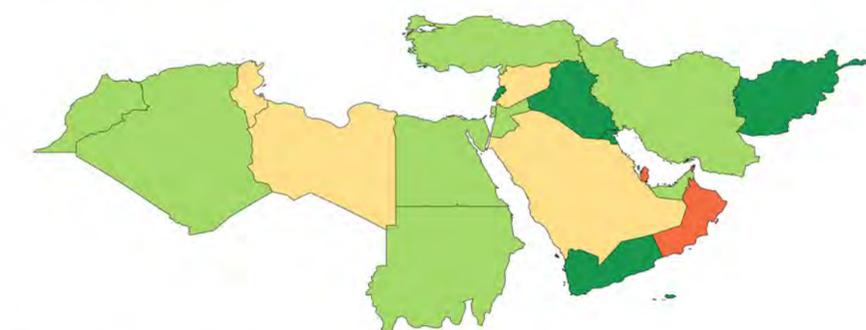
- < 0.13
- [0.13 to 0.19)
- [0.19 to 0.22)
- [0.22 to 0.26)
- ≥ 0.26

1990 to 1997

1998 to 2007

2008 to 2019

1990 to 2019

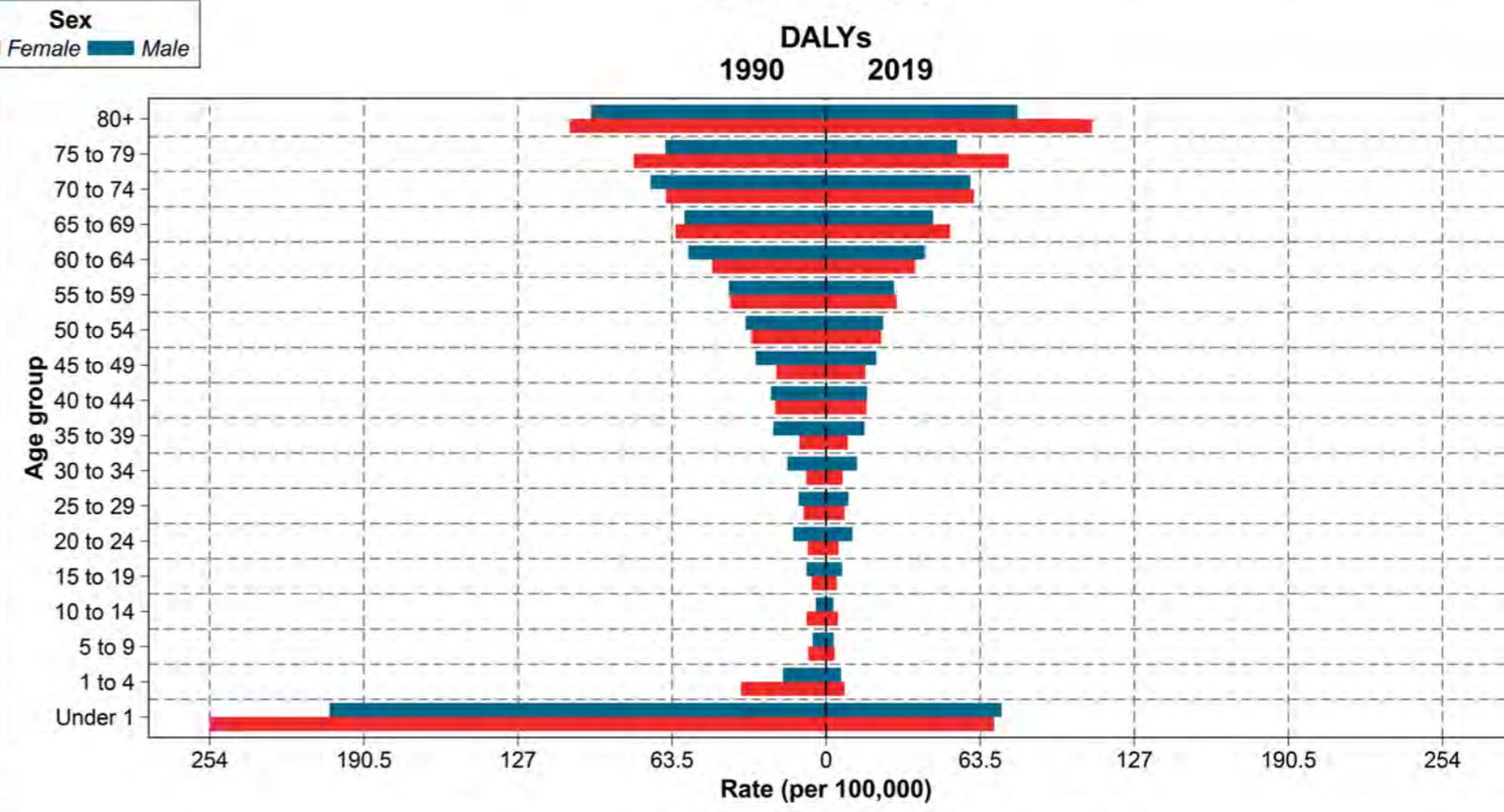
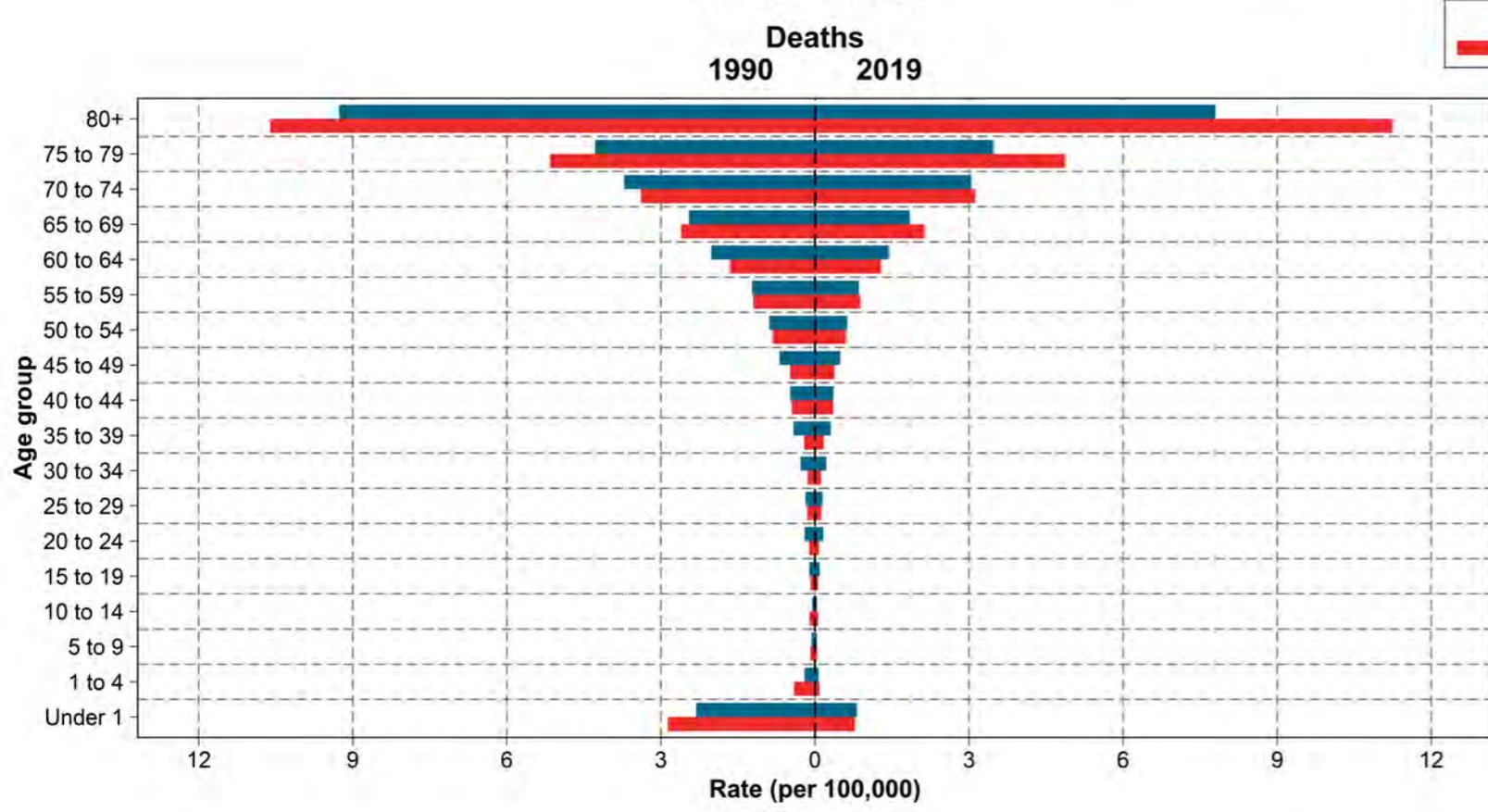
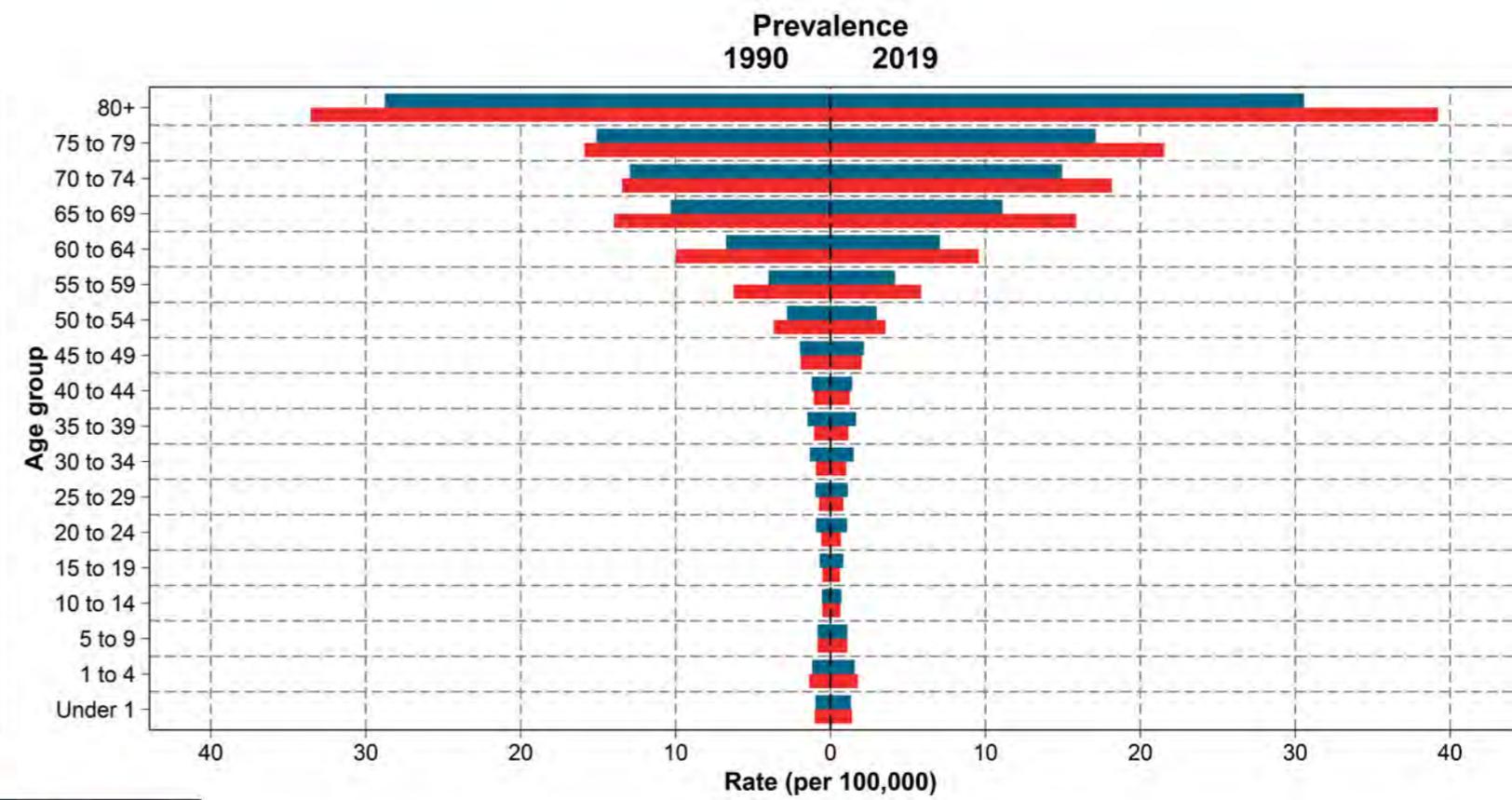
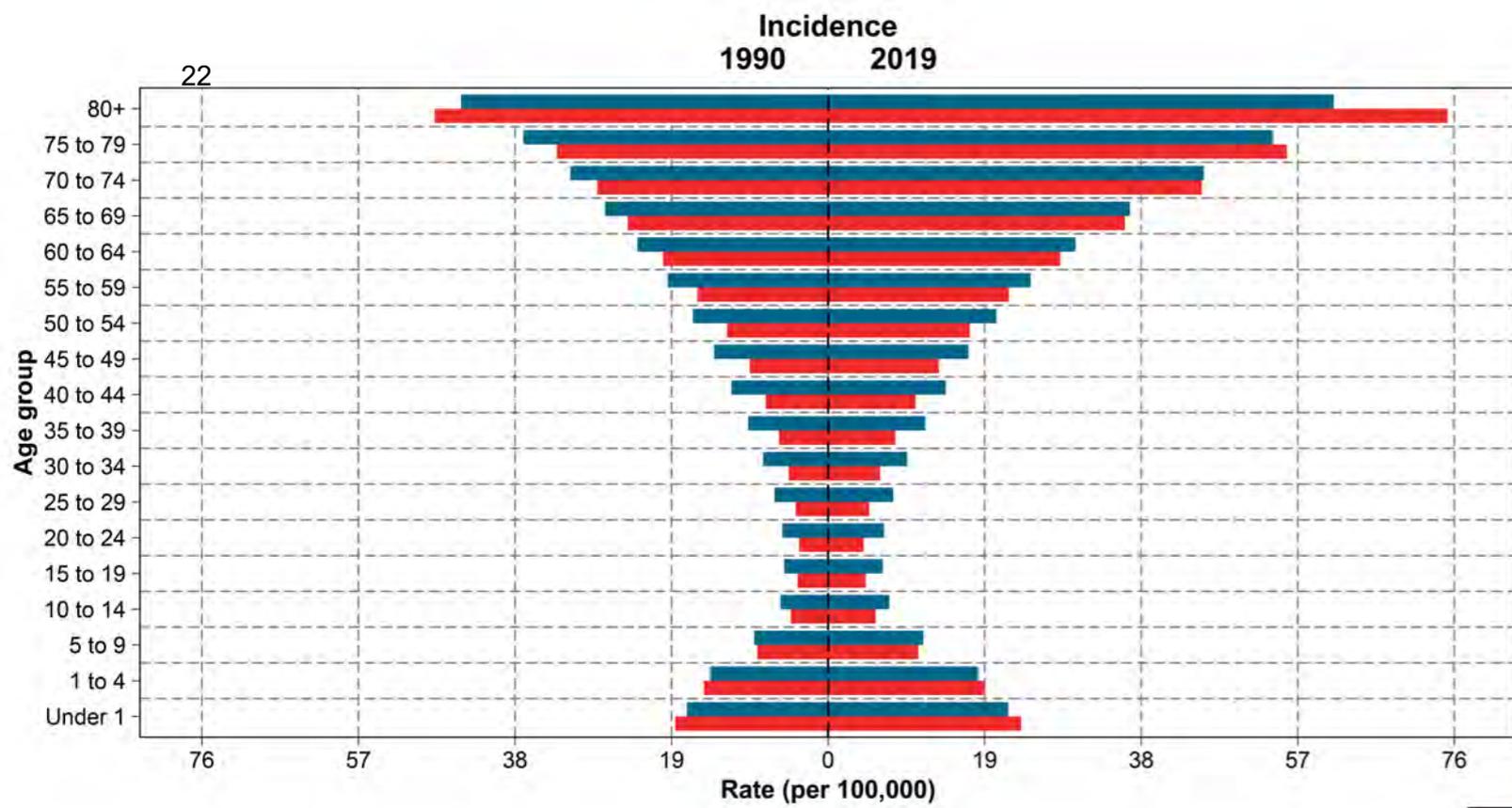


Percent change (%) in age-standardized rate

- < 2.03
- [2.03 to 4.80)
- [4.80 to 6.81)
- [6.81 to 10.75)
- ≥ 10.75

S11 Fig.

Comparison of rates (per 100,000) of incidence, prevalence, deaths, and DALYs of infective endocarditis in North Africa and the Middle East in 1990 and 2019 according to eighteen age groups and sex

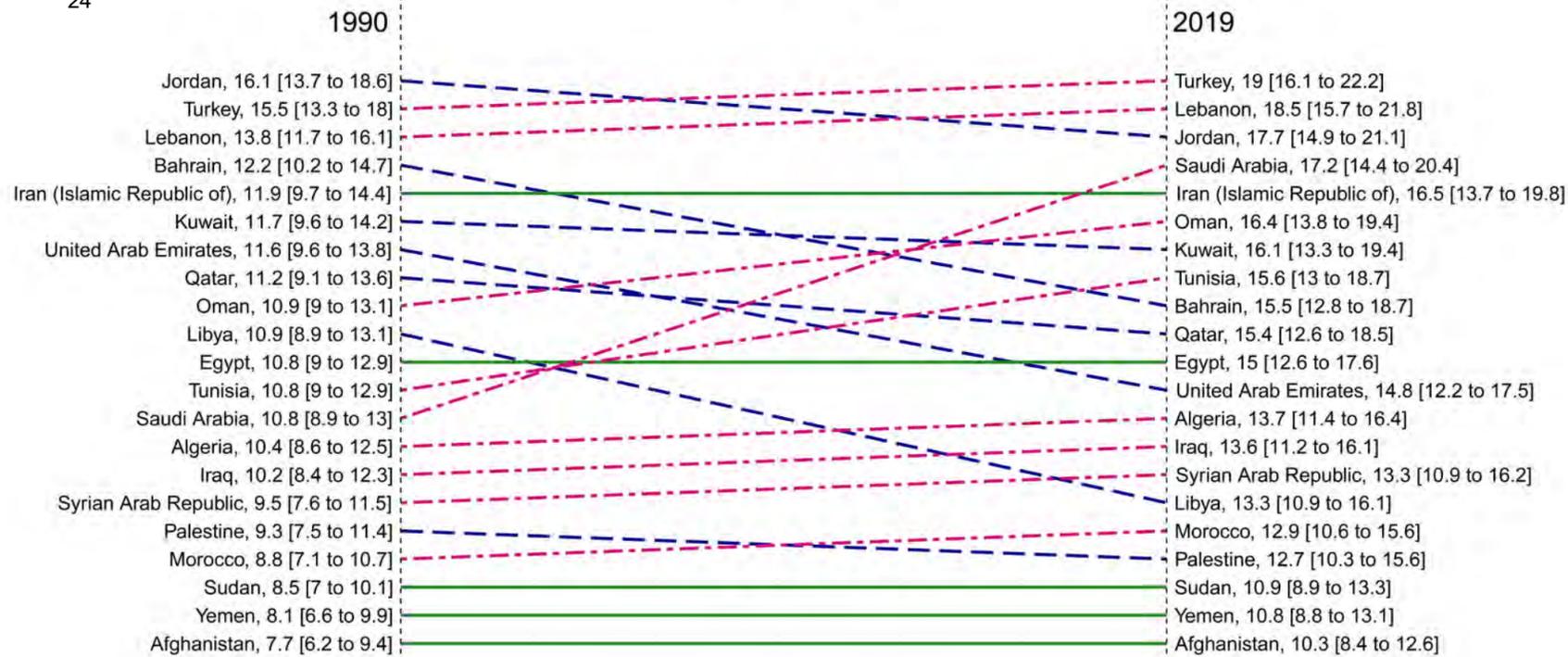


Sex
■ Female ■ Male

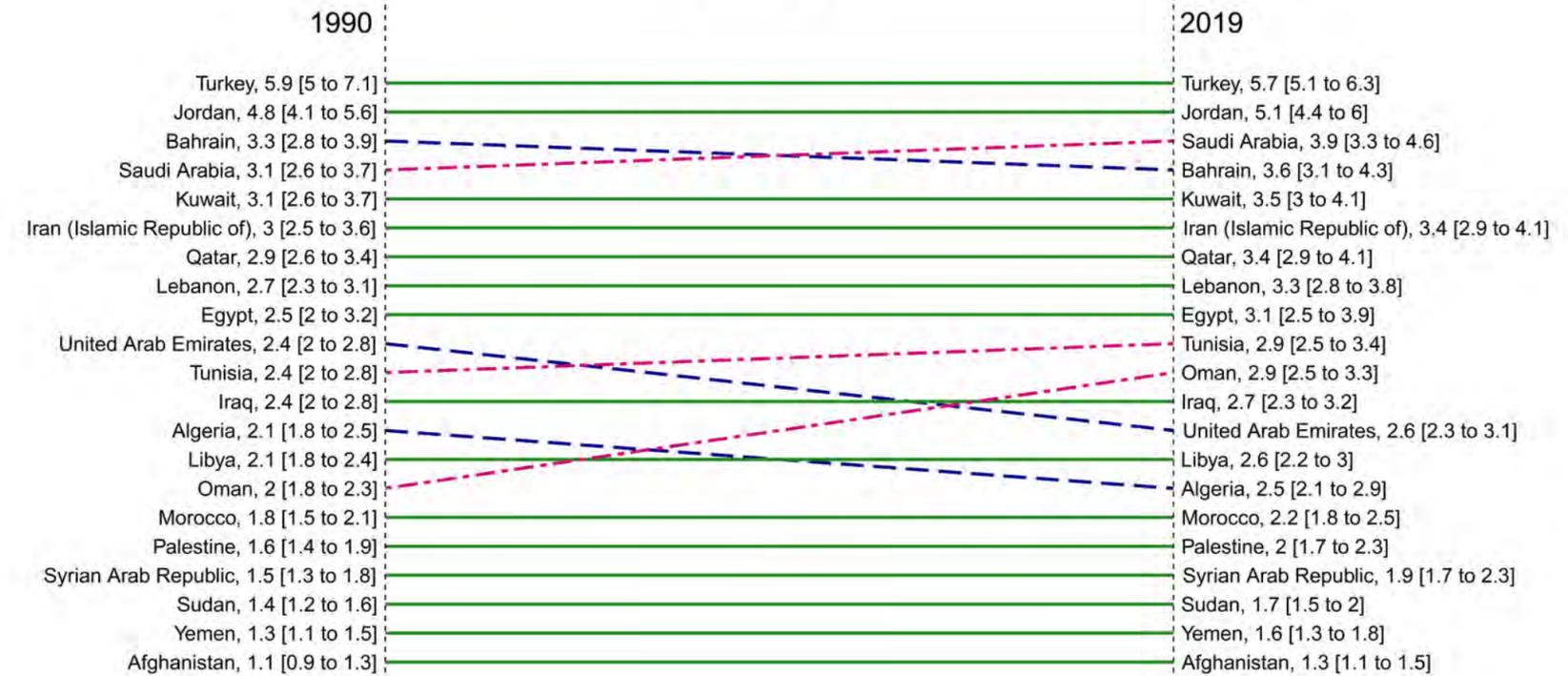
S12 Fig.

Rankings of 21 countries of North African and Middle Eastern countries based on age-standardized rates of incidence, prevalence, deaths, and DALYs of infective endocarditis in 1990 and 2019

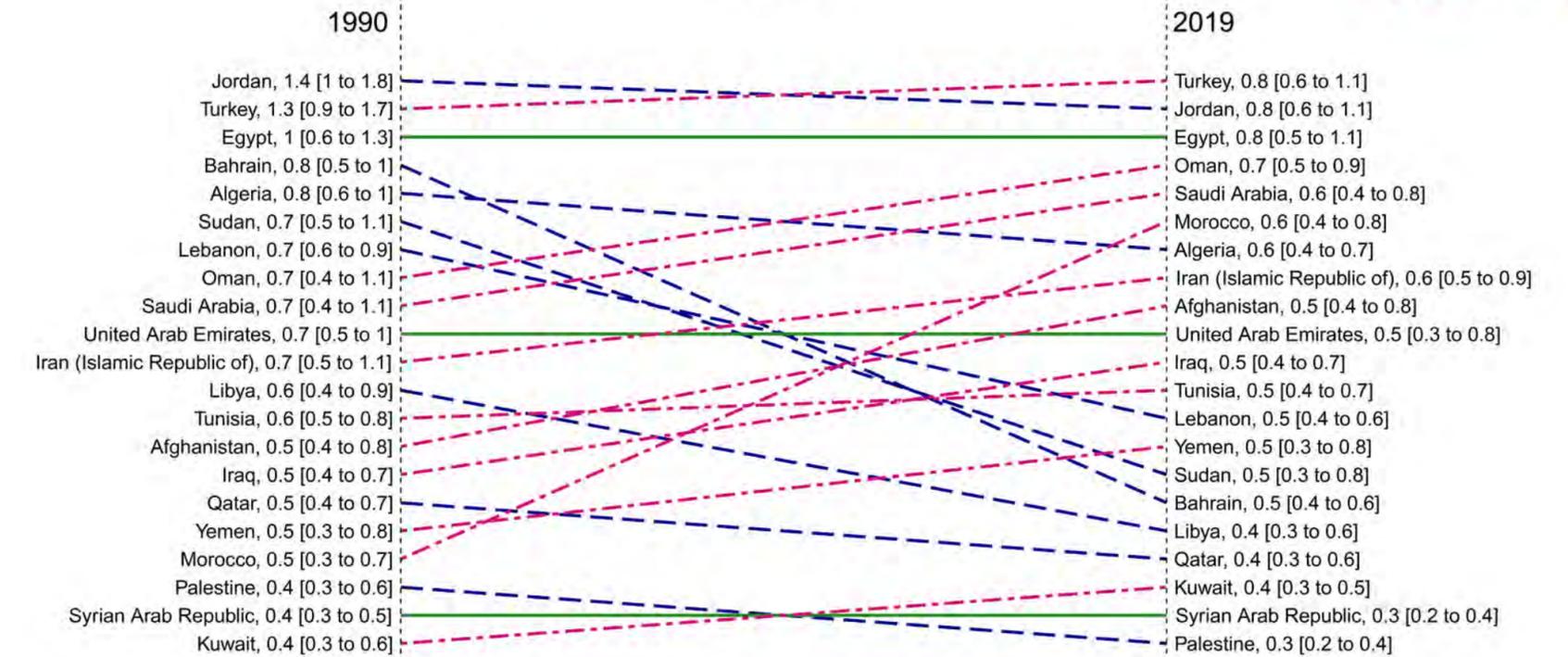
Incidence



Prevalence



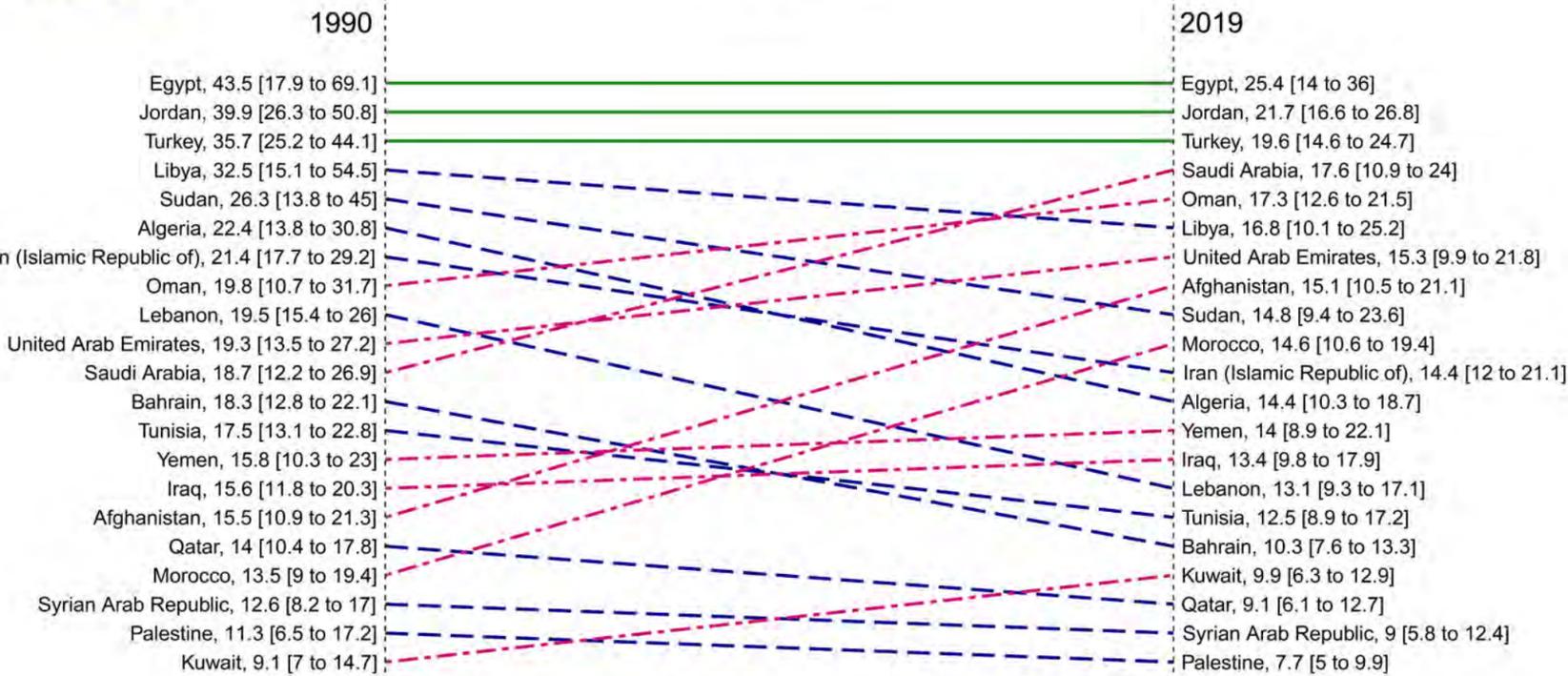
Deaths



Ranking

Upward Monotone Downward

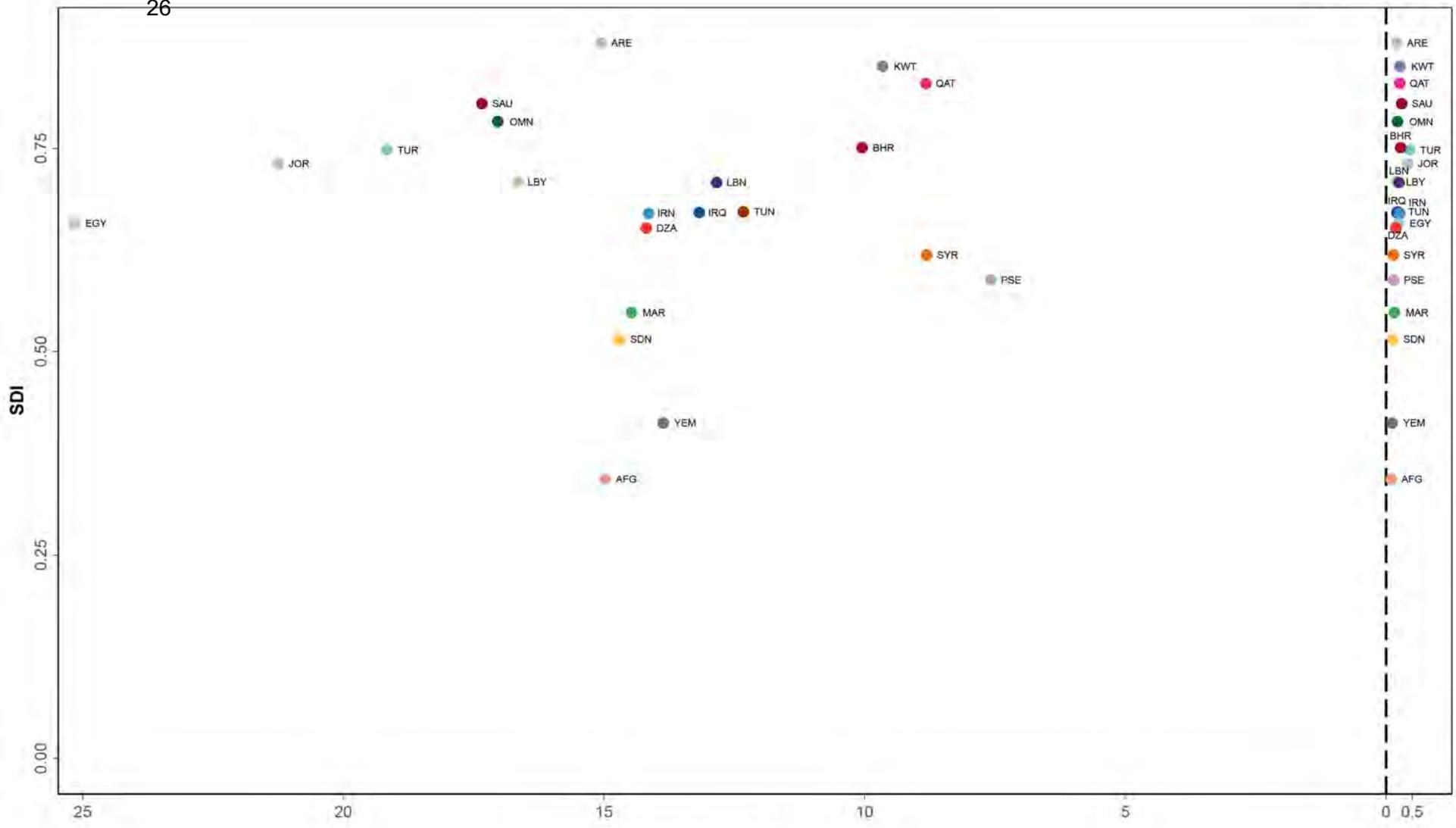
DALYs



S13 Fig.

Age-standardized rates (per 100,000) of YLDs and YLLs of infective endocarditis in 21 North African and Middle Eastern countries in 2019 by quintiles of the countries' socio-demographic index (SDI)

26



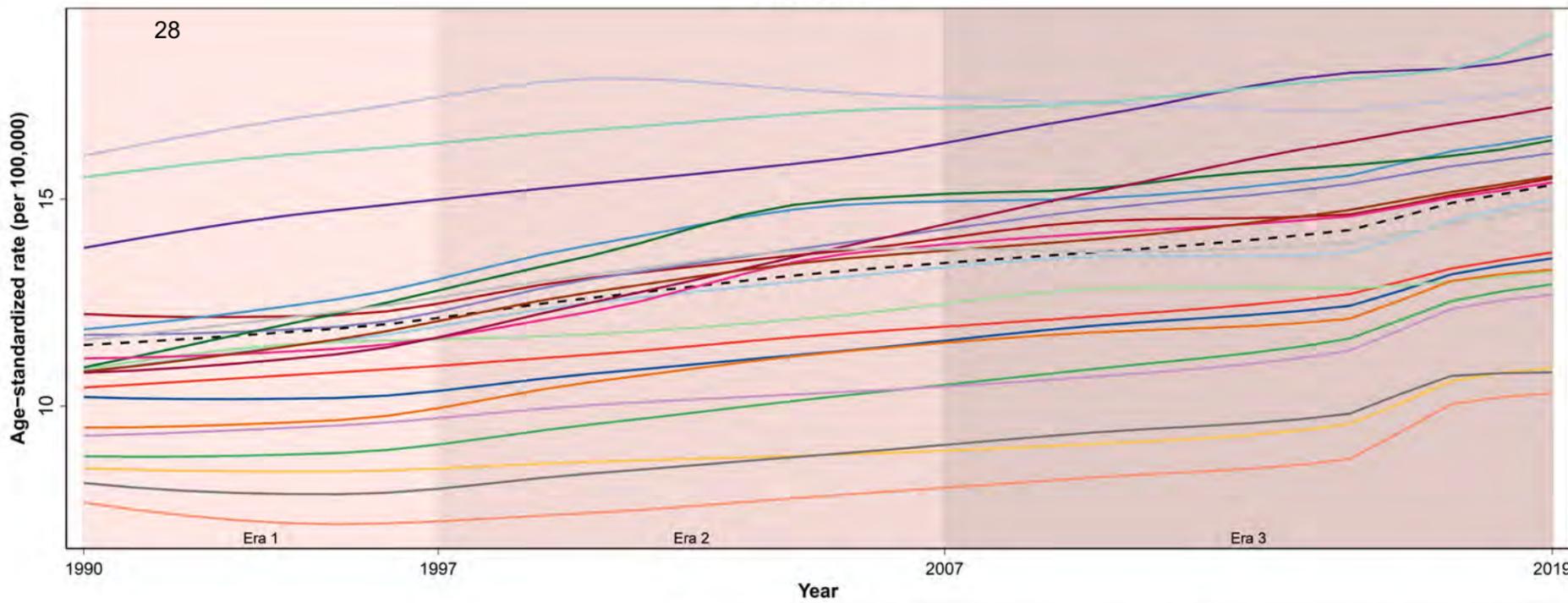
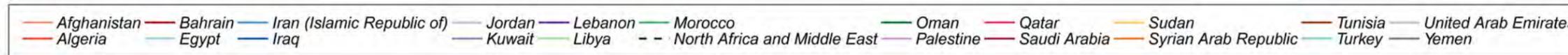
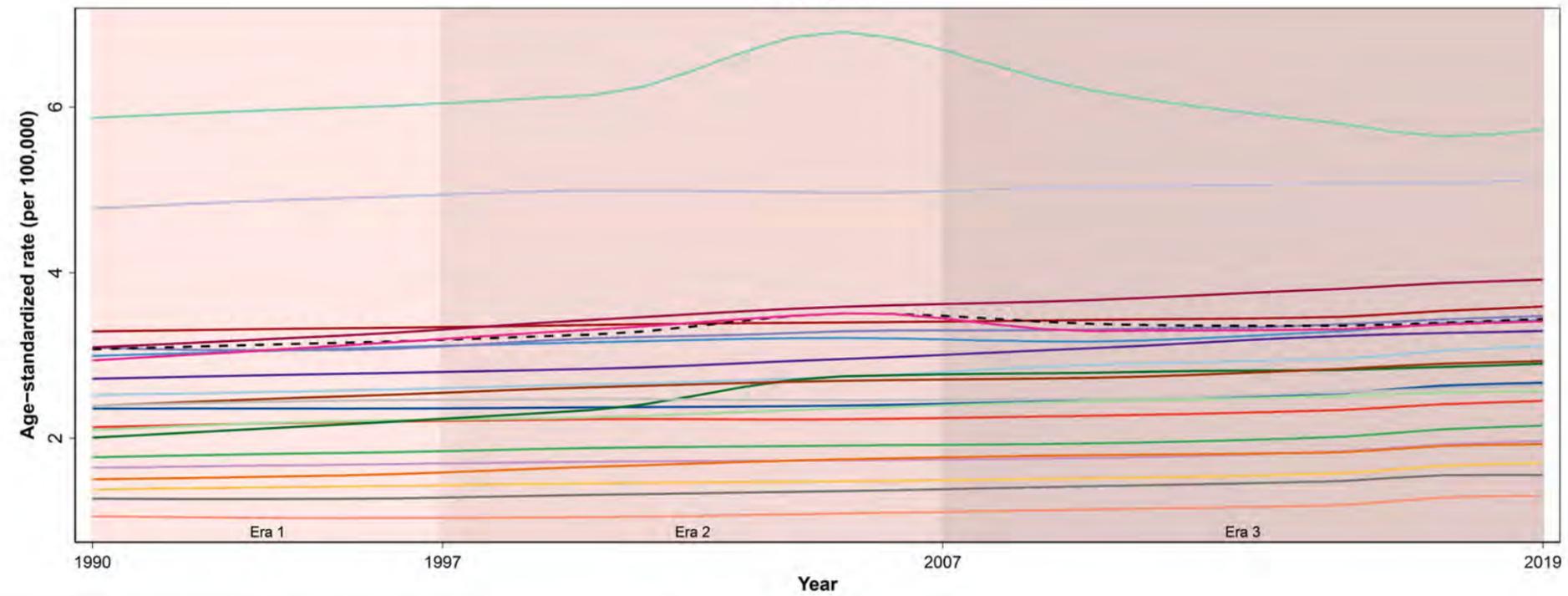
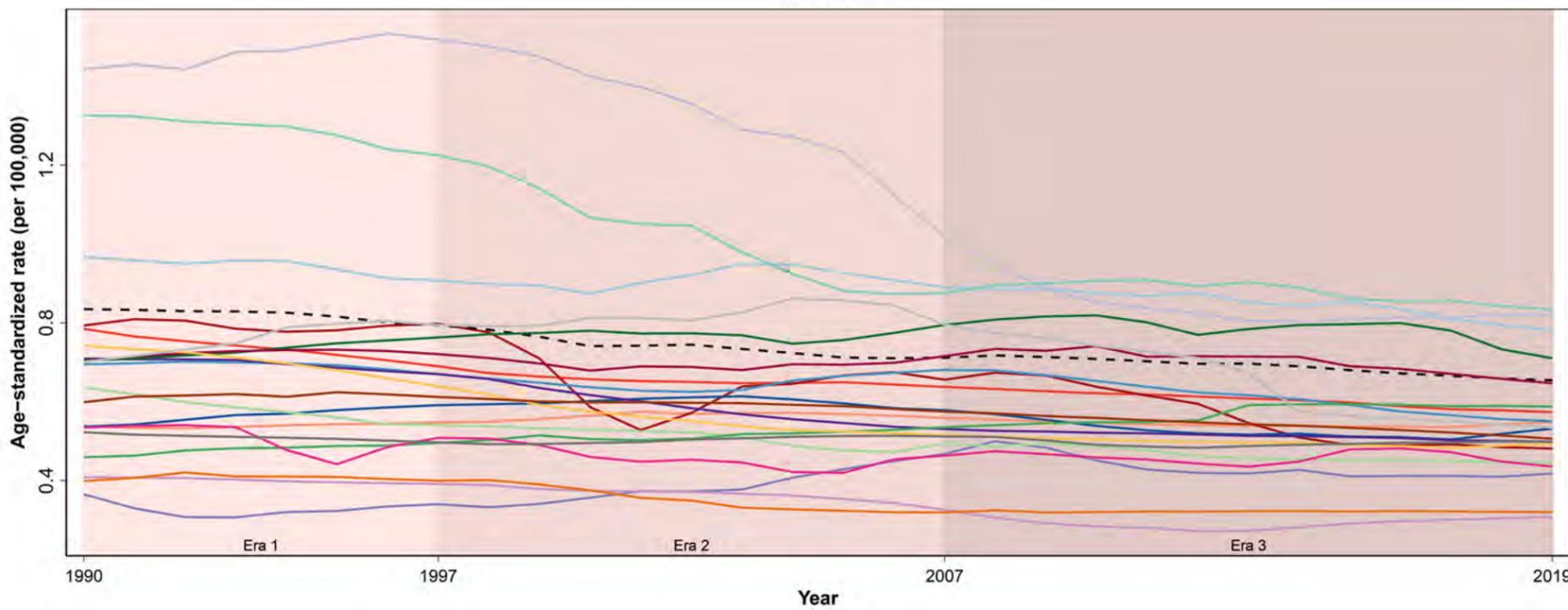
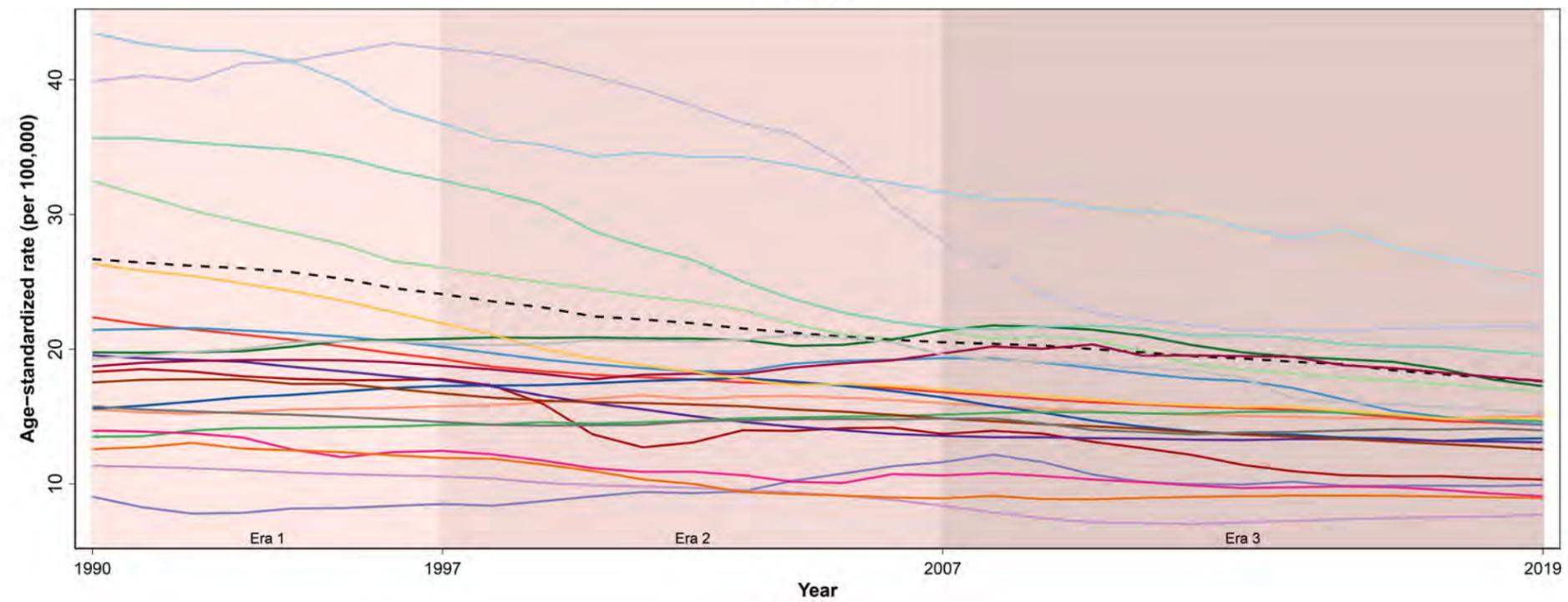
Age-standardized rate (per 100,000)

- Afghanistan (AFG)
- Egypt (EGY)
- Jordan (JOR)
- Libya (LBY)
- Palestine (PSE)
- Sudan (SDN)
- Turkey (TUR)
- Algeria (DZA)
- Iran (Islamic Republic of) (IRN)
- Kuwait (KWT)
- Morocco (MAR)
- Qatar (QAT)
- Syrian Arab Republic (SYR)
- United Arab Emirates (ARE)
- Bahrain (BHR)
- Iraq (IRQ)
- Lebanon (LBN)
- Oman (OMN)
- Saudi Arabia (SAU)
- Tunisia (TUN)
- Yemen (YEM)

Low SDI: AFG, YEM
Low-middle SDI: MAR, SDN, PSE
Middle SDI: DZA, EGY, IRN, IRQ, SYR, TUN
Middle-high SDI: BHR, JOR, LBN, LBY, OMN, SAU, TUR
High SDI: ARE, KWT, QAT

S14 Fig.

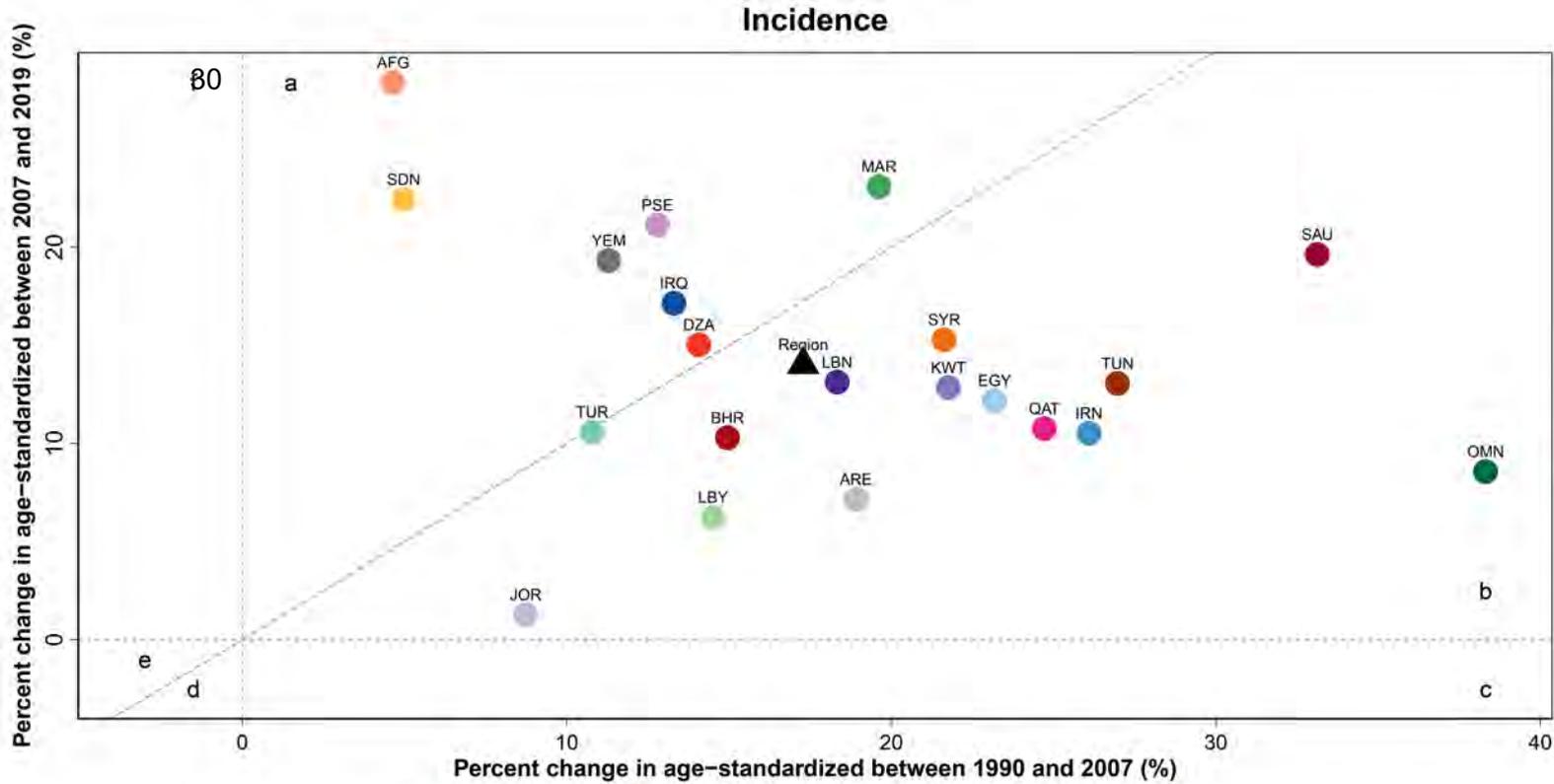
The temporal trend of age-standardized incidence, prevalence, deaths, and DALYs of infective endocarditis in 21 countries of North Africa and the Middle East between 1990 and 2019 in the three eras (1990–1997, 1998–2007, and 2008–2019)

Incidence**Prevalence****Deaths****DALYs**

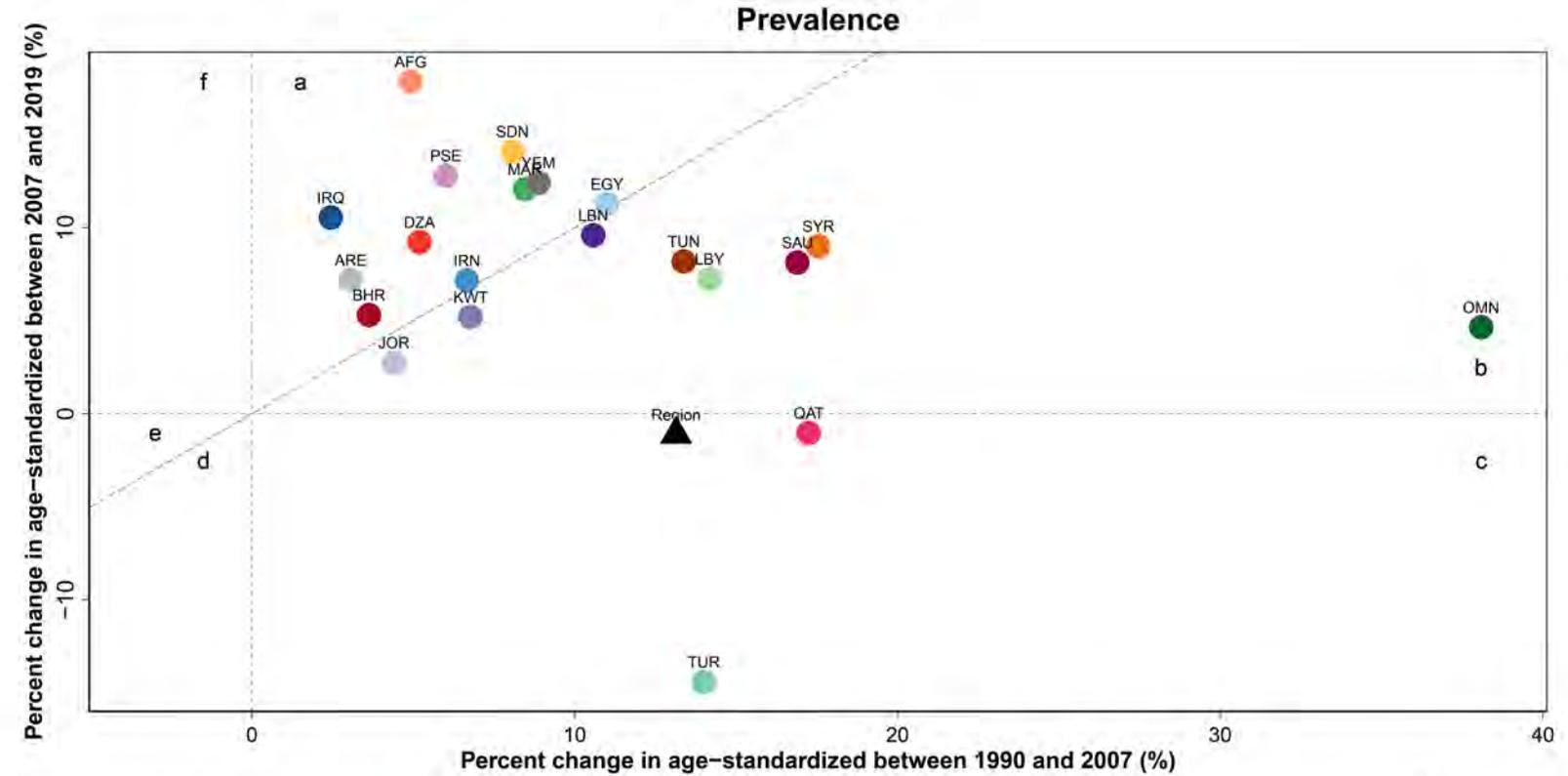
S15 Fig.

Percent changes (%) in age-standardized rates (per 100,000) of incidence, prevalence, deaths, and DALYs of infective endocarditis between 1997 and 2007, and 2007 and 2019 in 21 countries of North Africa and the Middle East

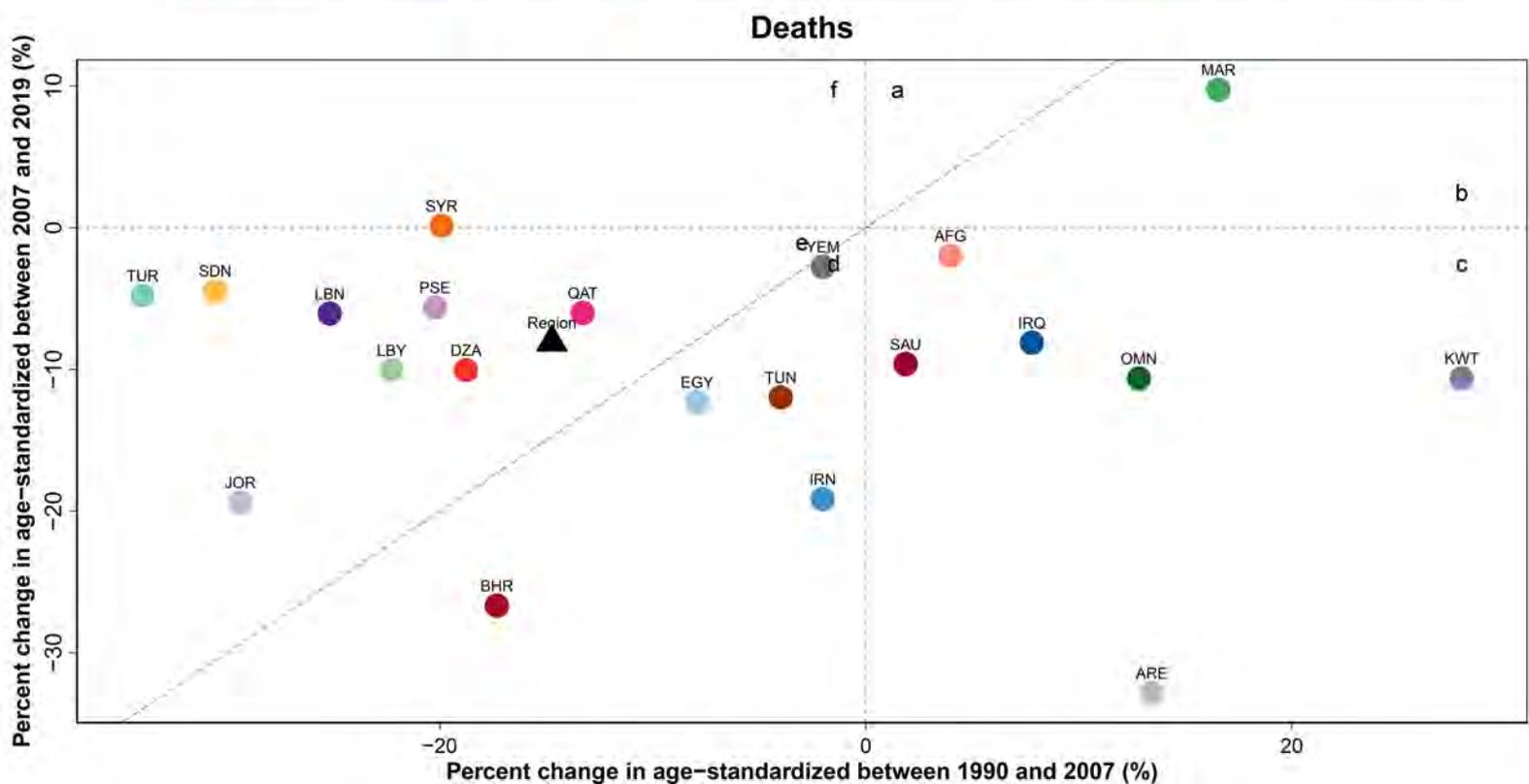
Incidence



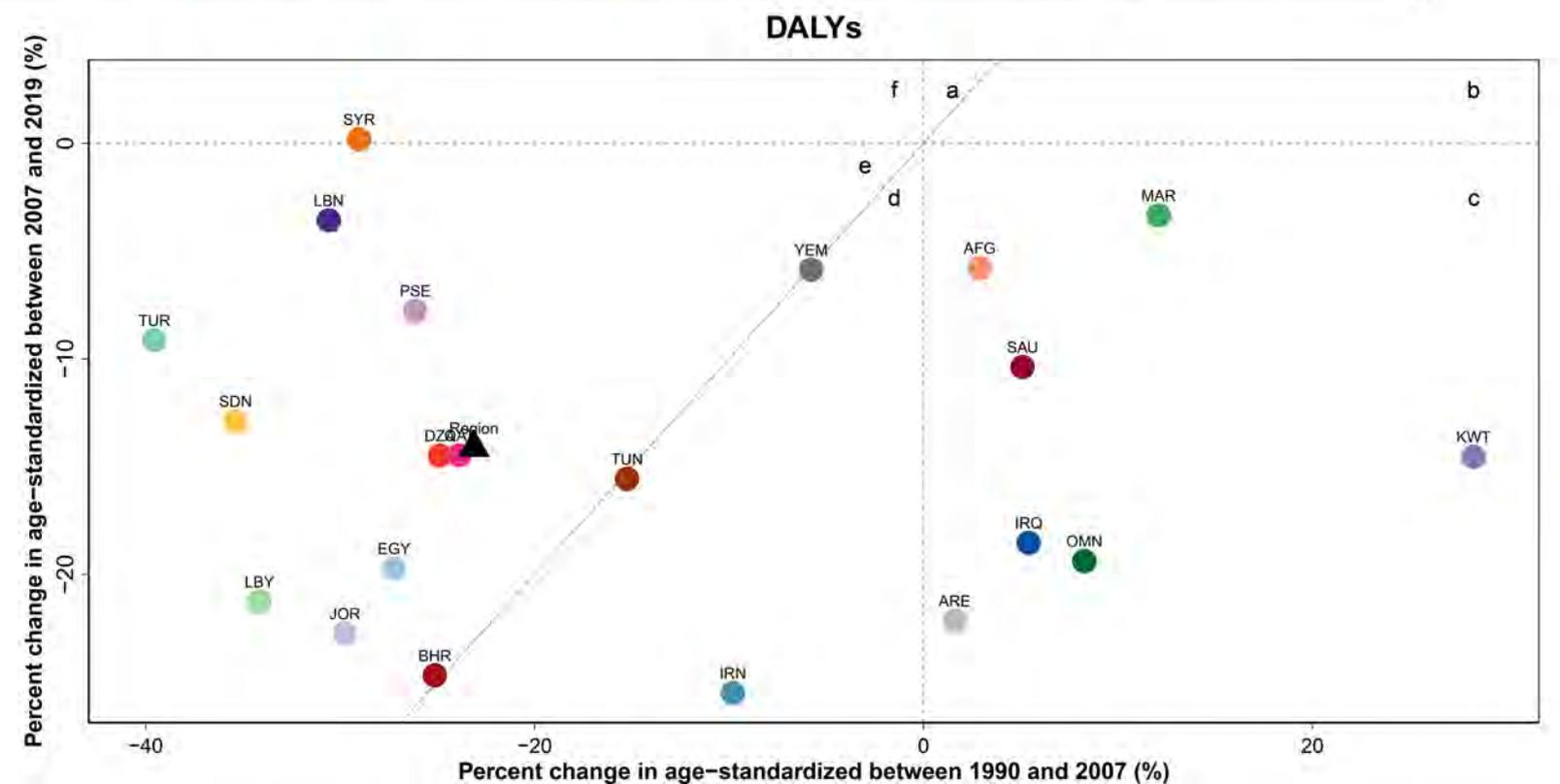
Prevalence



Deaths

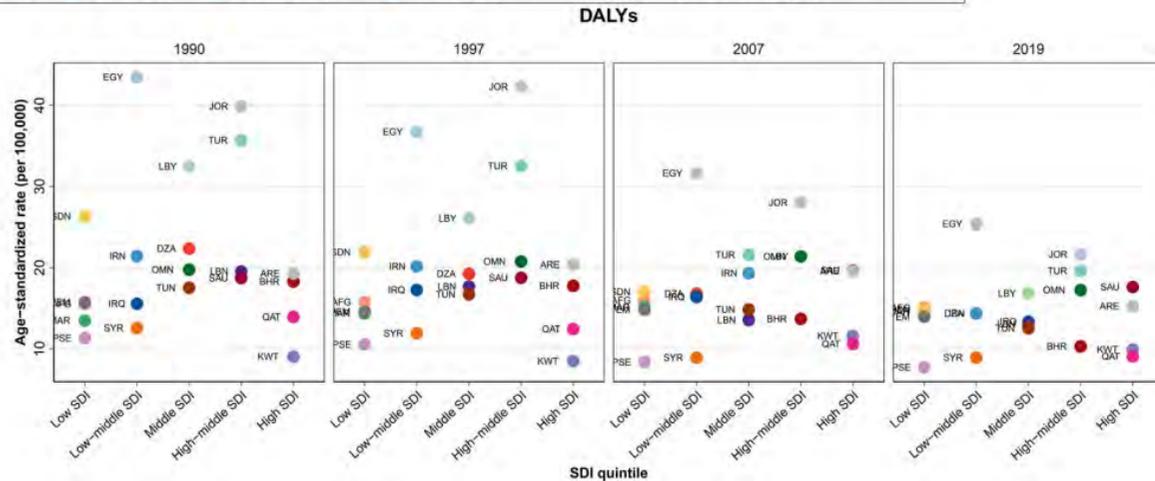
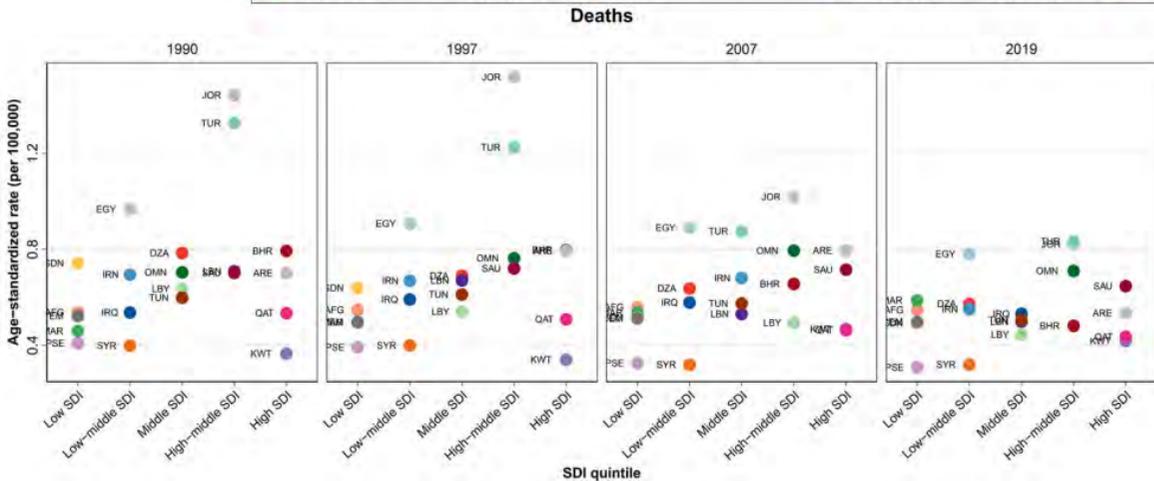
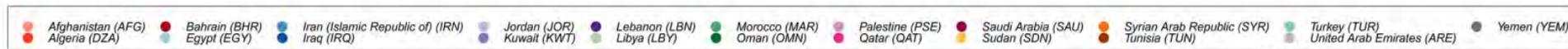
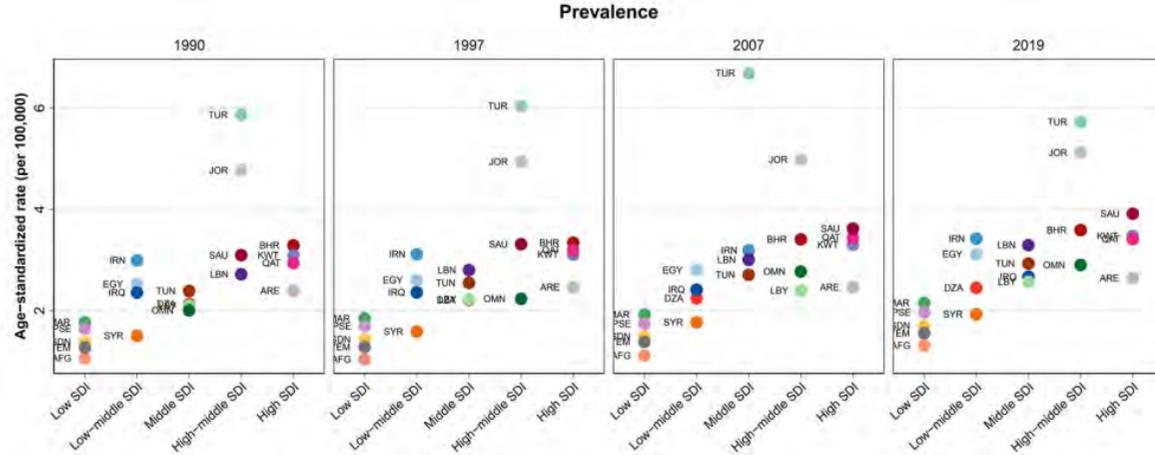
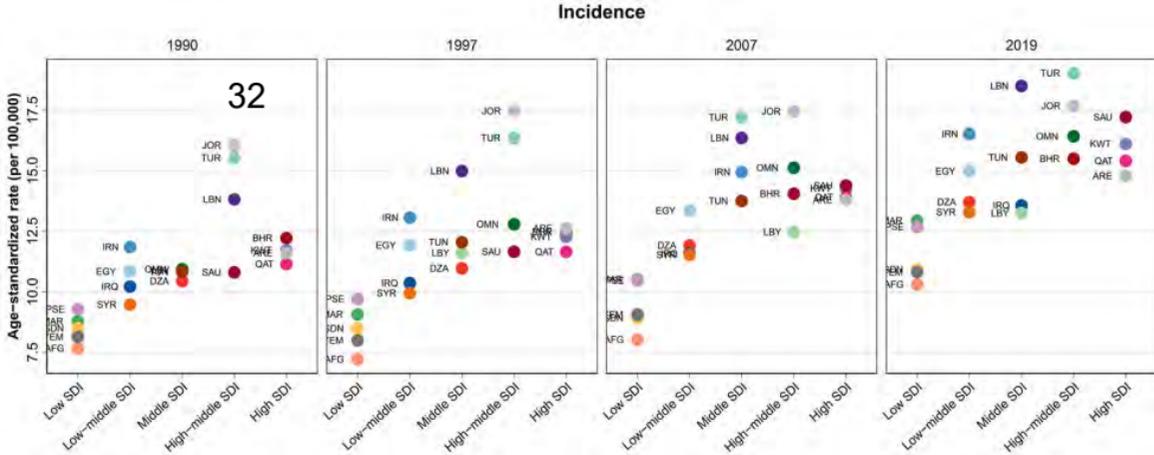


DALYs



S16 Fig.

Age-standardized rates (per 100,000) of incidence, prevalence, deaths, and disability-adjusted life years (DALYs) of infective endocarditis in 21 North African and Middle Eastern countries in 1990, 1997, 2007, and 2019 by quintiles of the countries' socio-demographic index

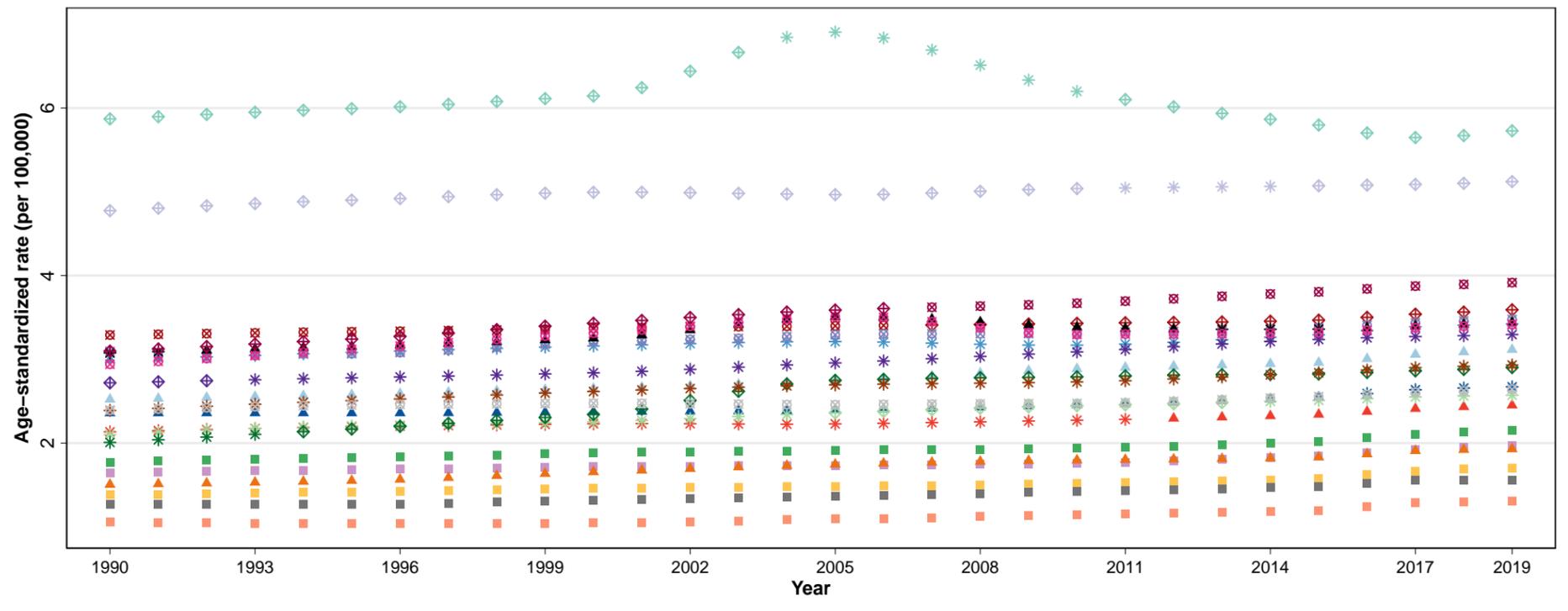
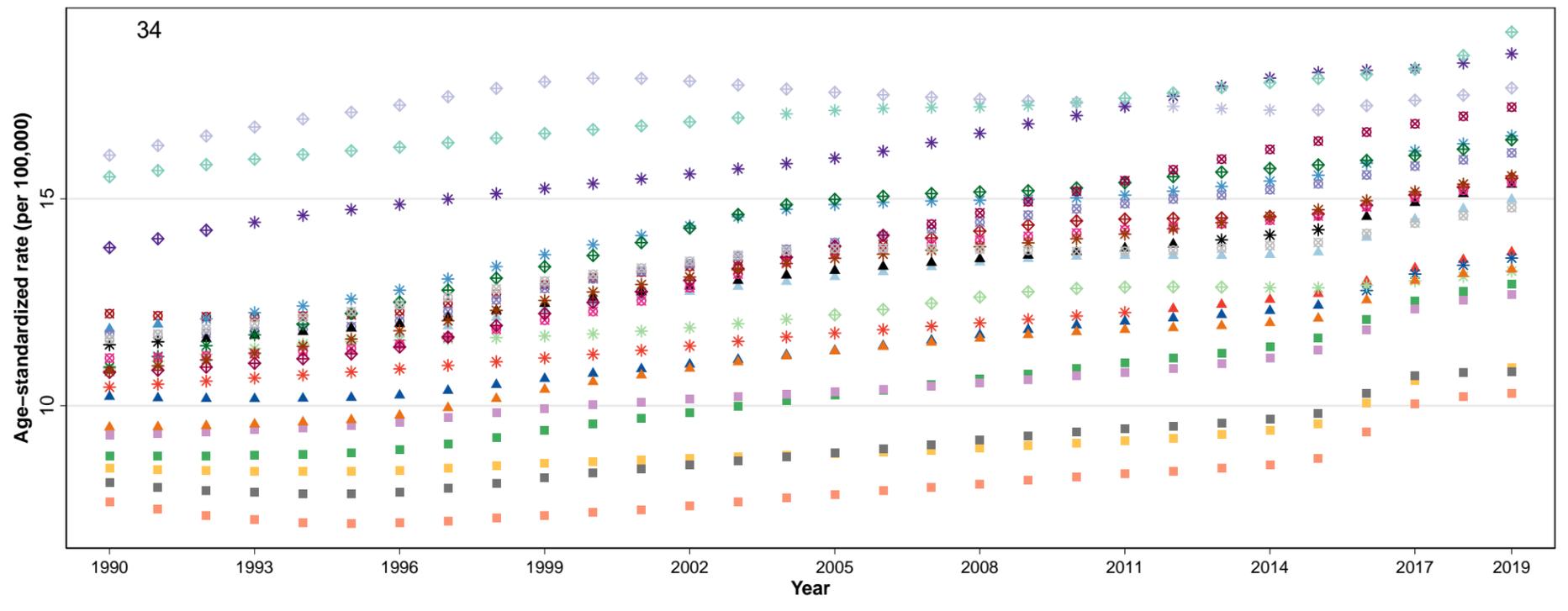


S17 Fig.

Age-standardized rates (per 100,000) of incidence, prevalence, deaths, and disability-adjusted life years (DALYs) of infective endocarditis in 21 North African and Middle Eastern nations from 1990 to 2019 at three-year intervals (1990, 1993, 1996, 1999, 2002, 2005, 2008, 2011, 2014, 2017 and 2019) by quintiles of the countries' sociodemographic index (SDI)

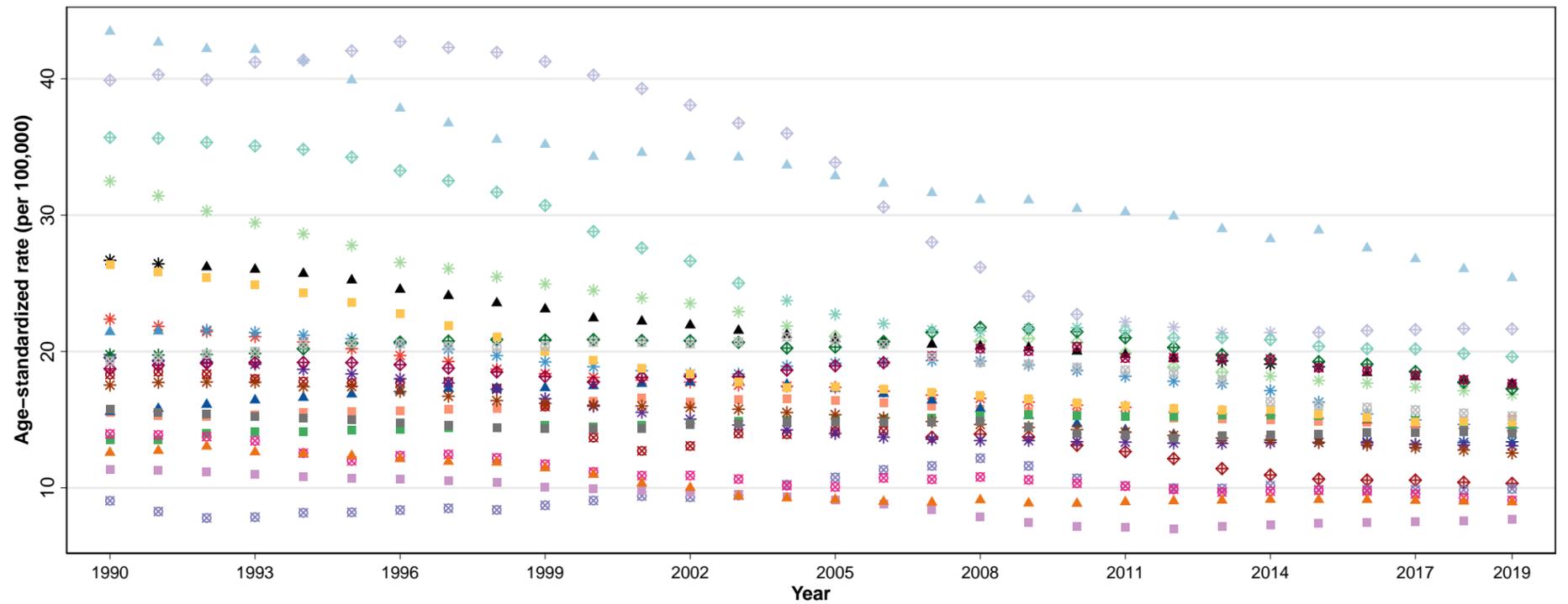
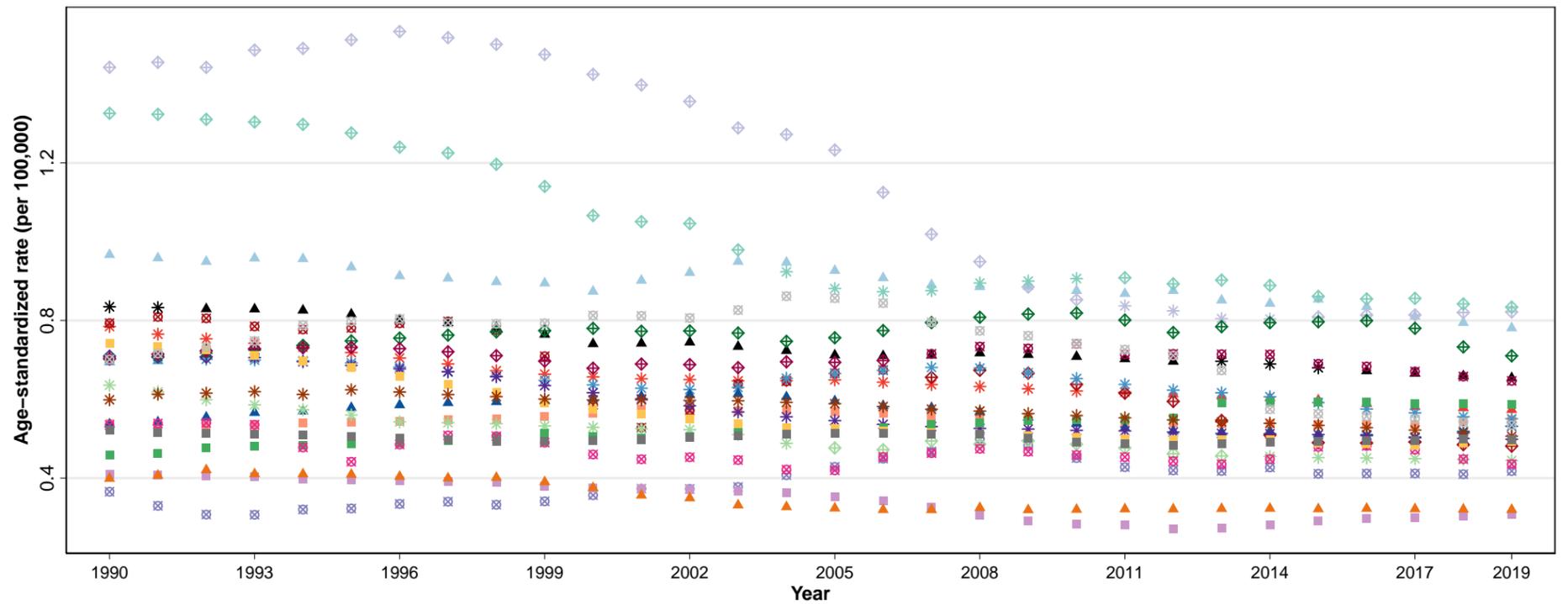
Incidence

Prevalence



Deaths

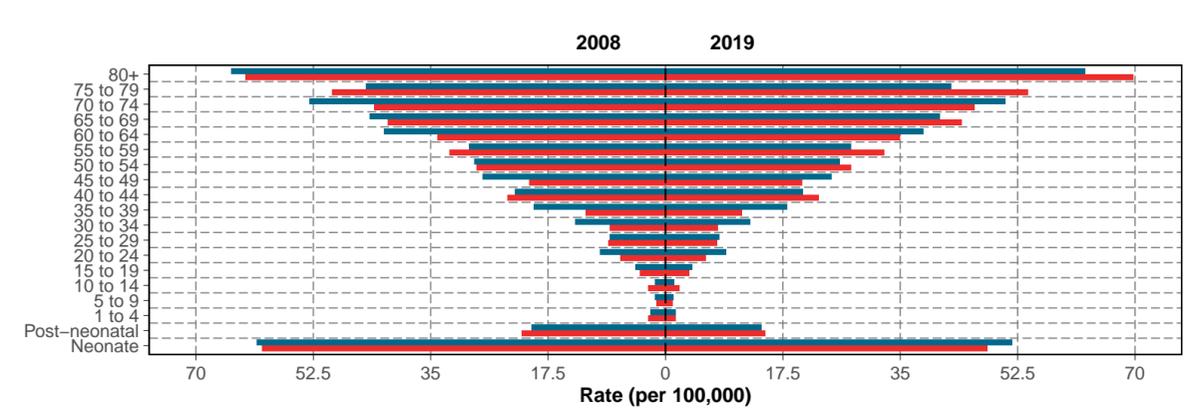
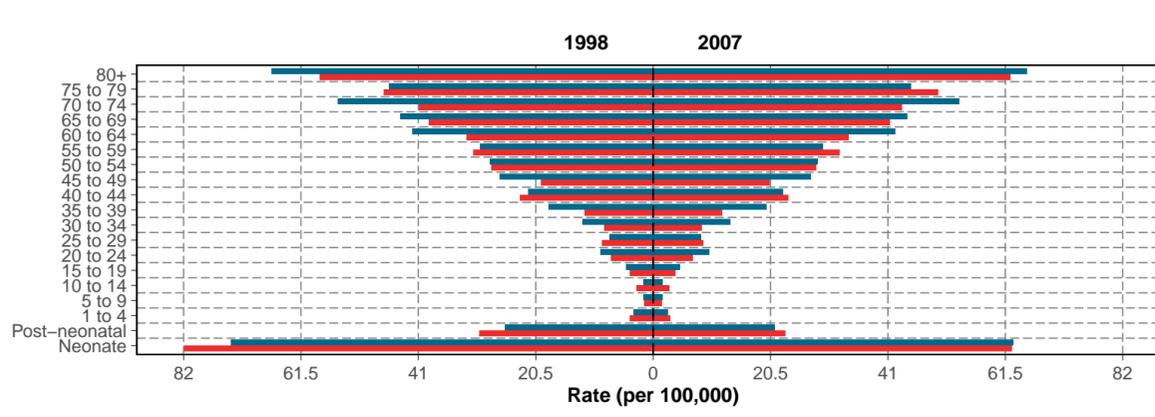
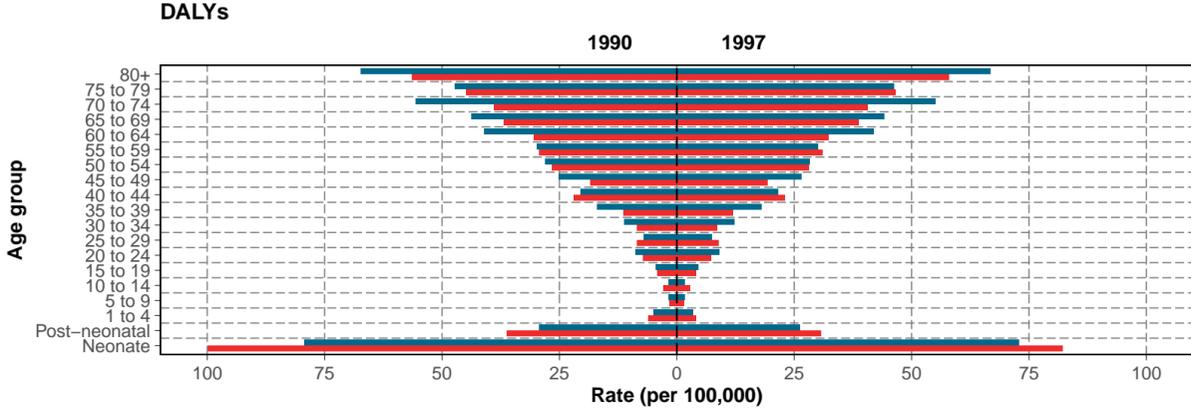
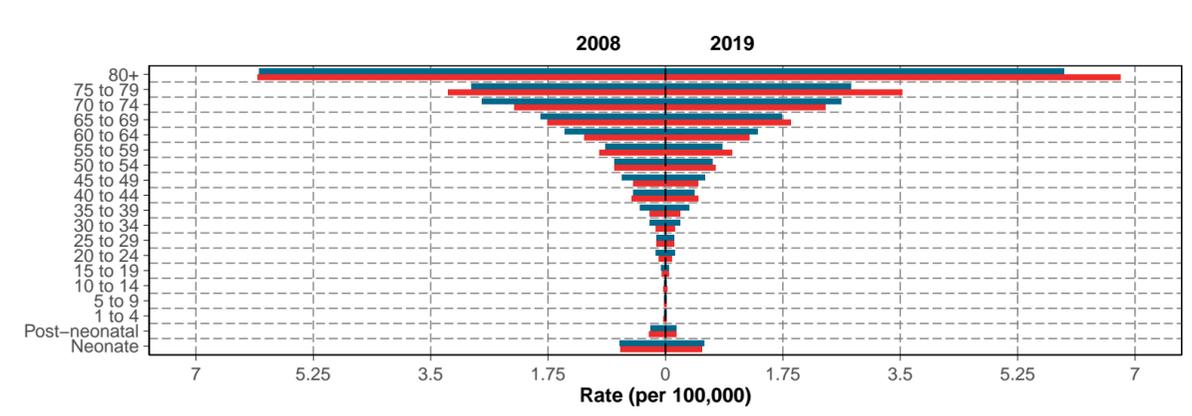
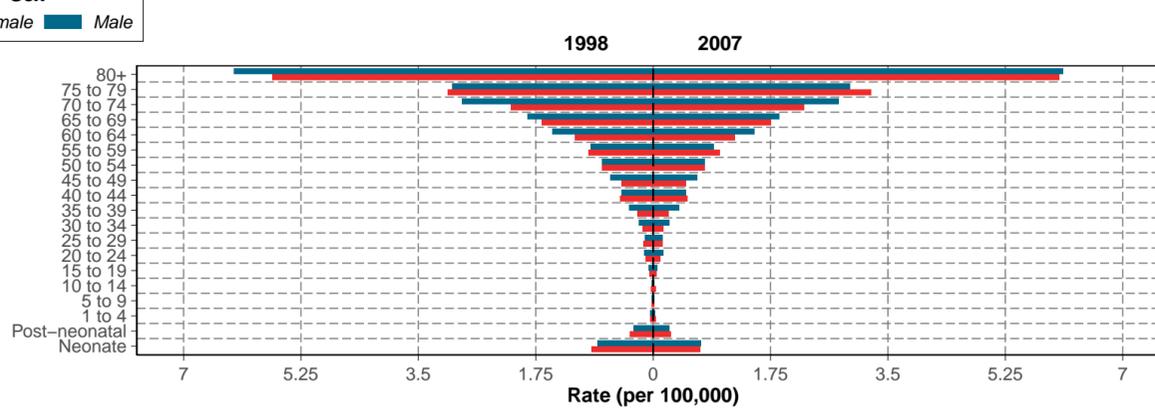
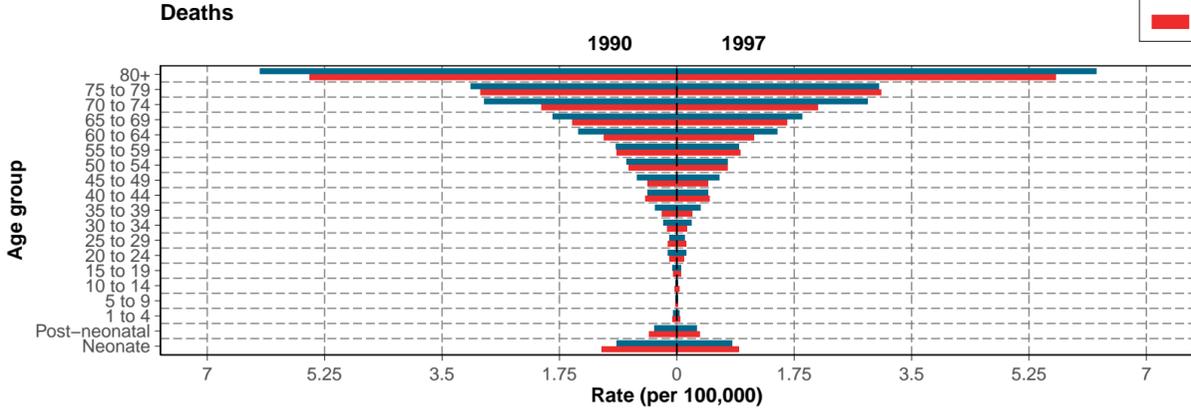
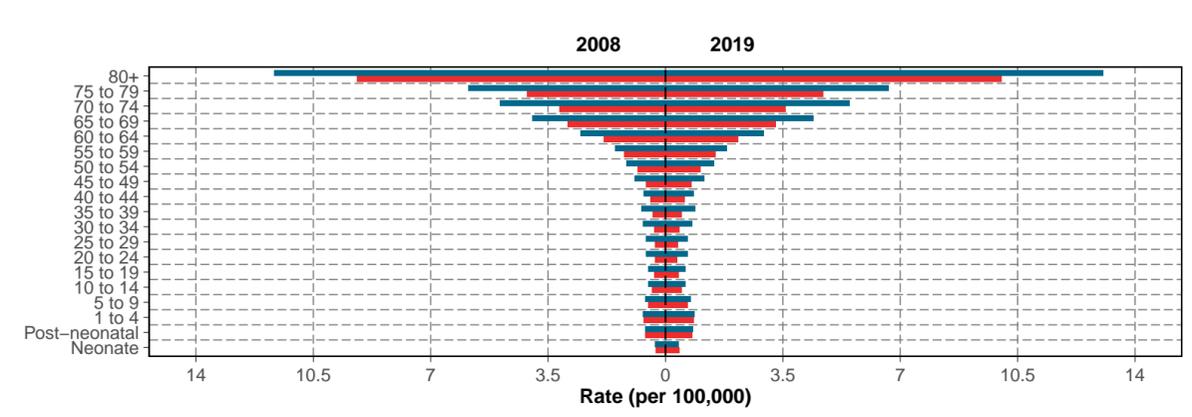
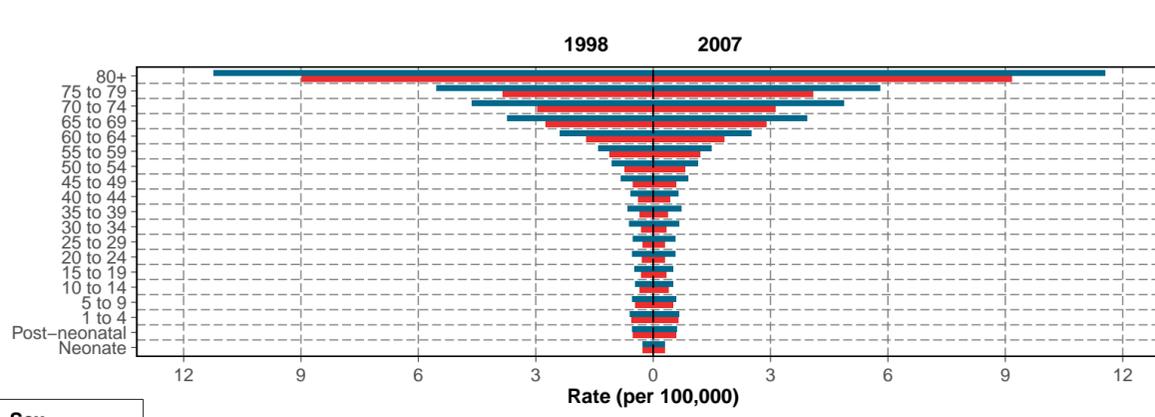
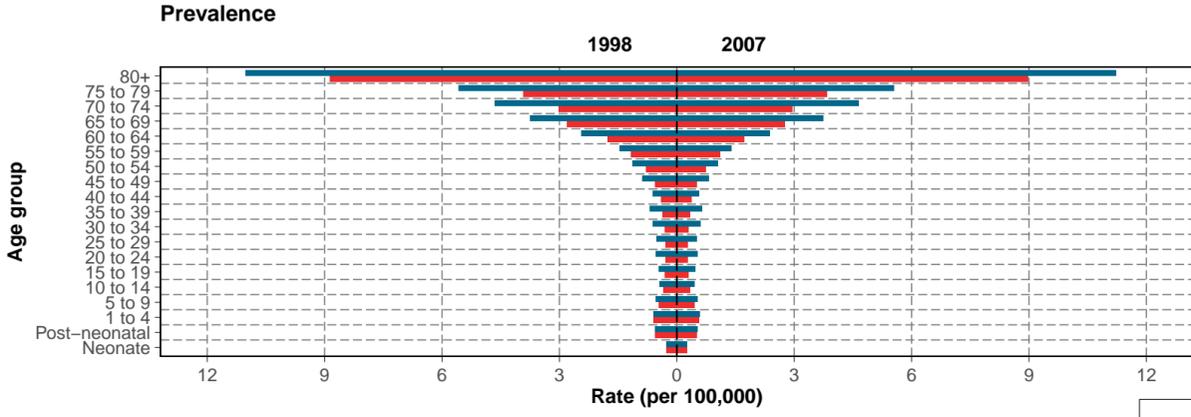
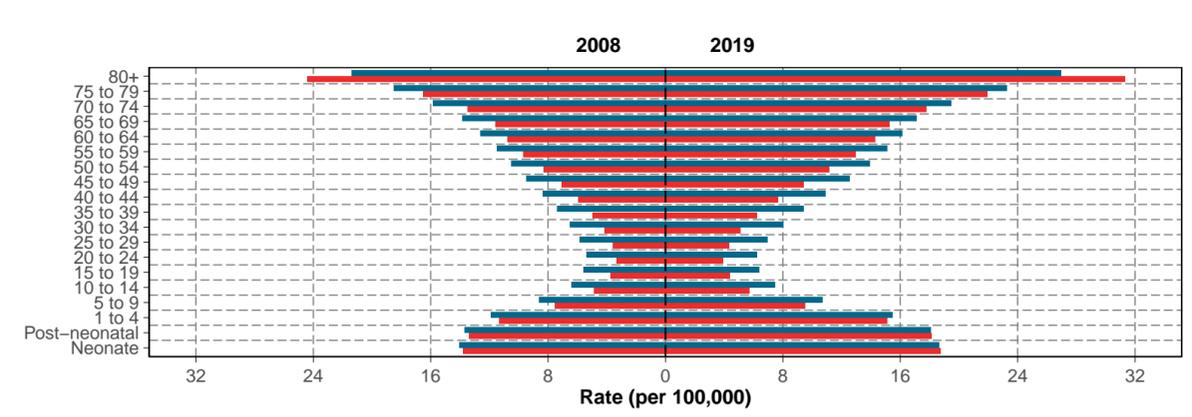
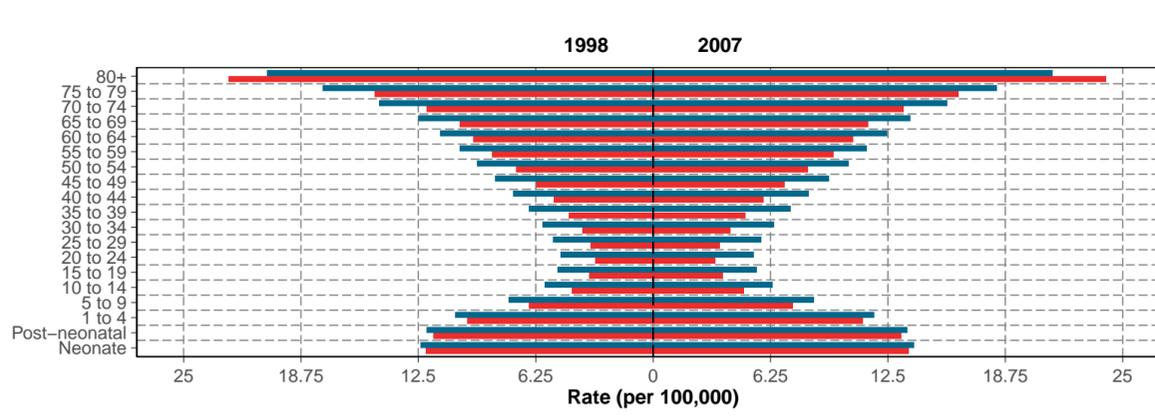
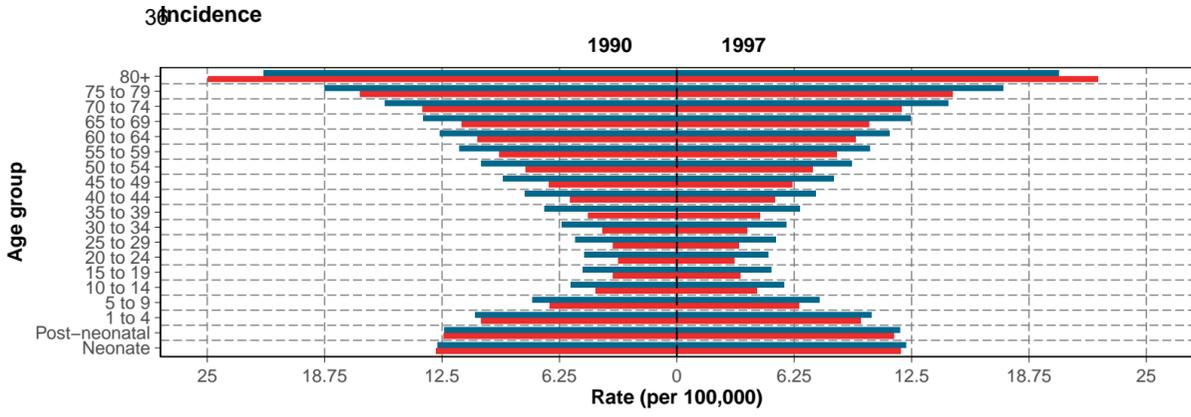
DALYs



S18 Fig.

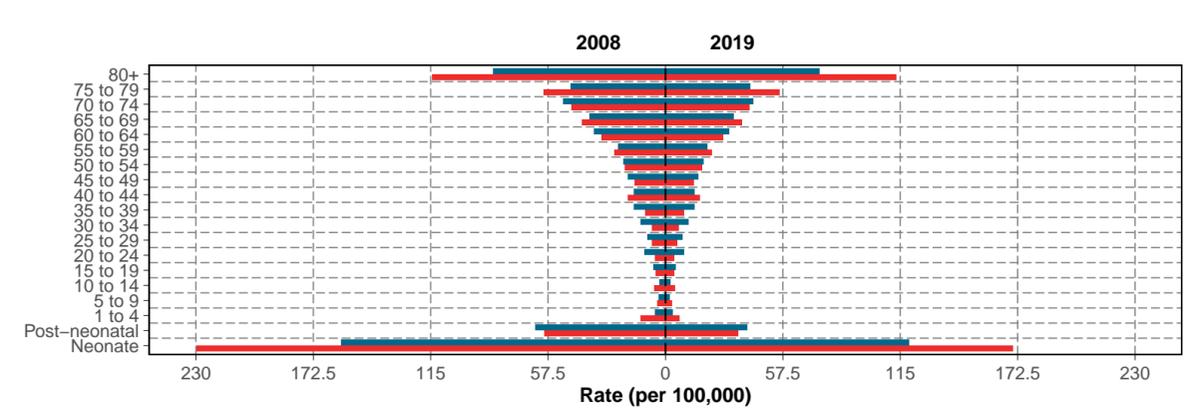
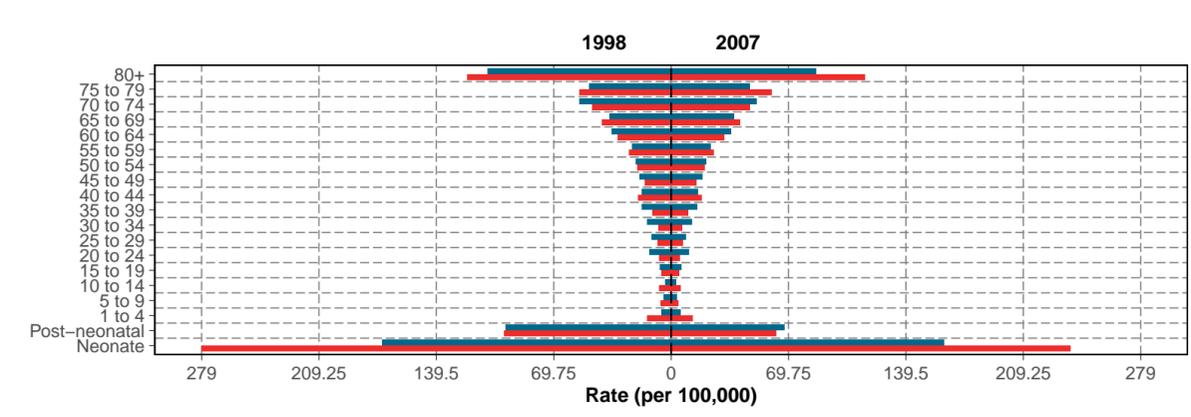
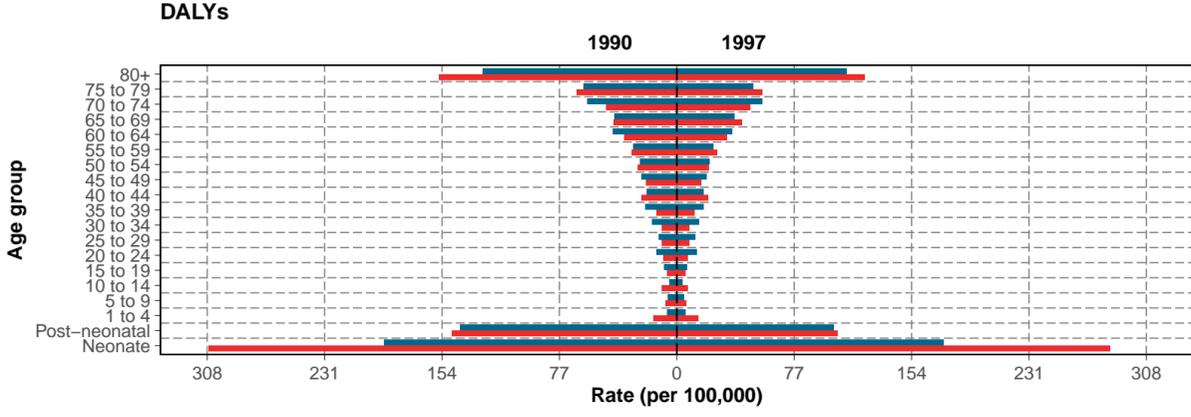
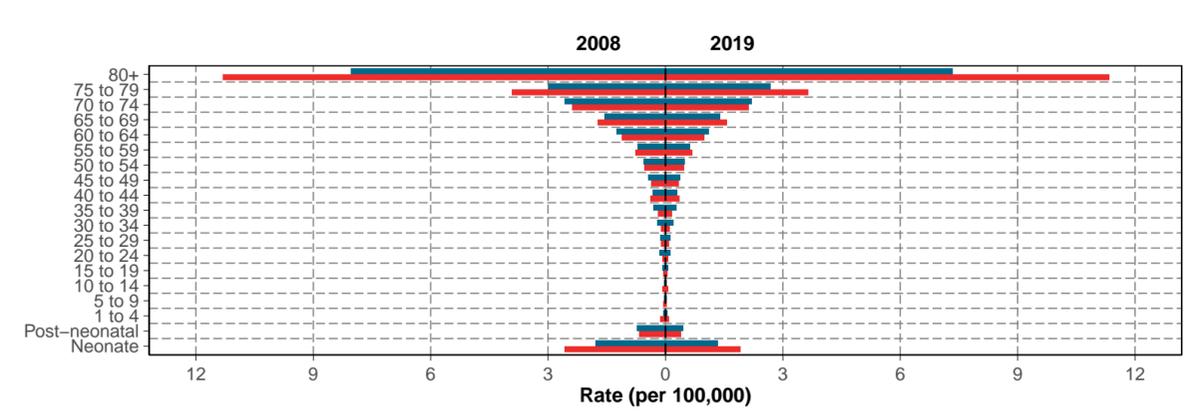
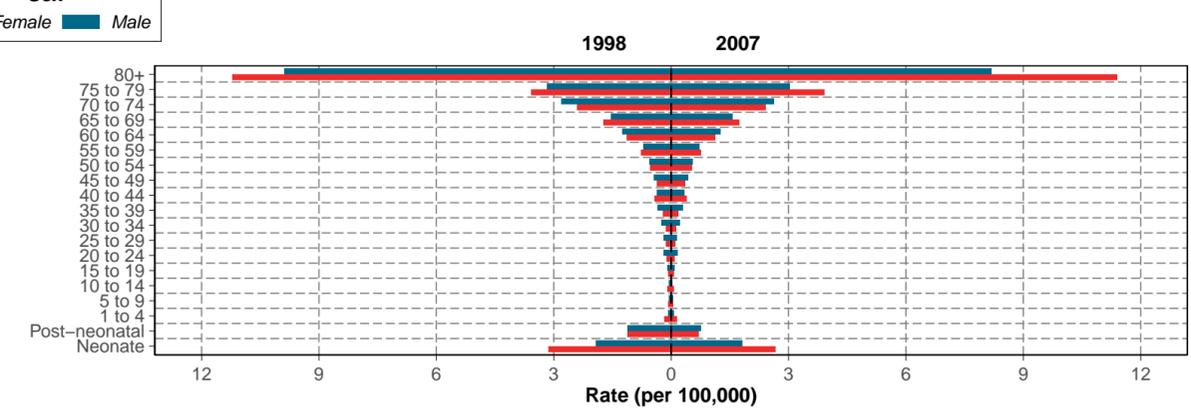
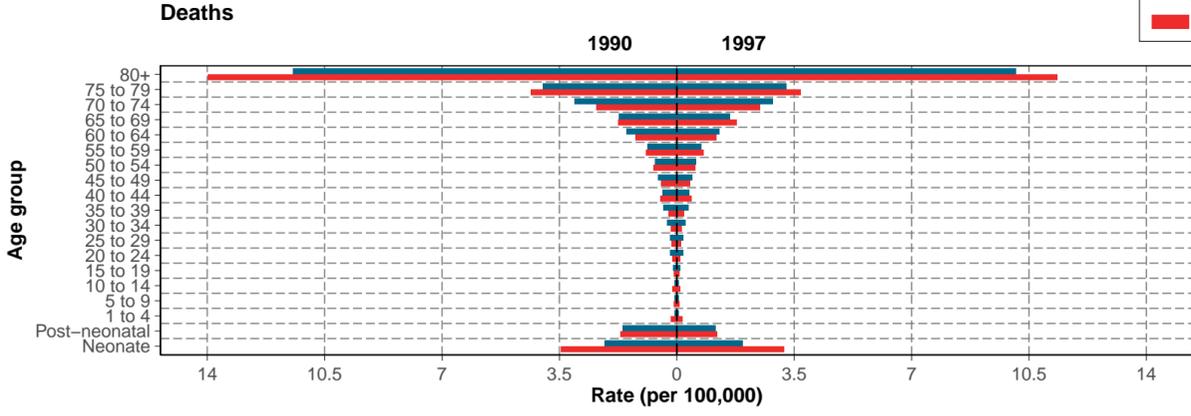
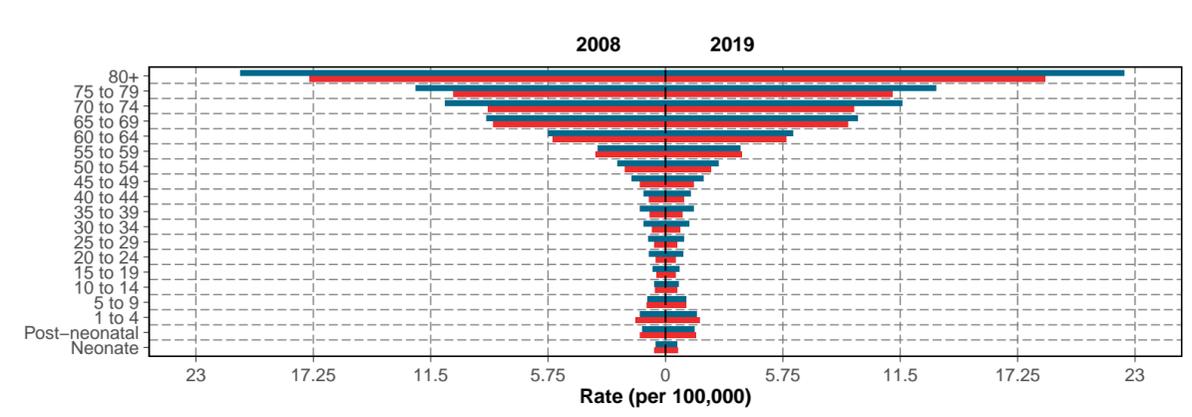
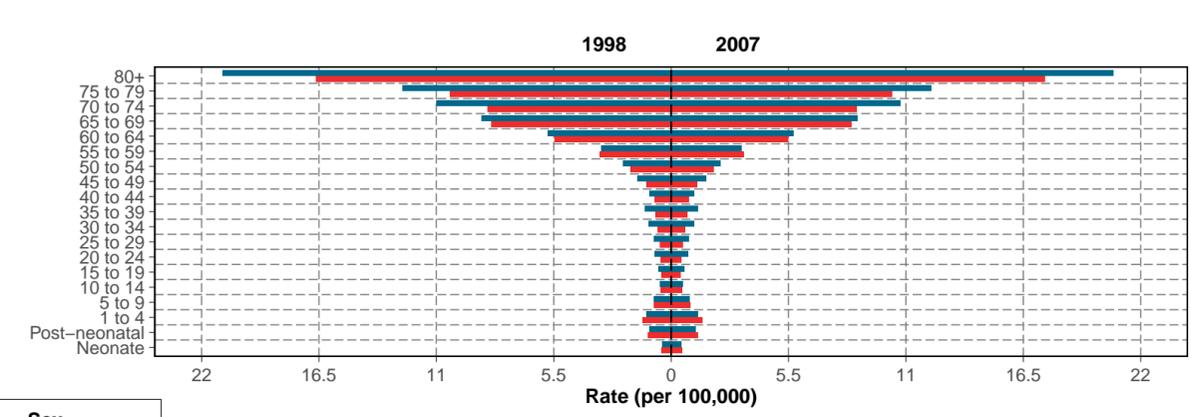
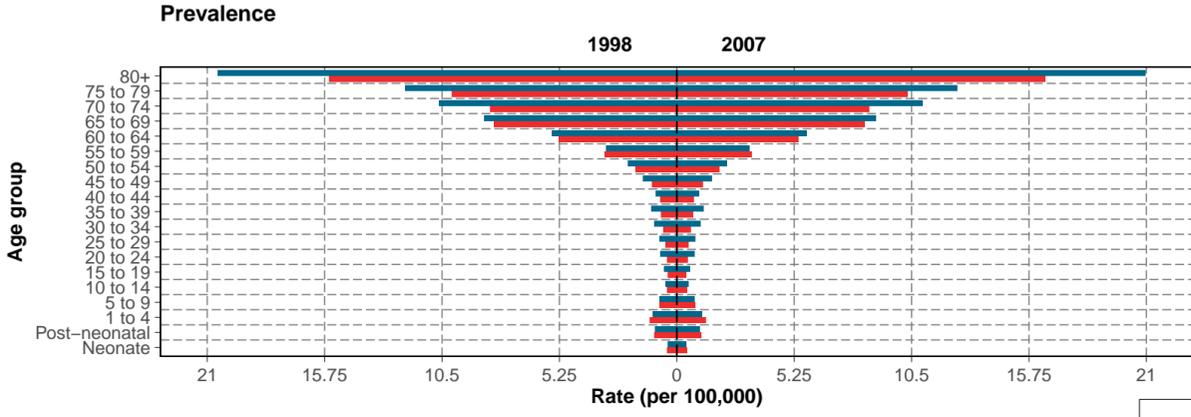
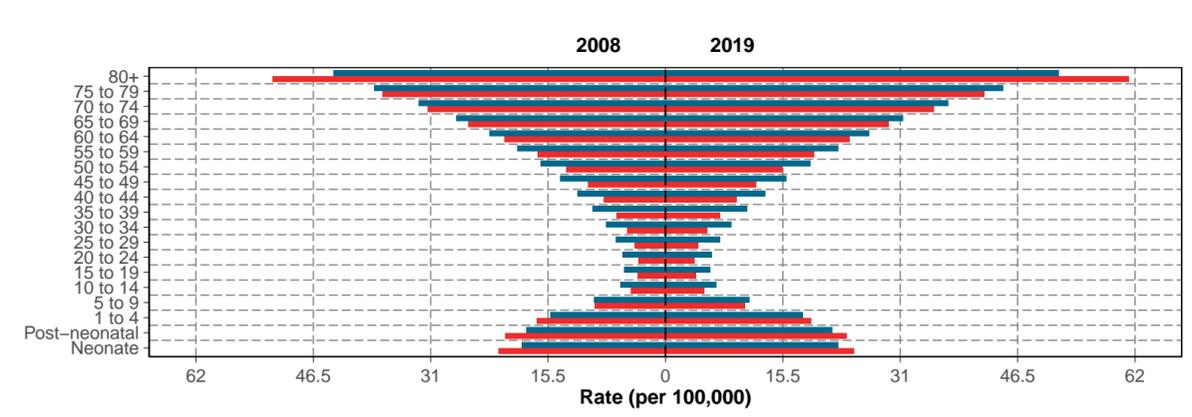
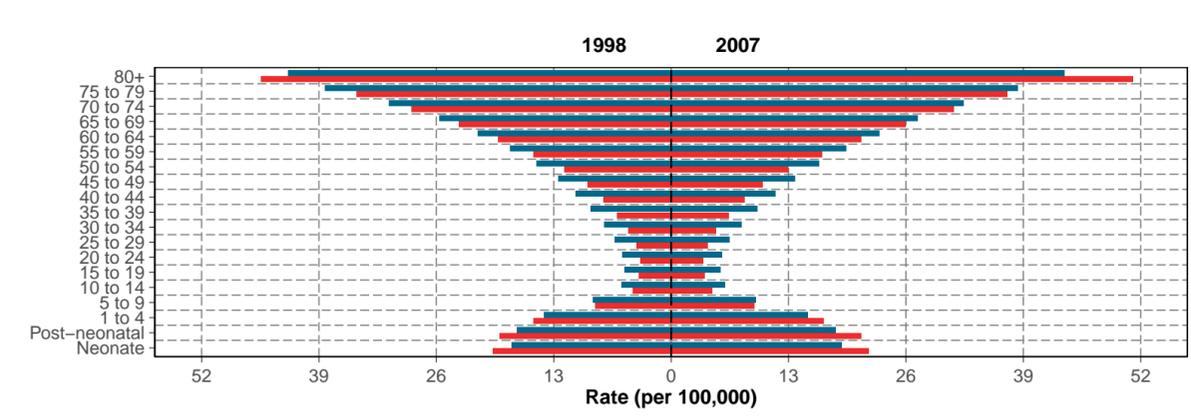
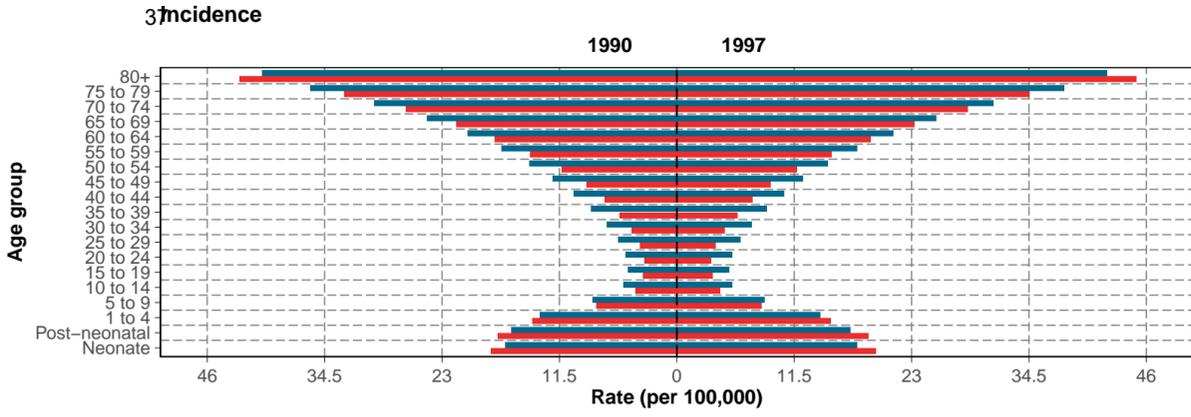
Rates (per 100,000) of incidence, prevalence, deaths, and DALYs of infective endocarditis in 21 countries of North Africa and the Middle East in 1990 compared with 1997, in 1998 versus 2007, and in 2008 versus 2019 according to eighteen age groups and sex

Afghanistan

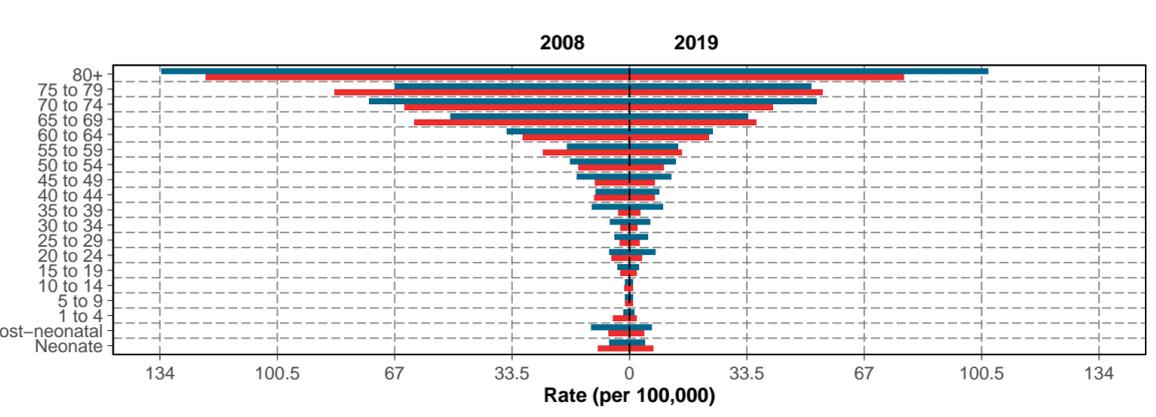
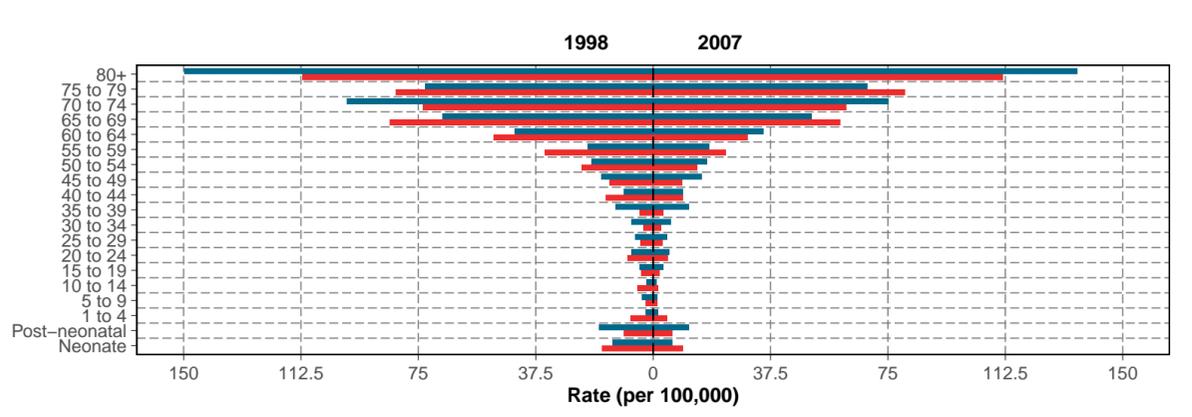
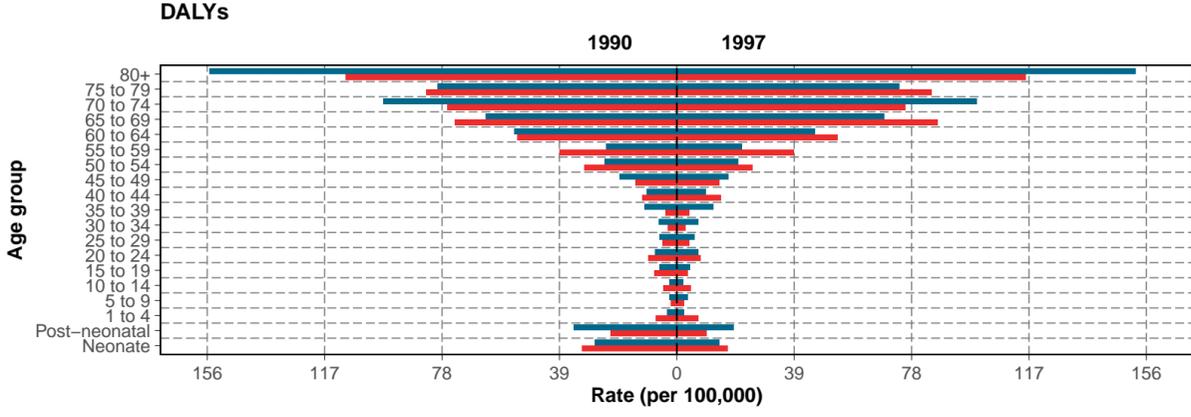
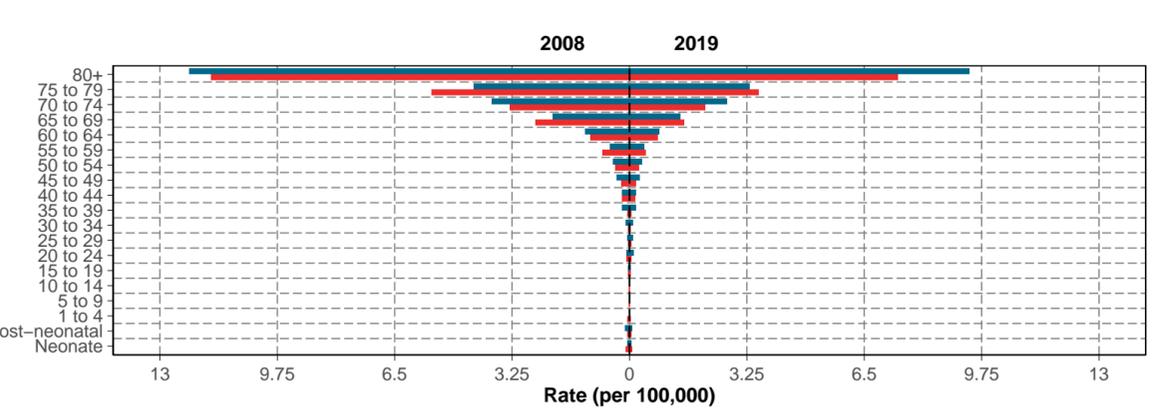
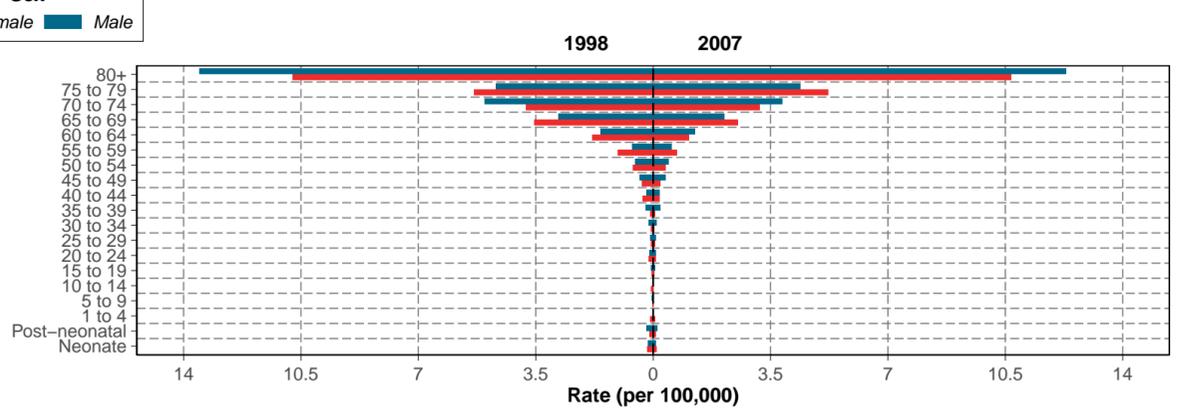
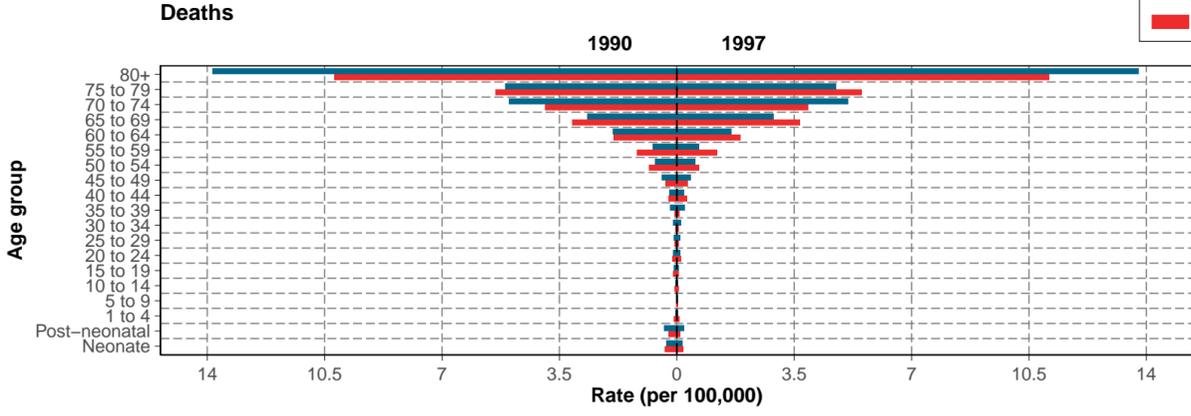
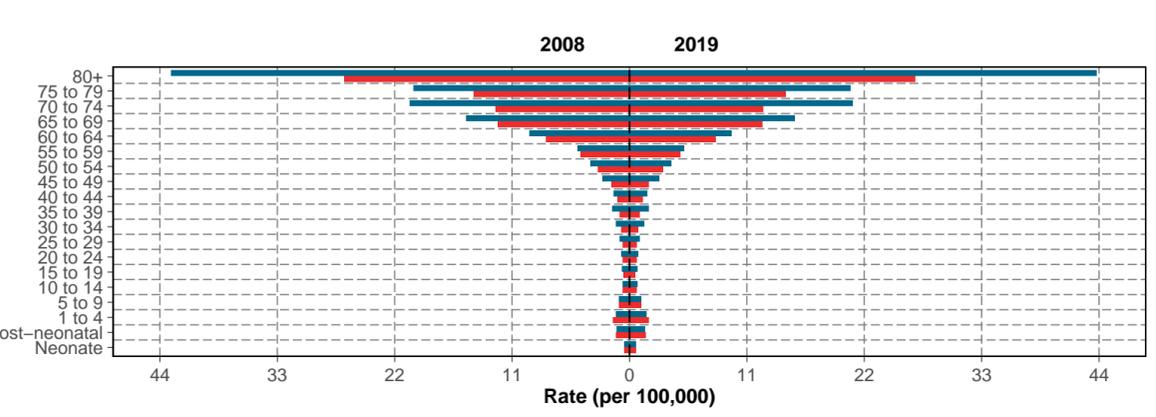
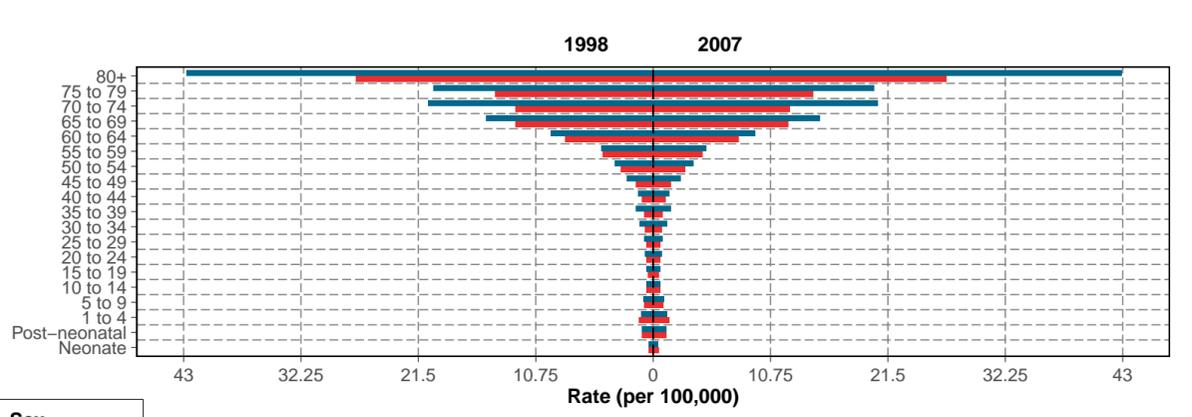
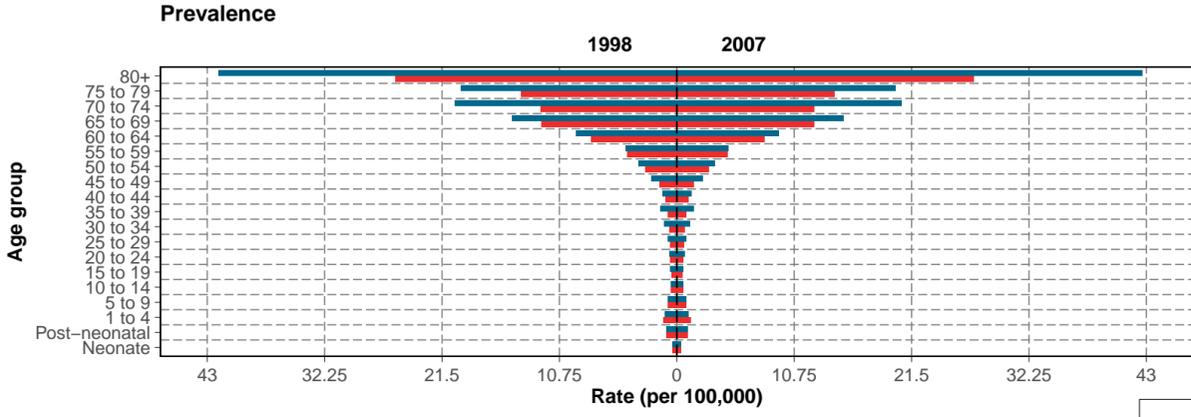
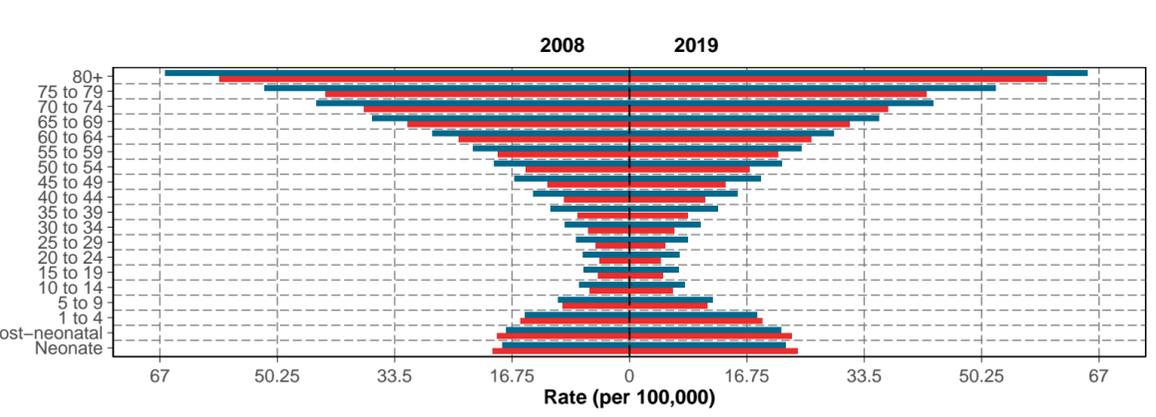
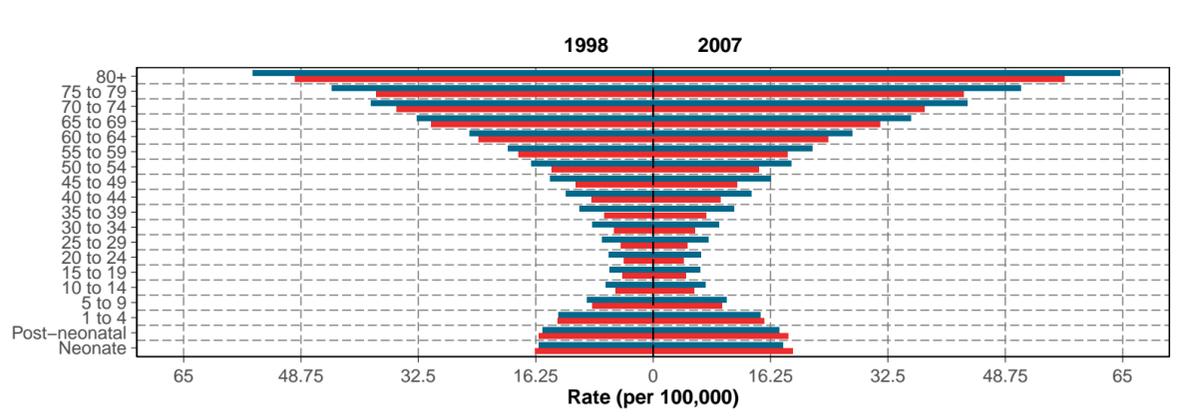
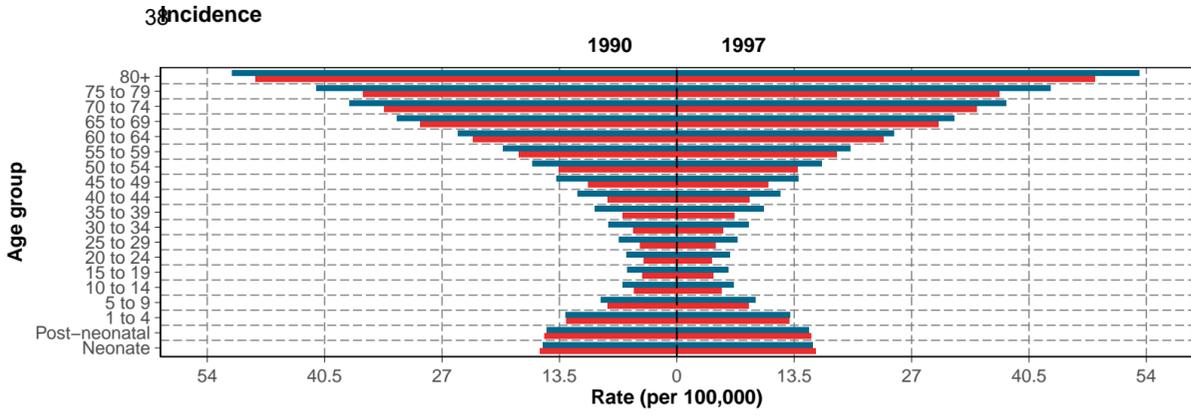


Sex
Female Male

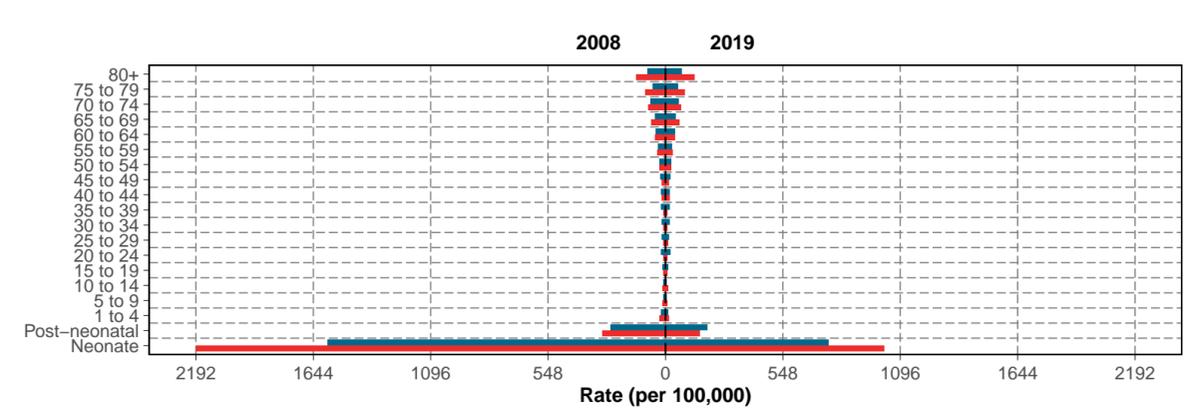
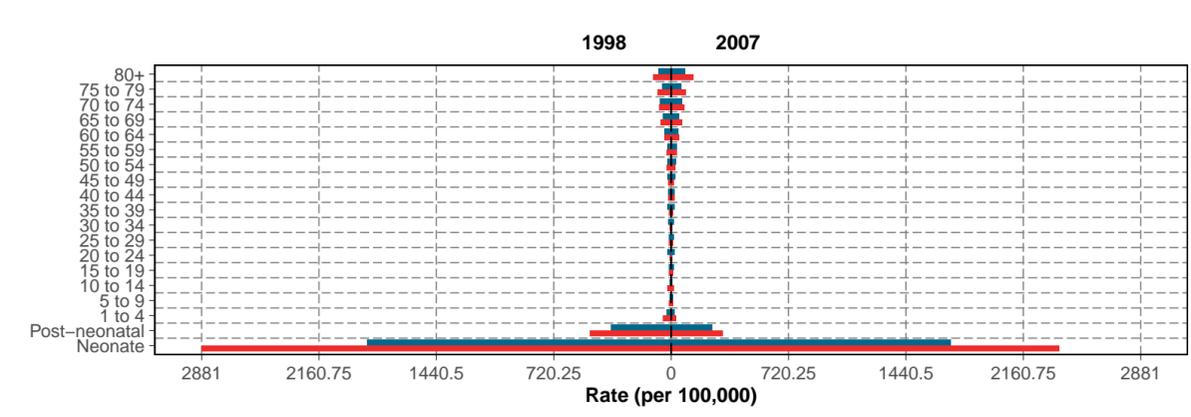
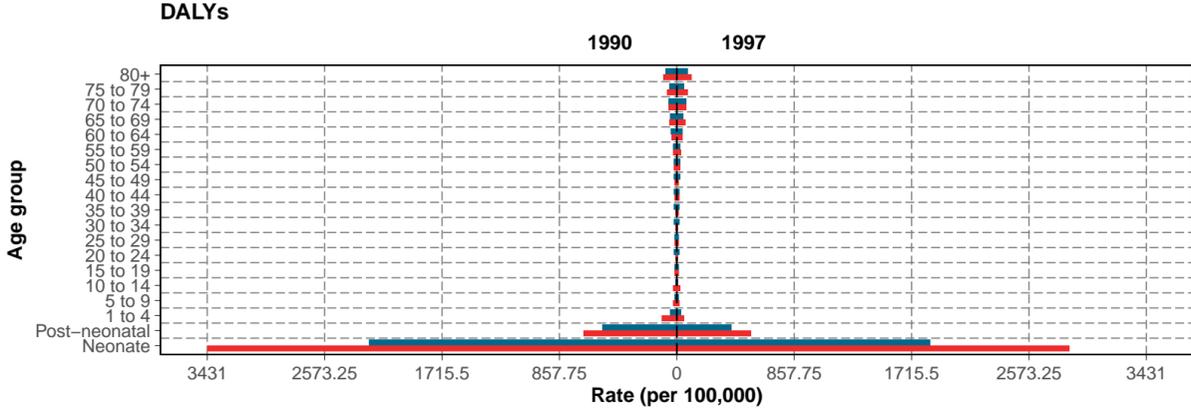
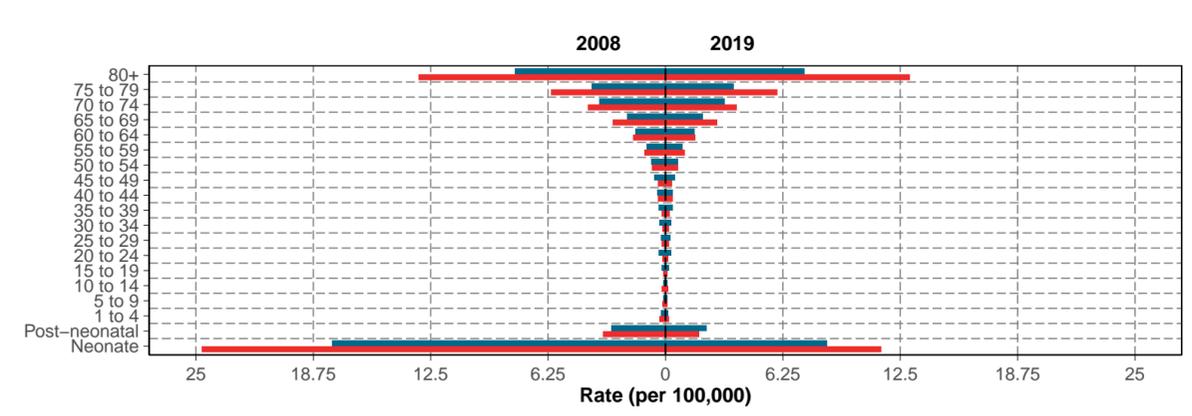
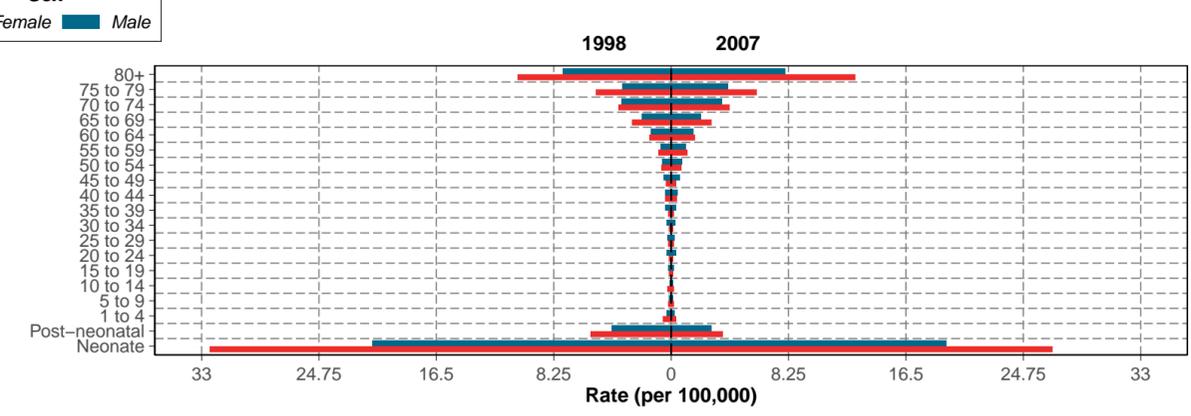
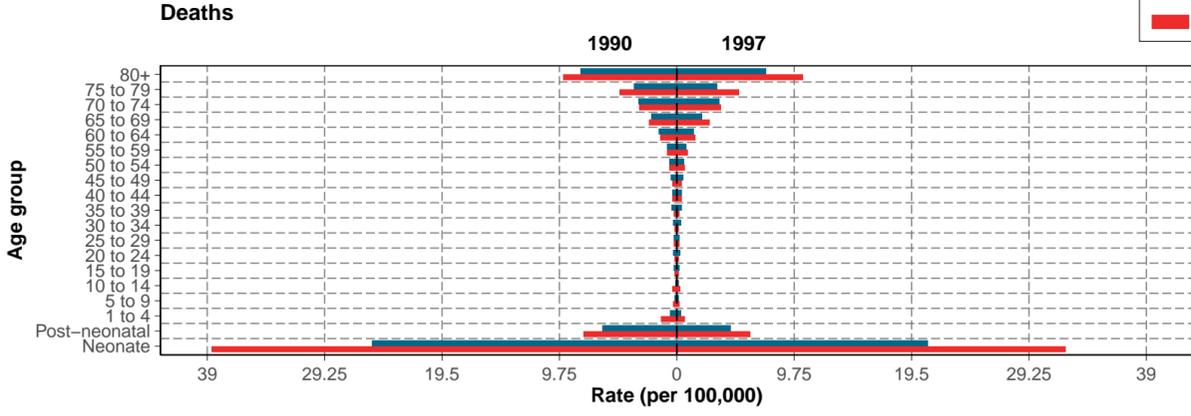
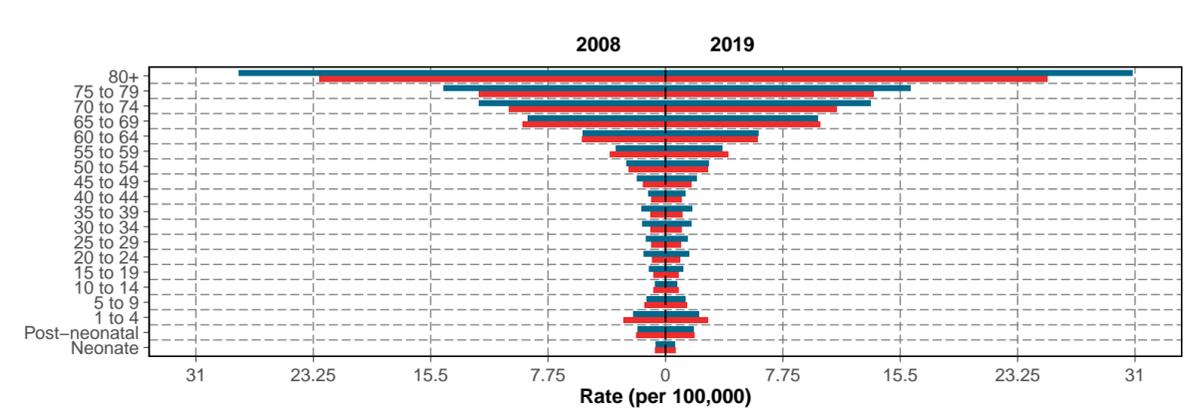
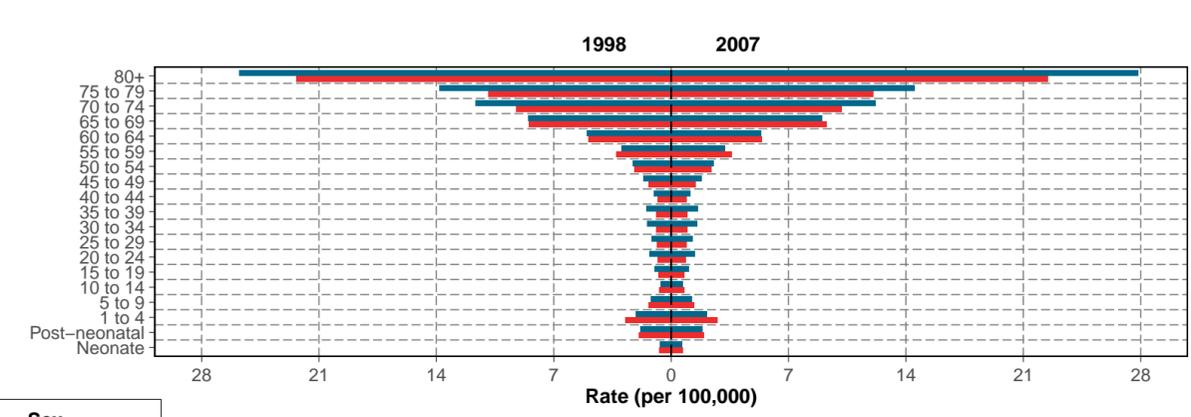
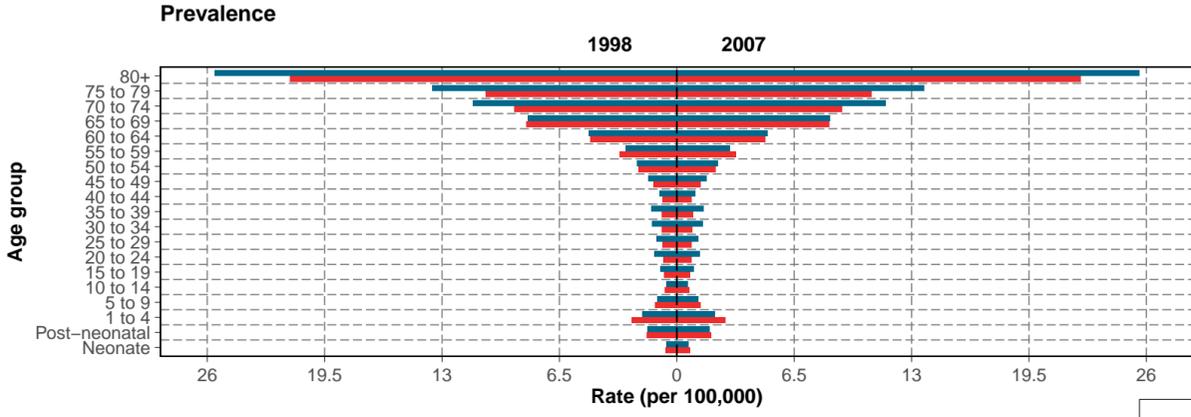
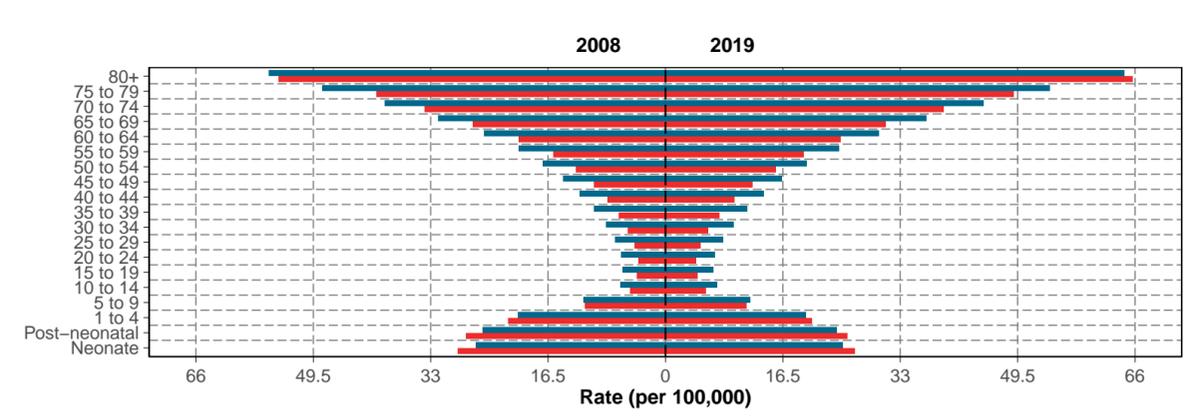
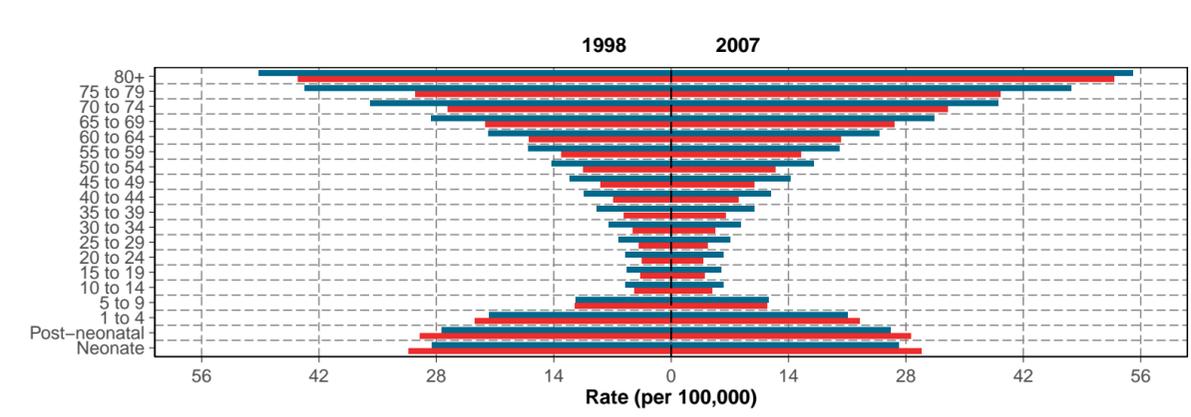
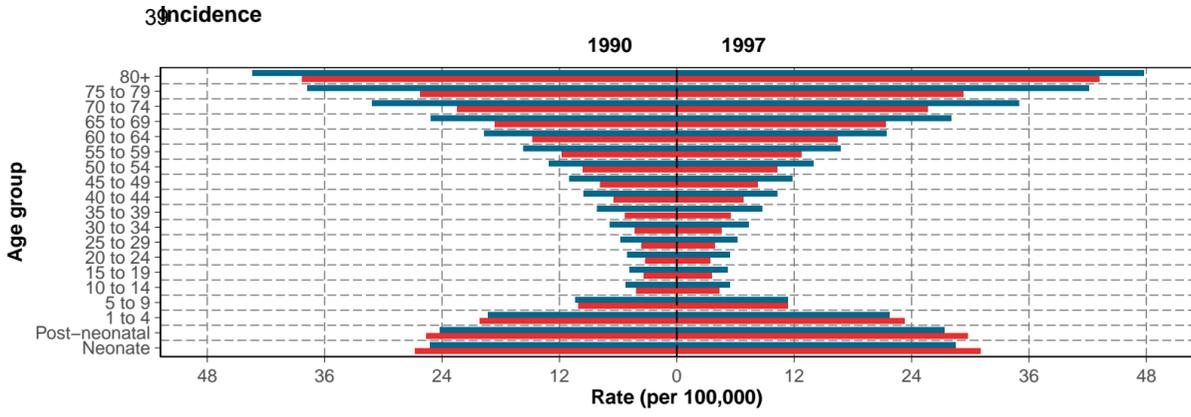
Algeria



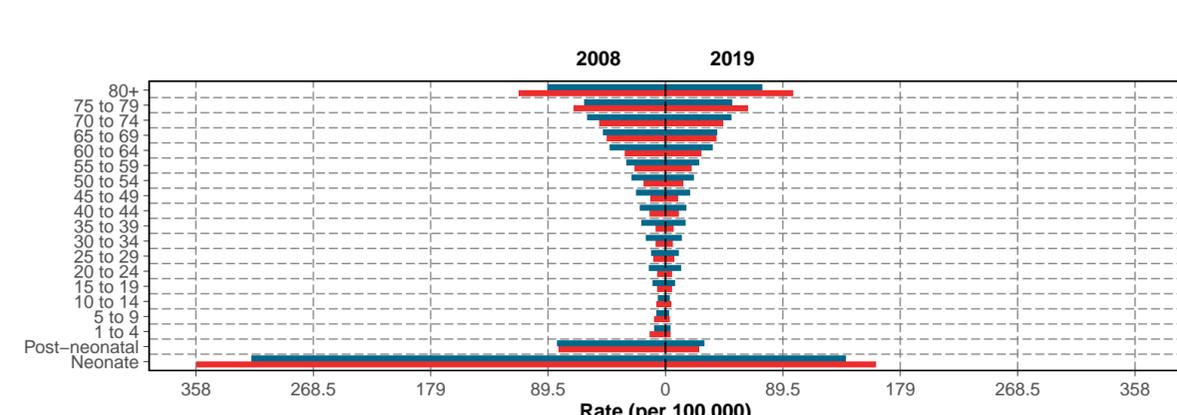
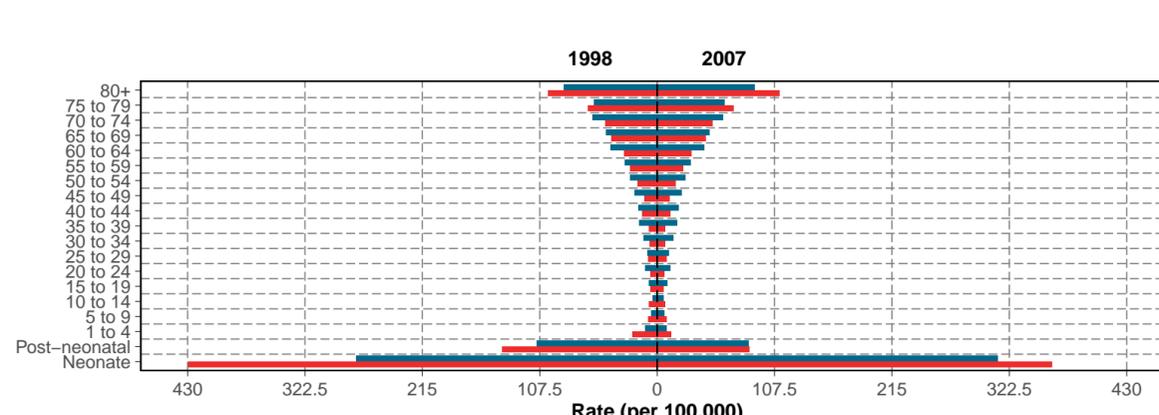
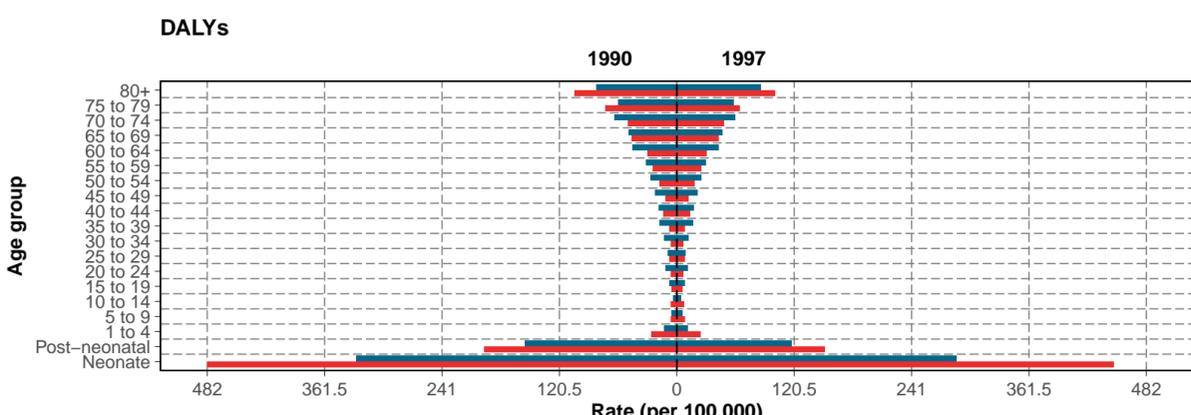
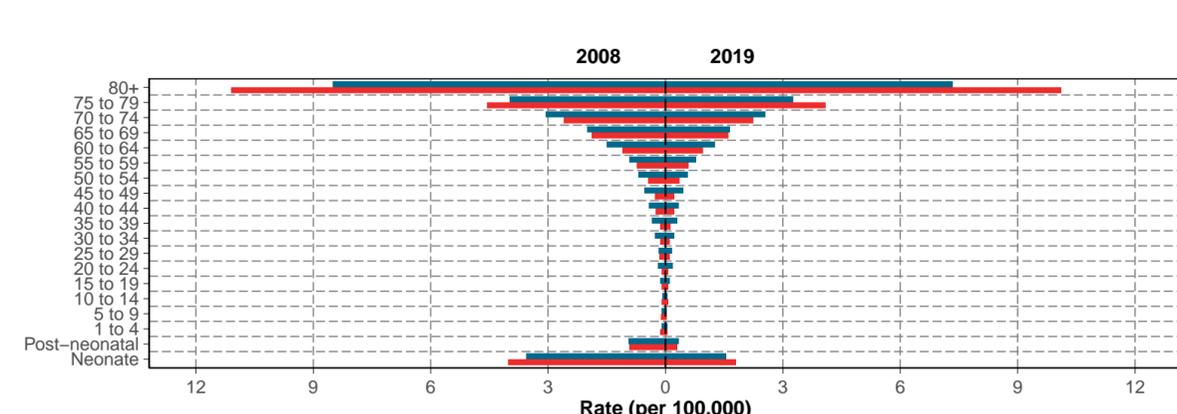
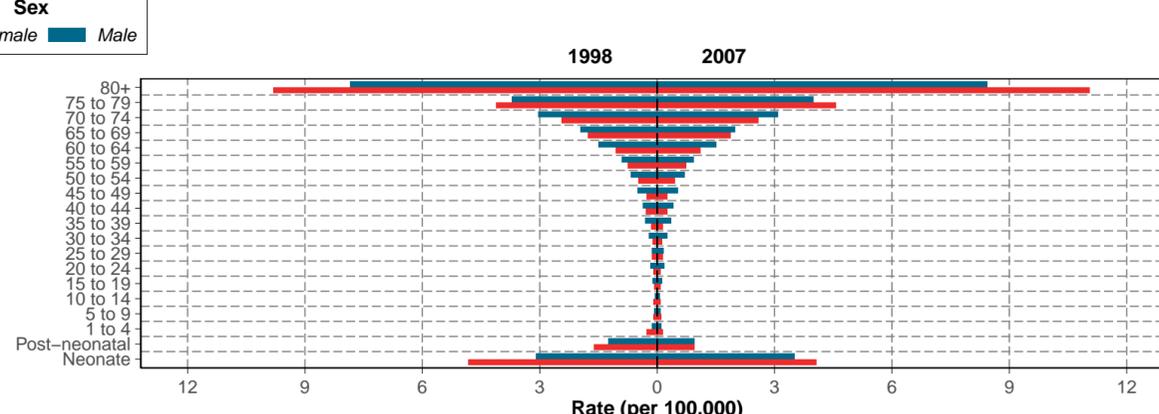
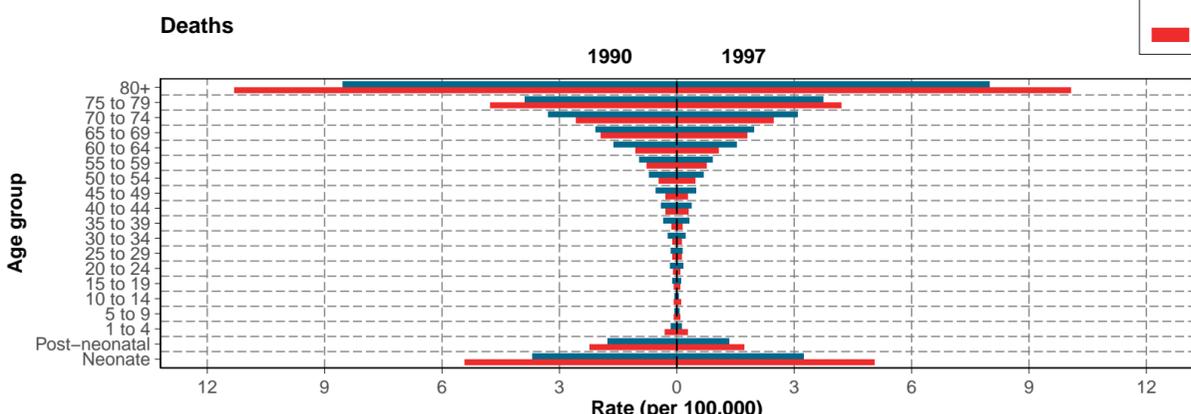
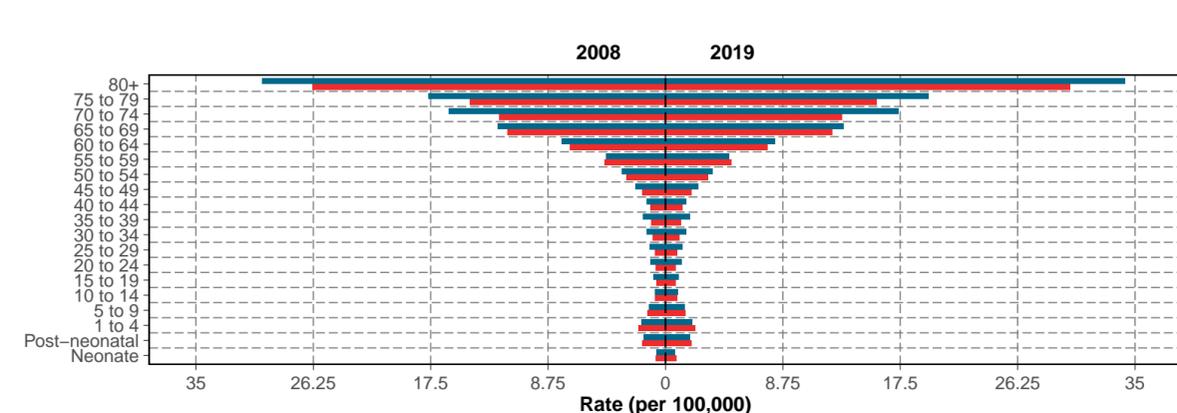
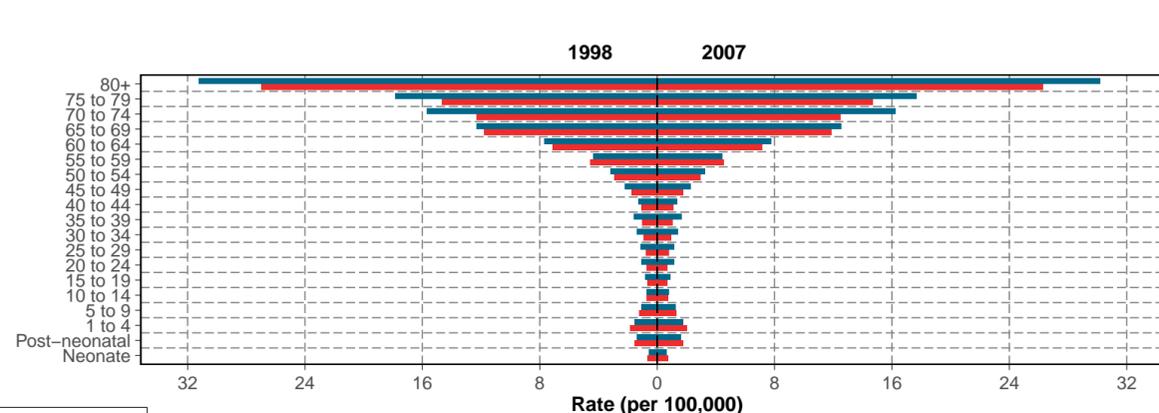
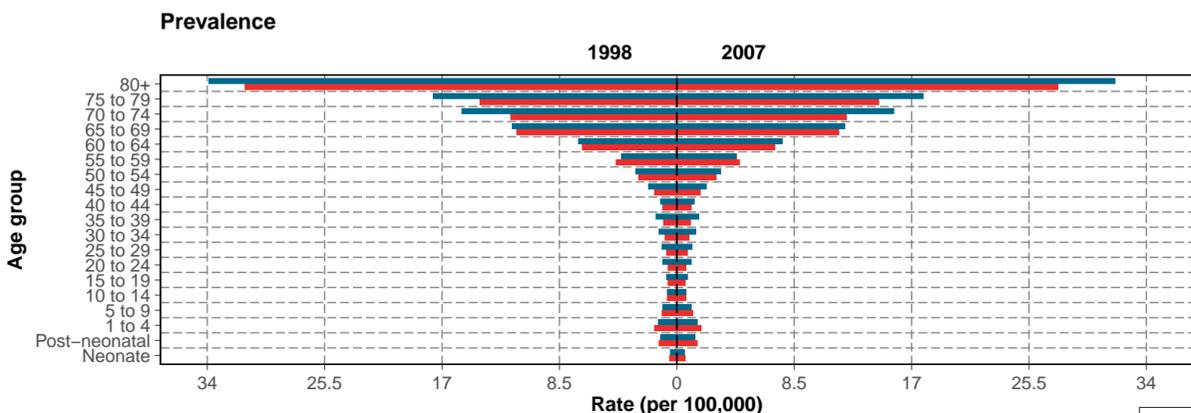
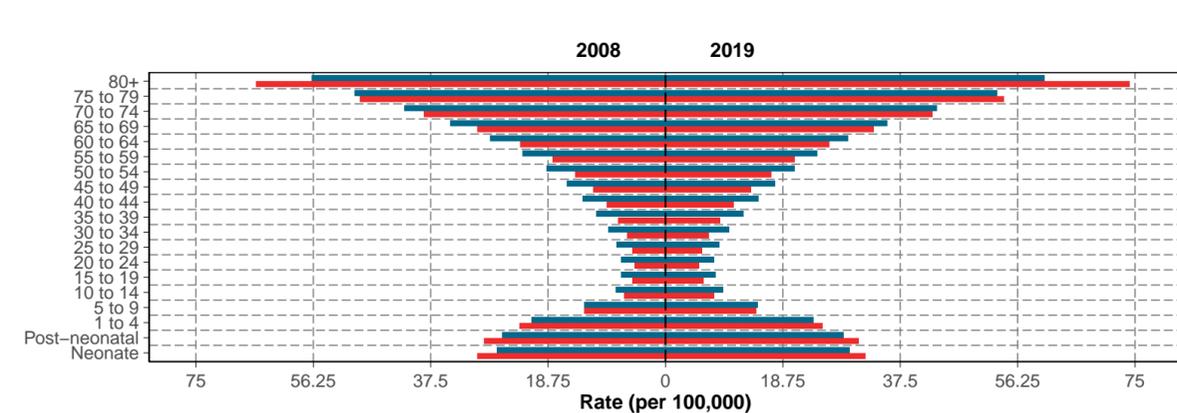
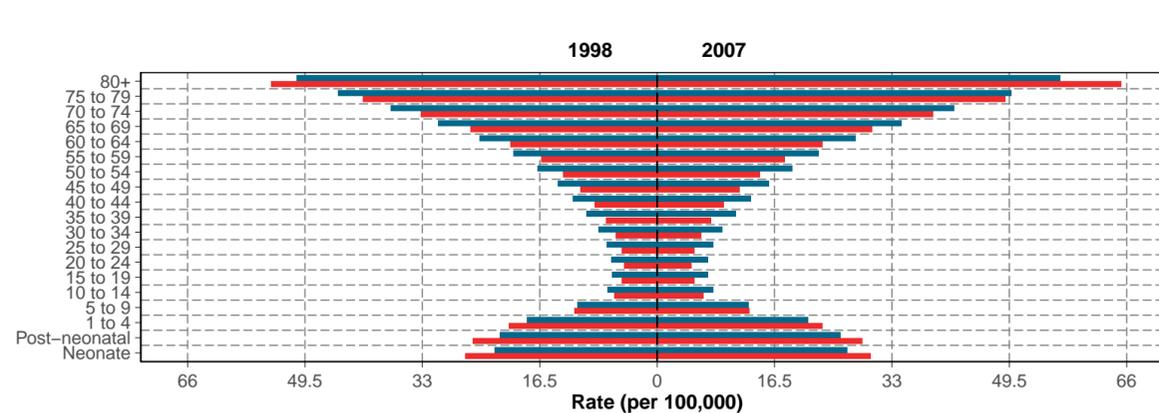
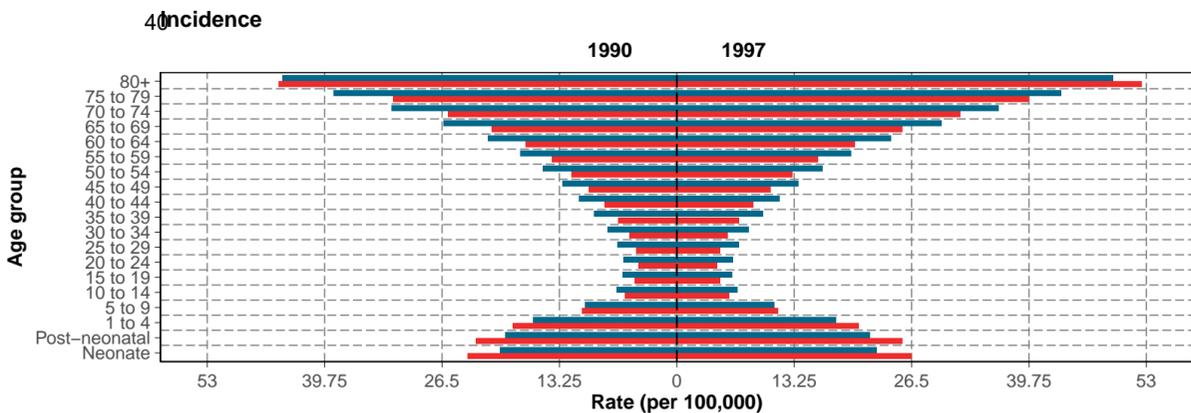
Bahrain



Egypt

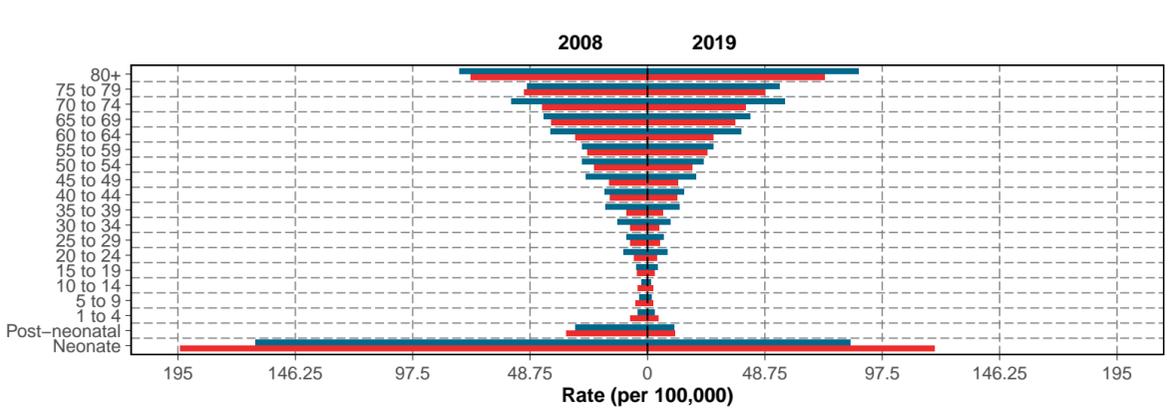
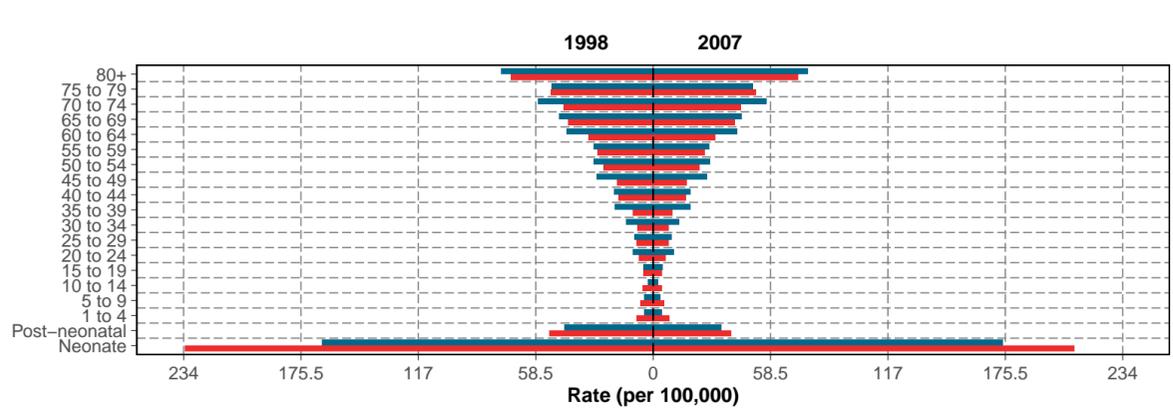
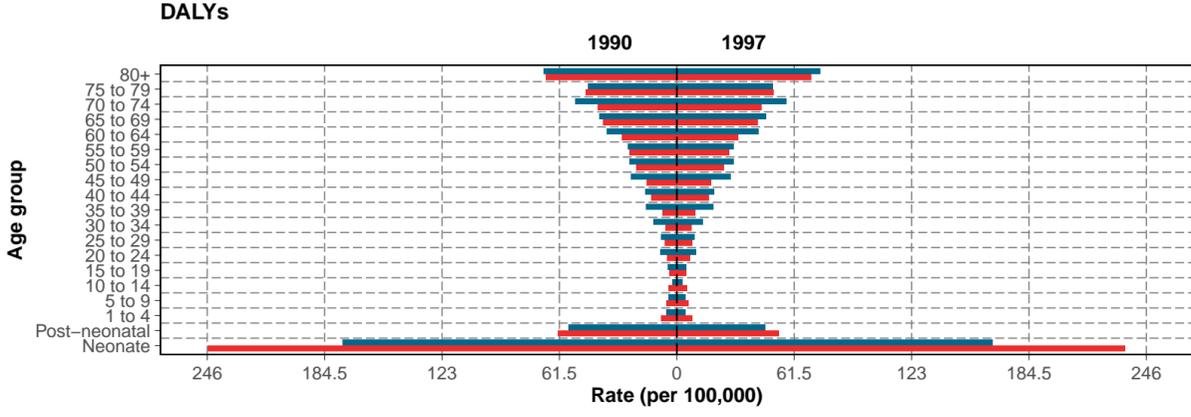
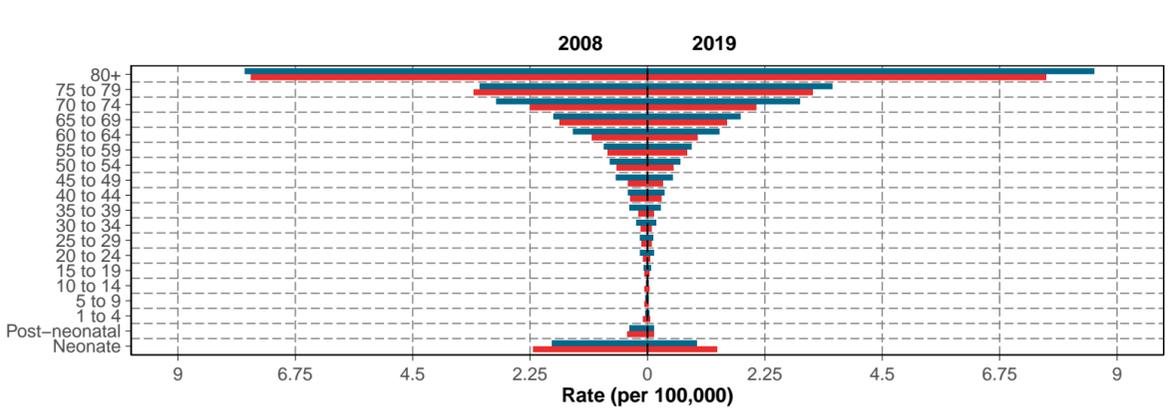
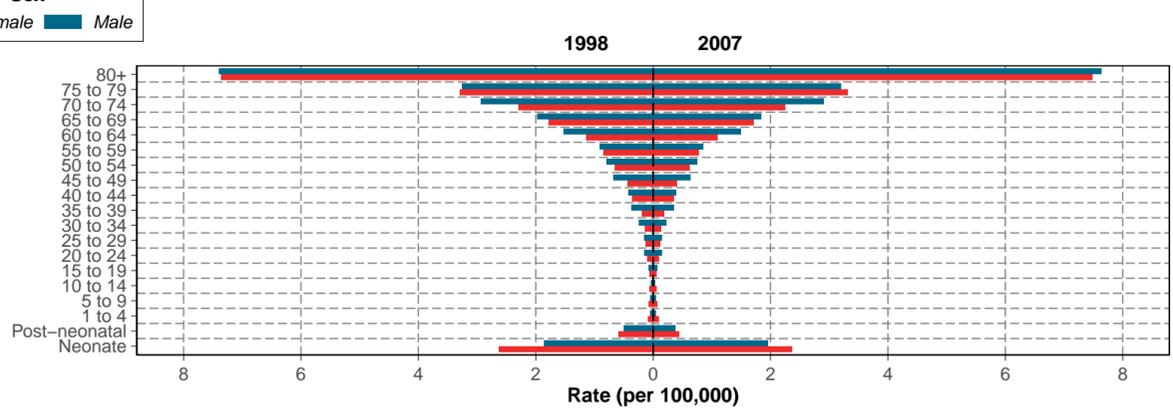
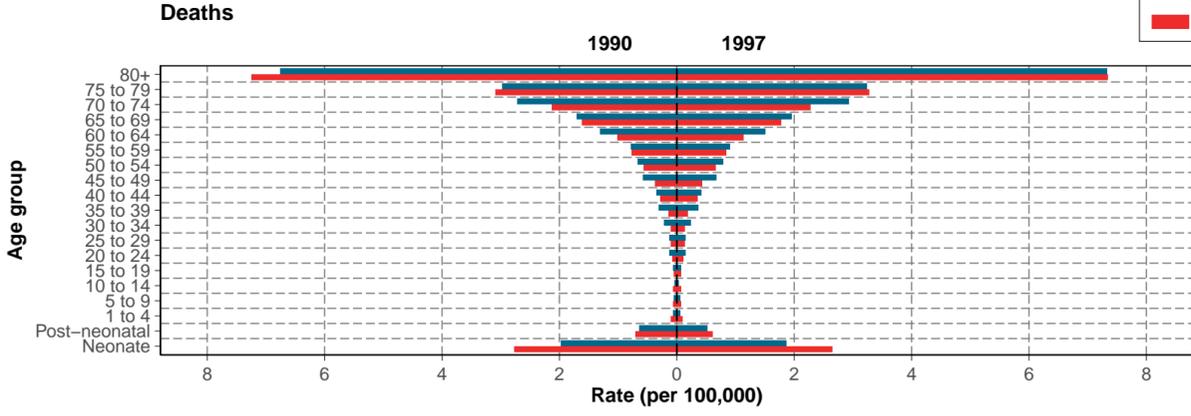
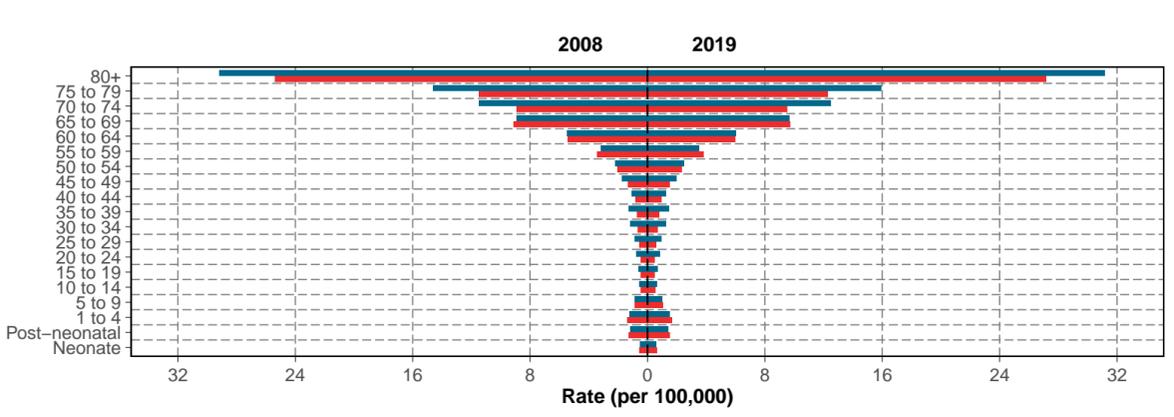
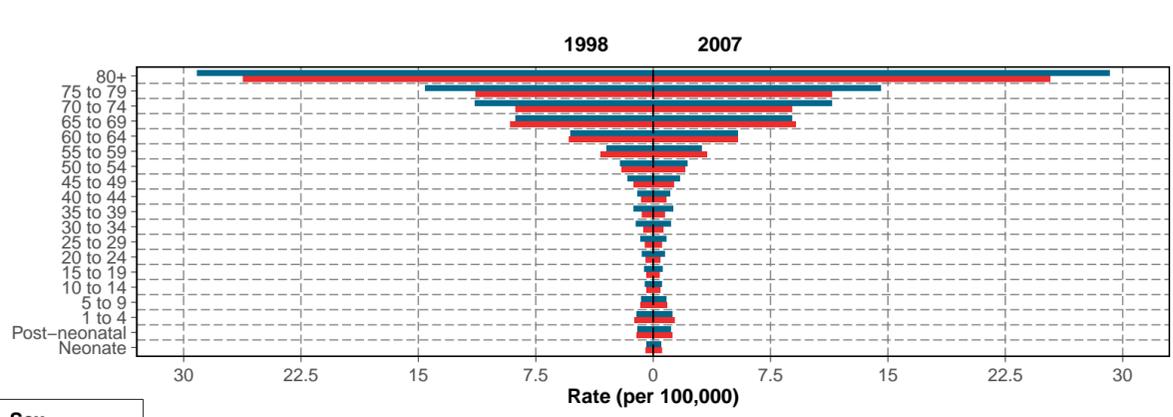
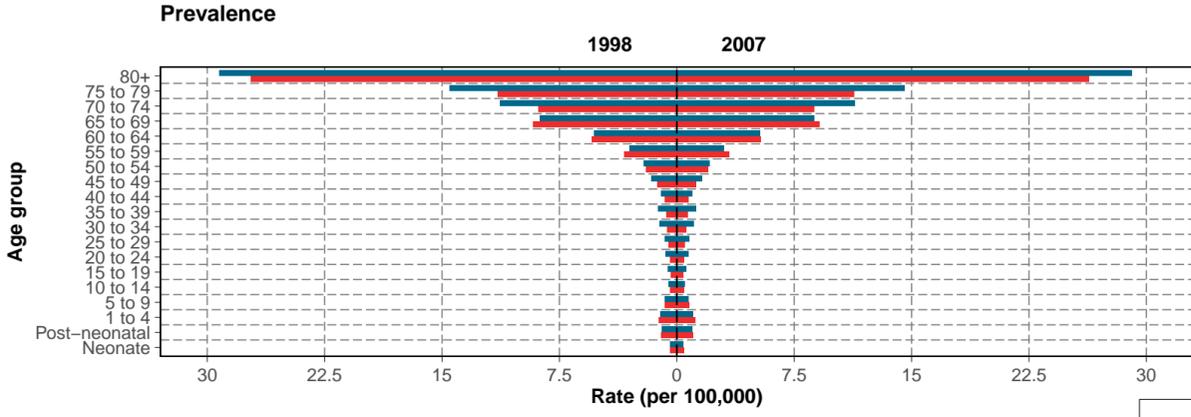
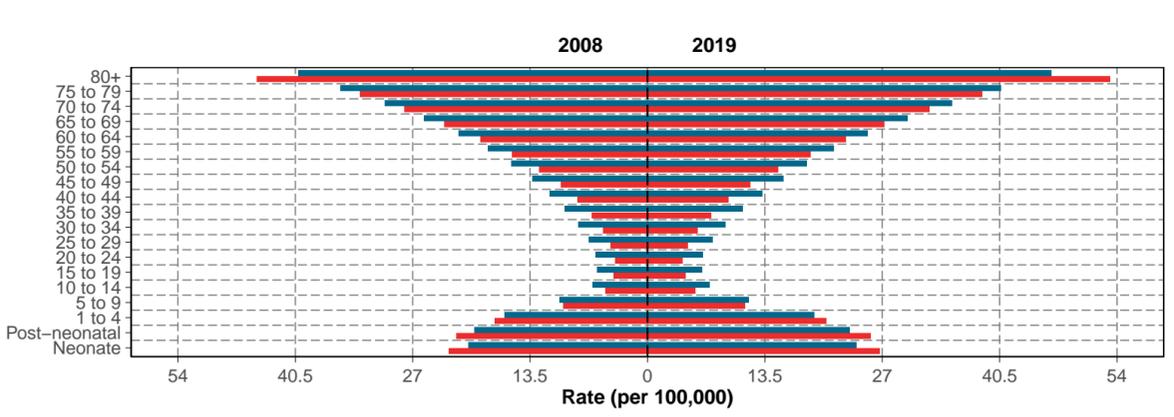
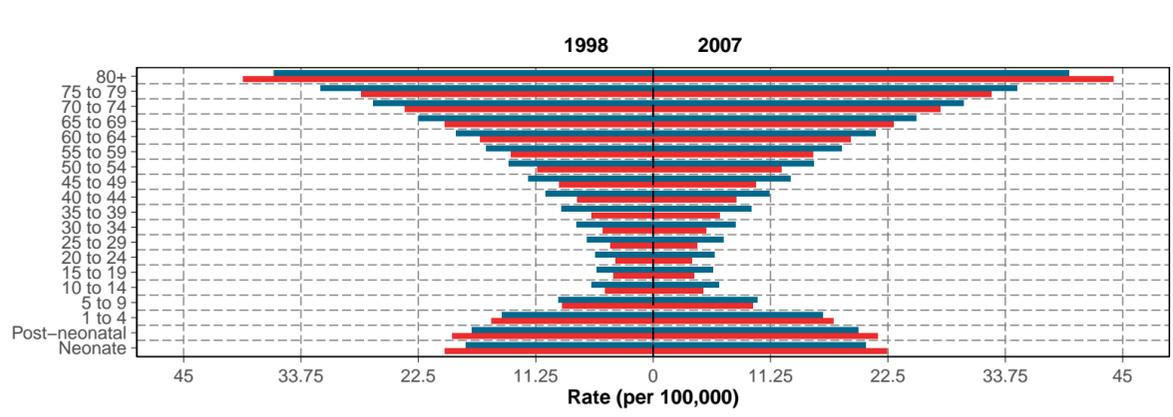
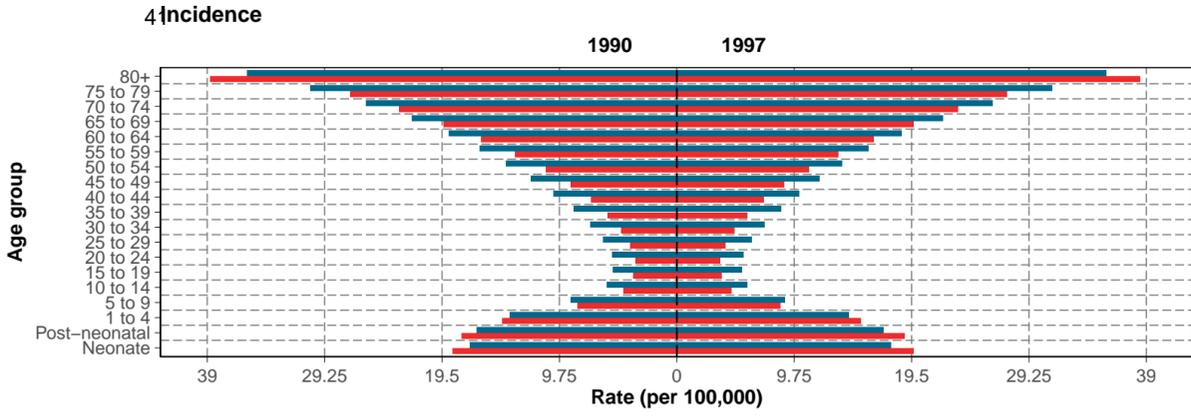


Iran (Islamic Republic of)



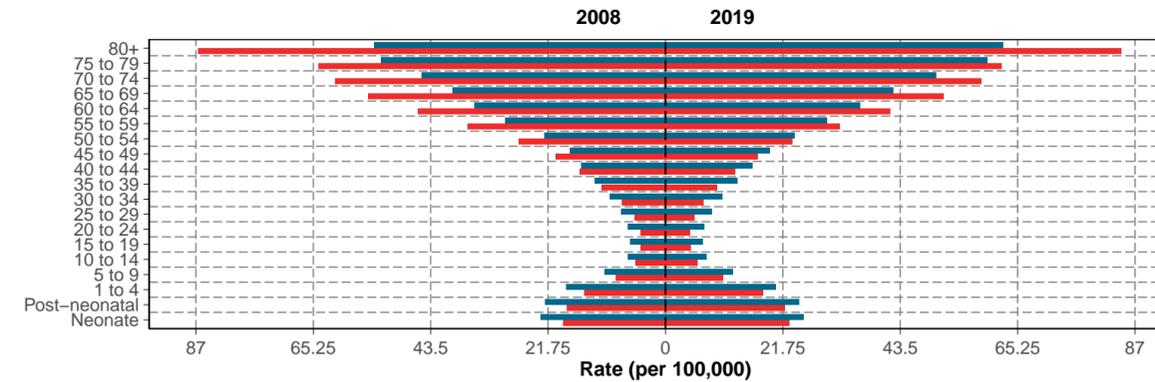
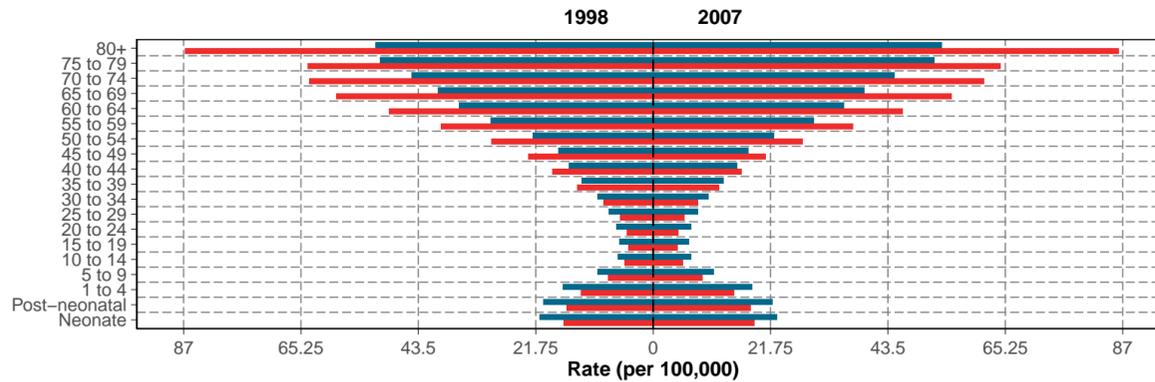
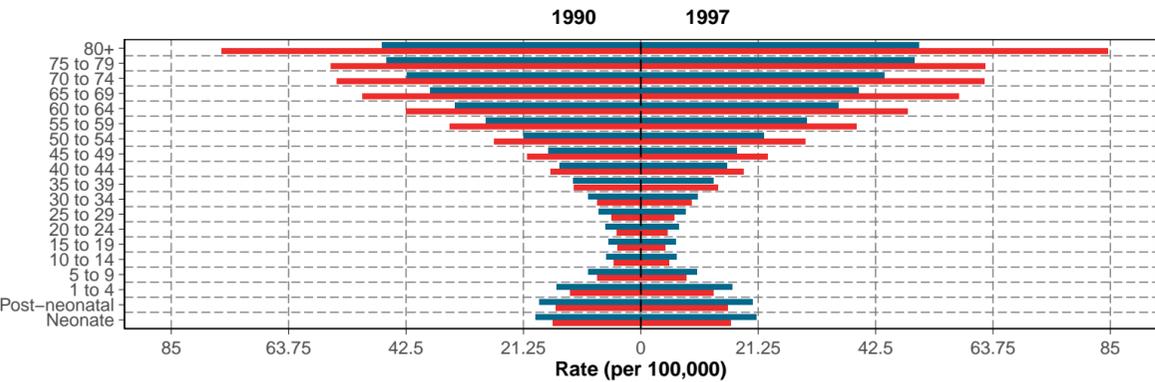
Sex
Female Male

Iraq

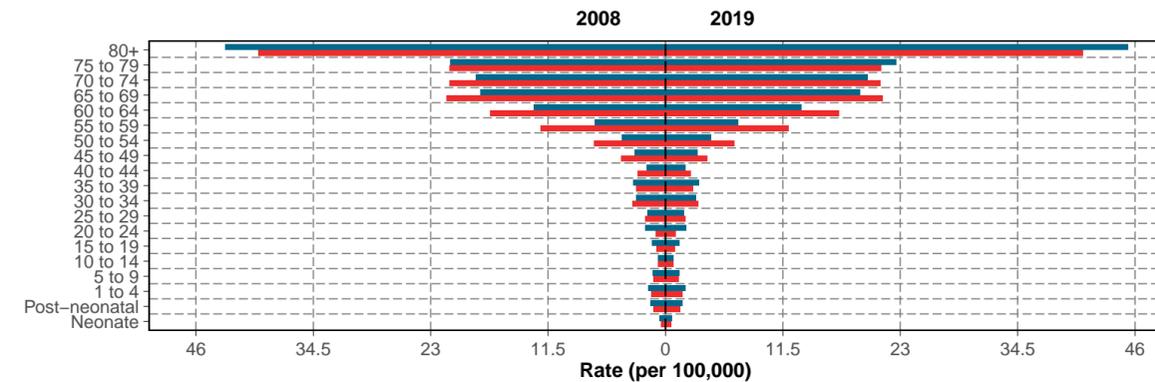
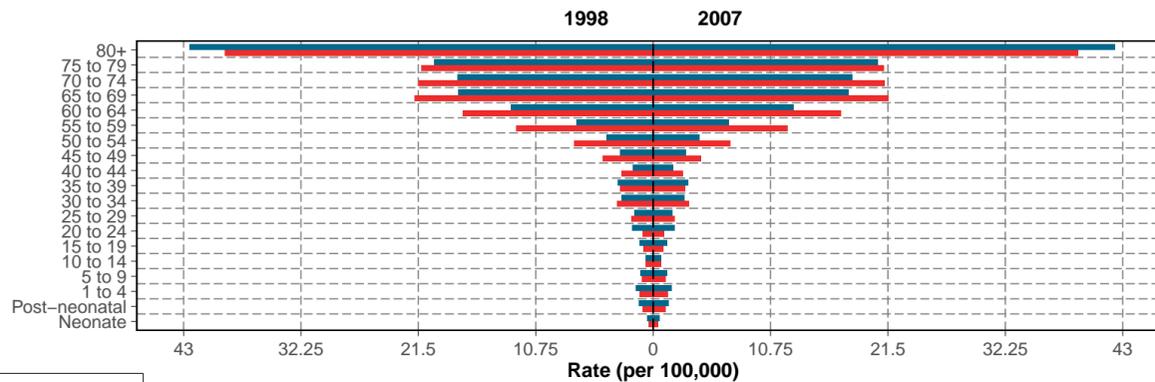
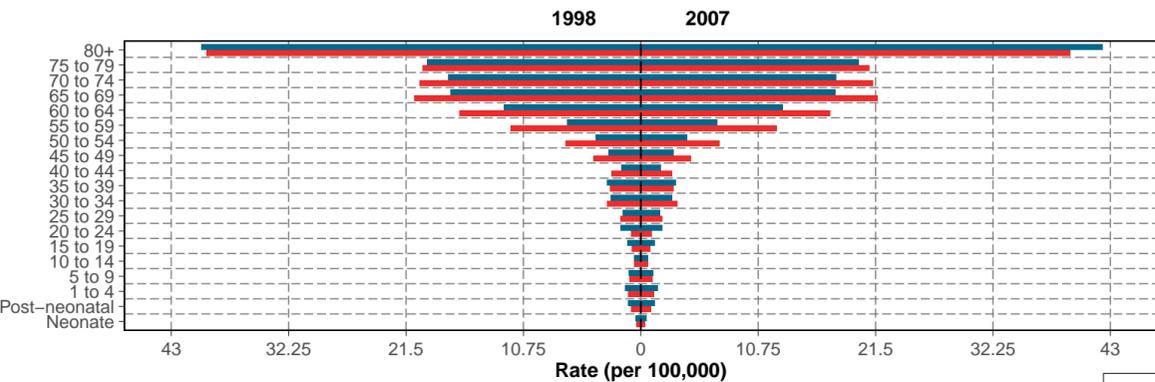


Jordan

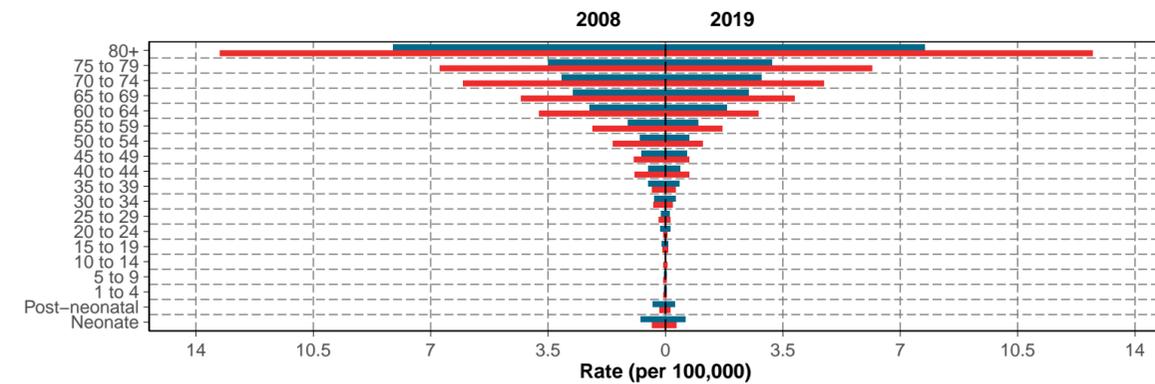
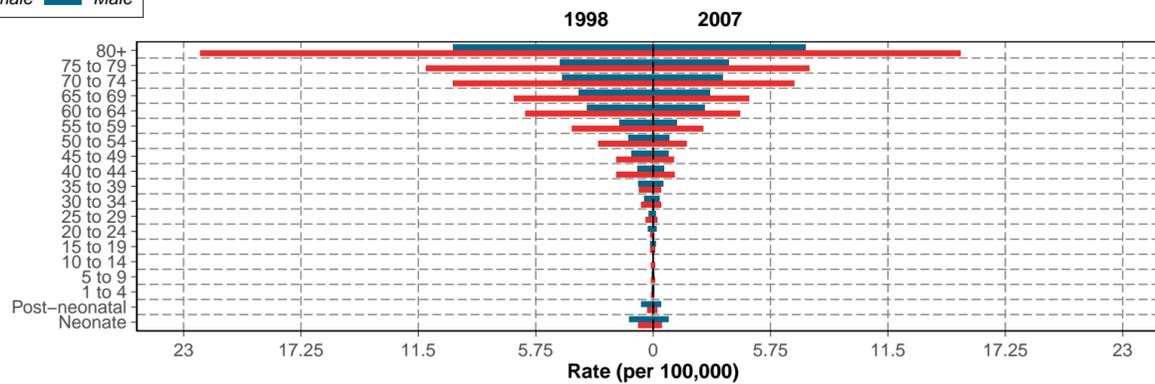
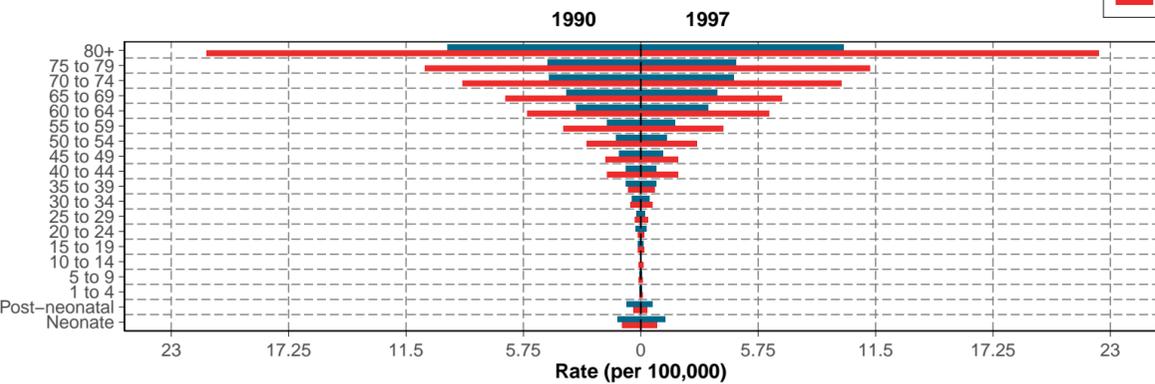
Incidence



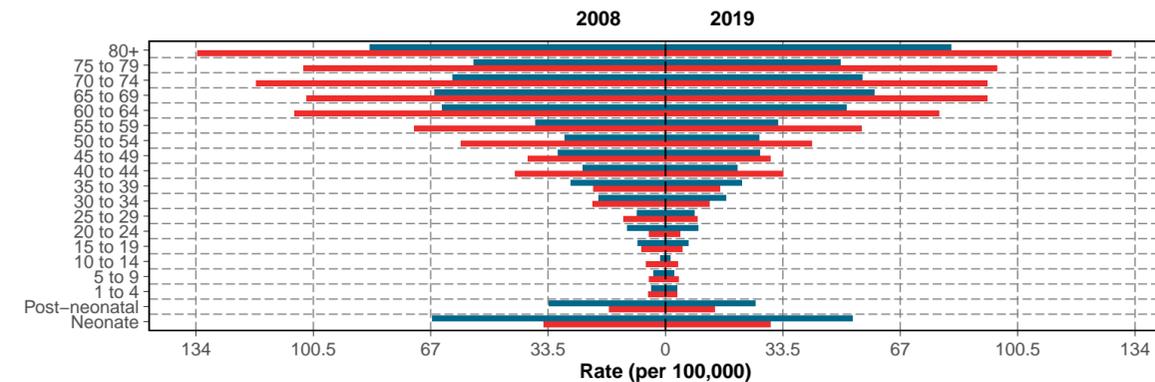
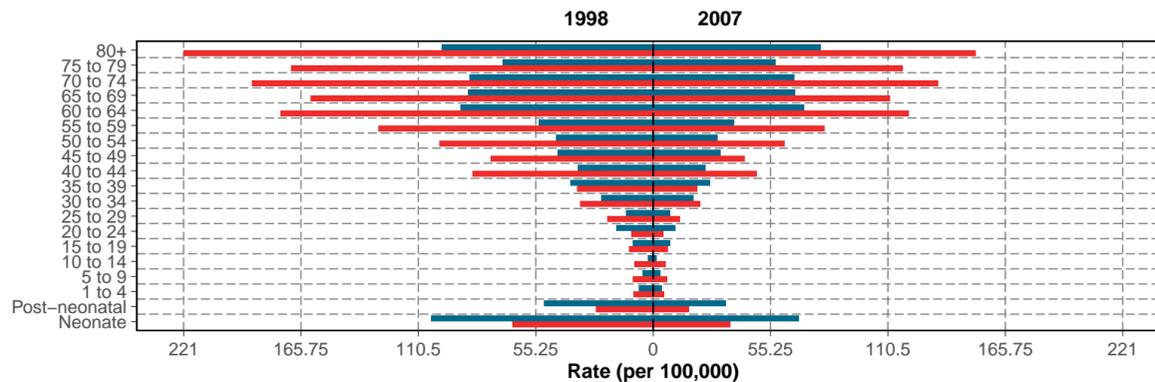
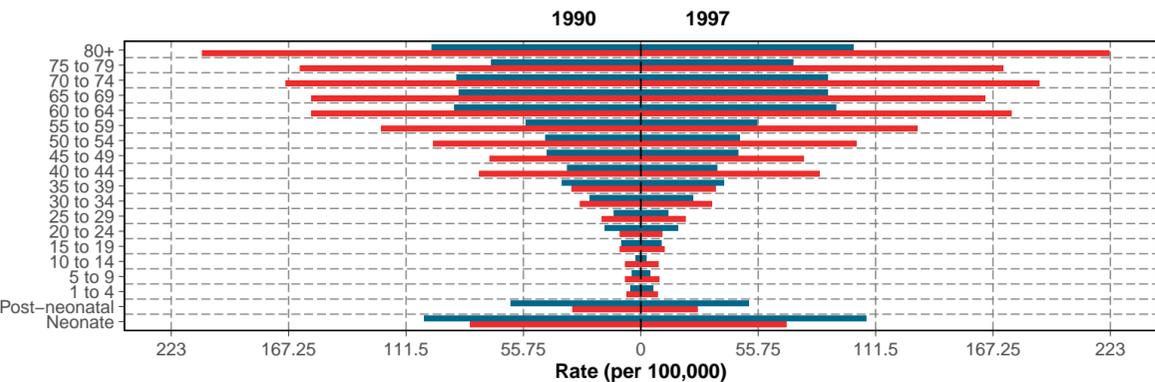
Prevalence



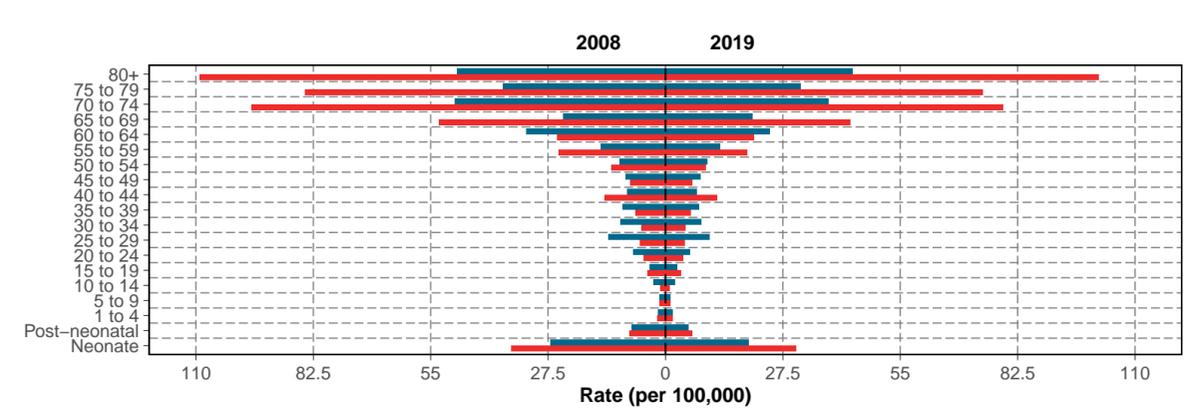
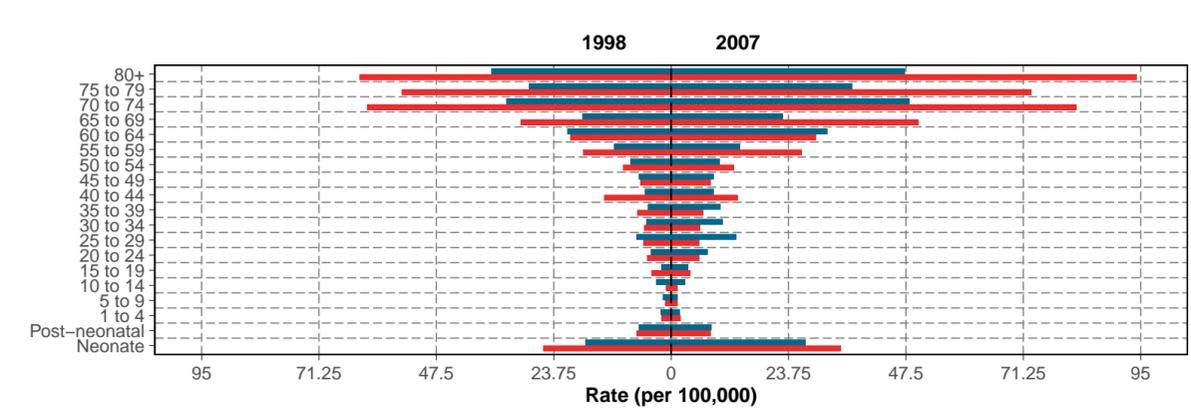
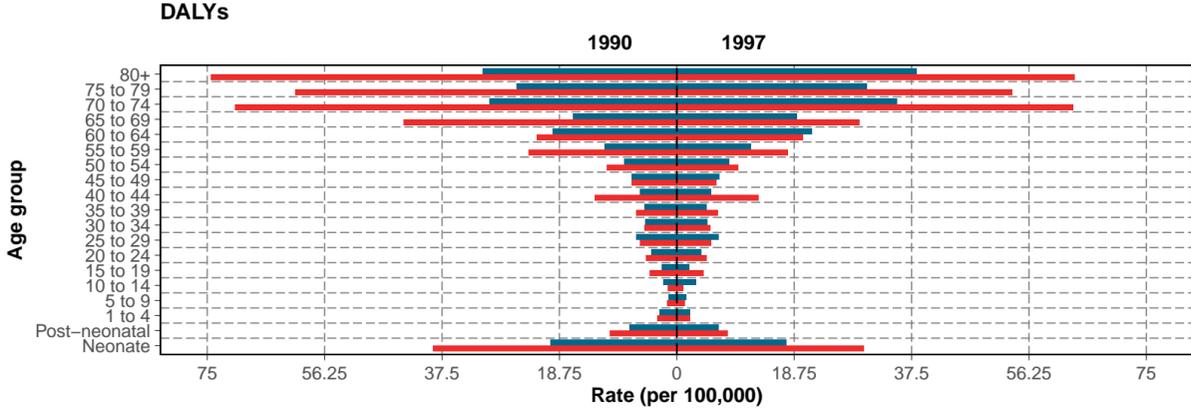
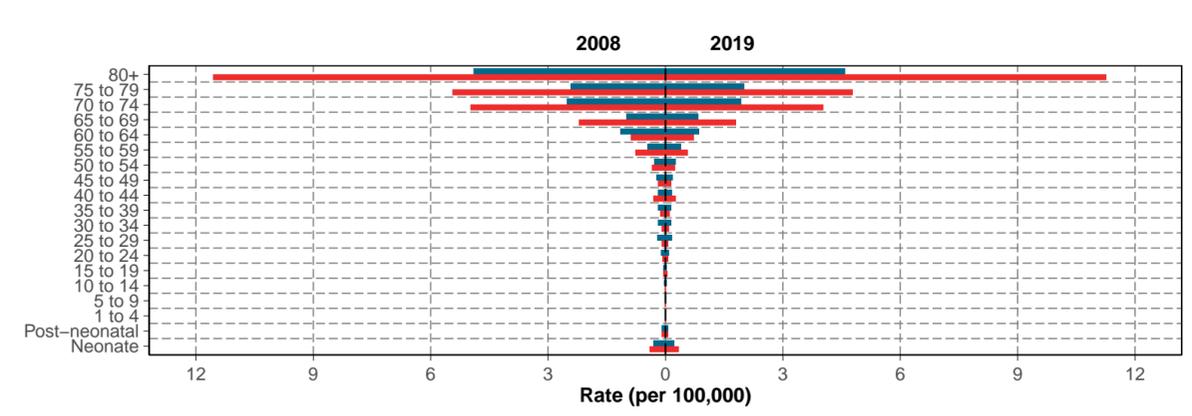
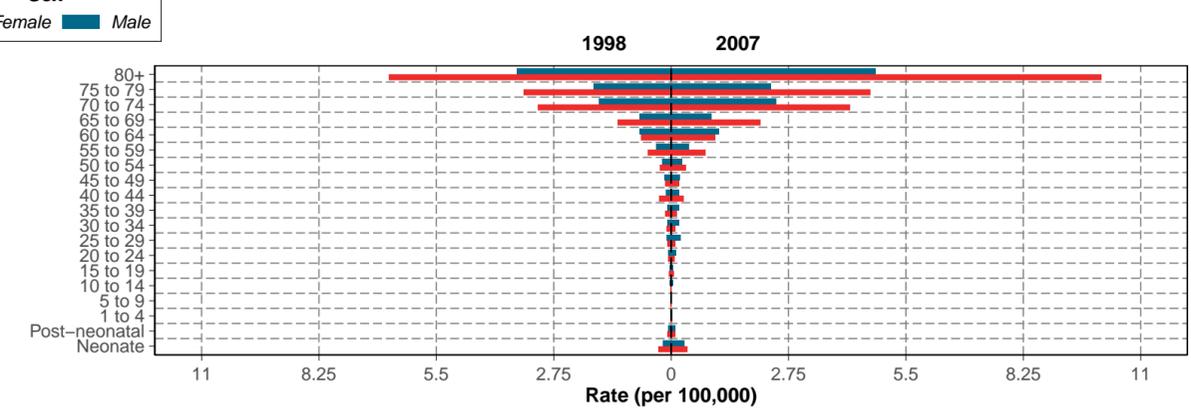
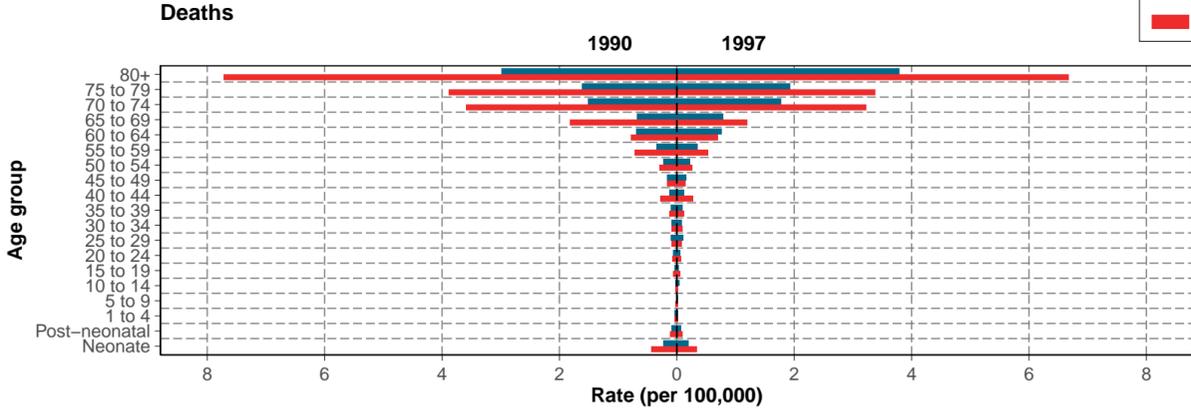
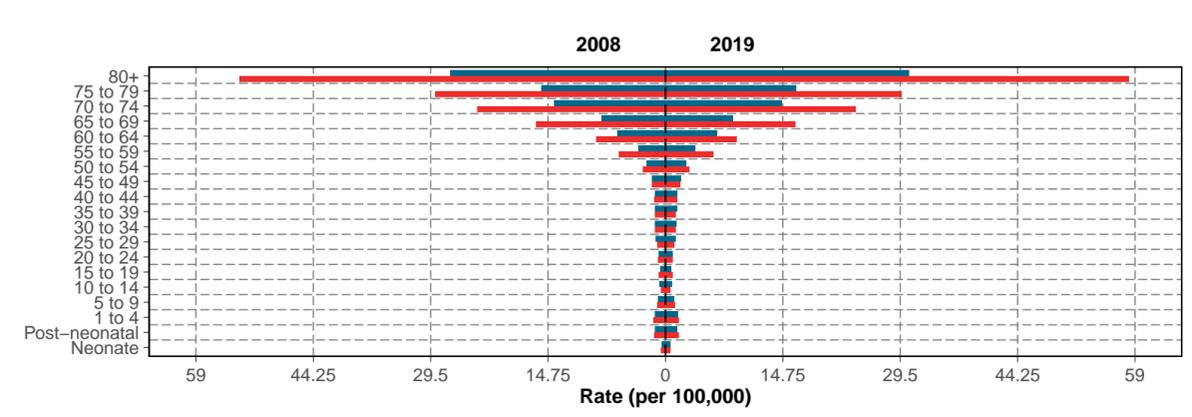
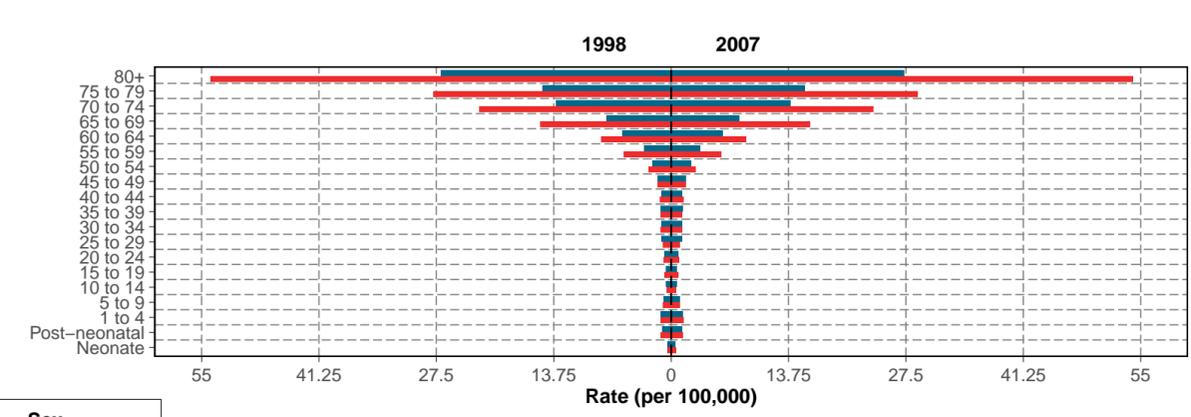
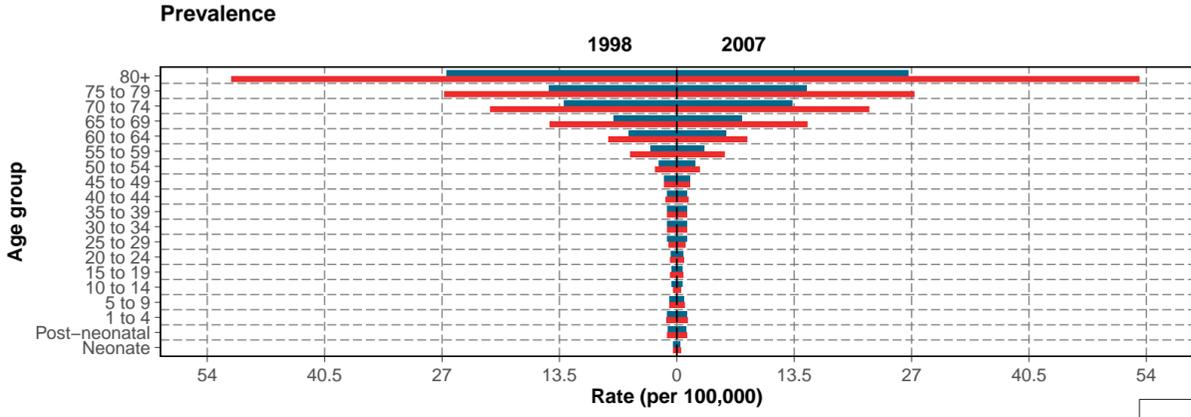
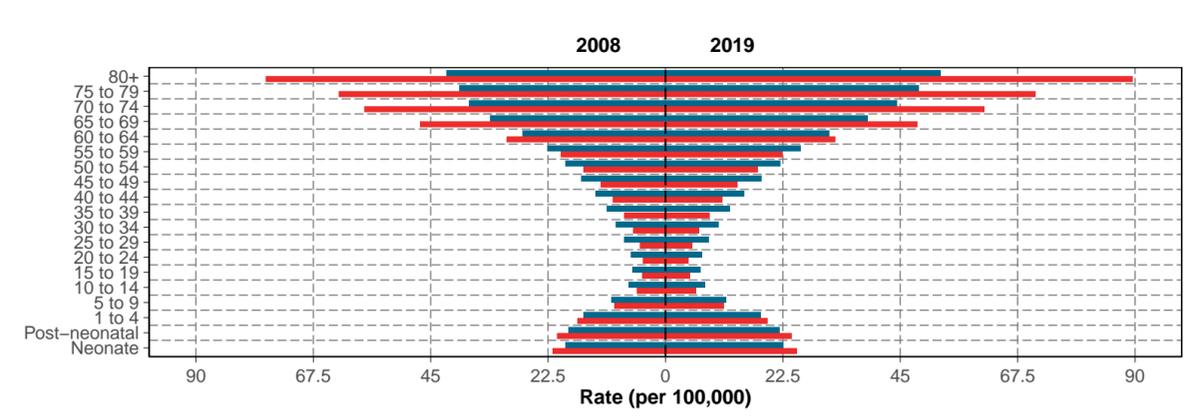
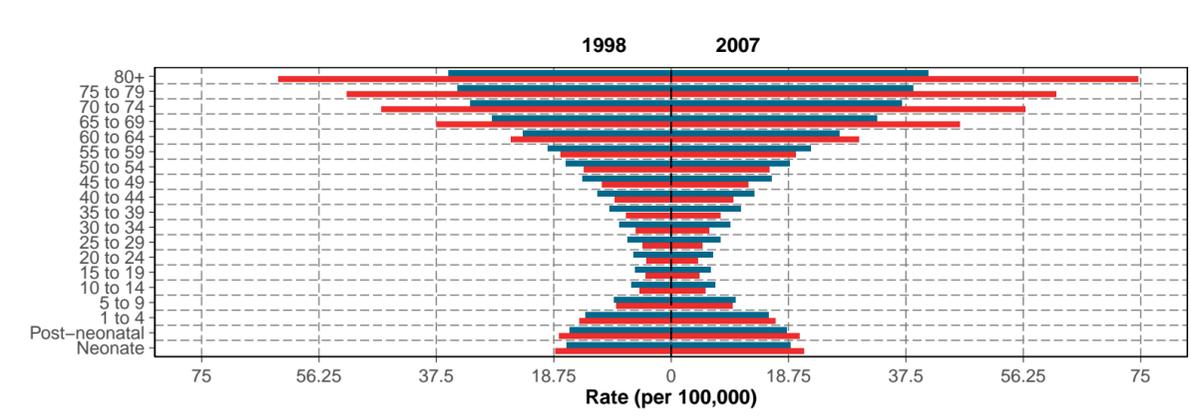
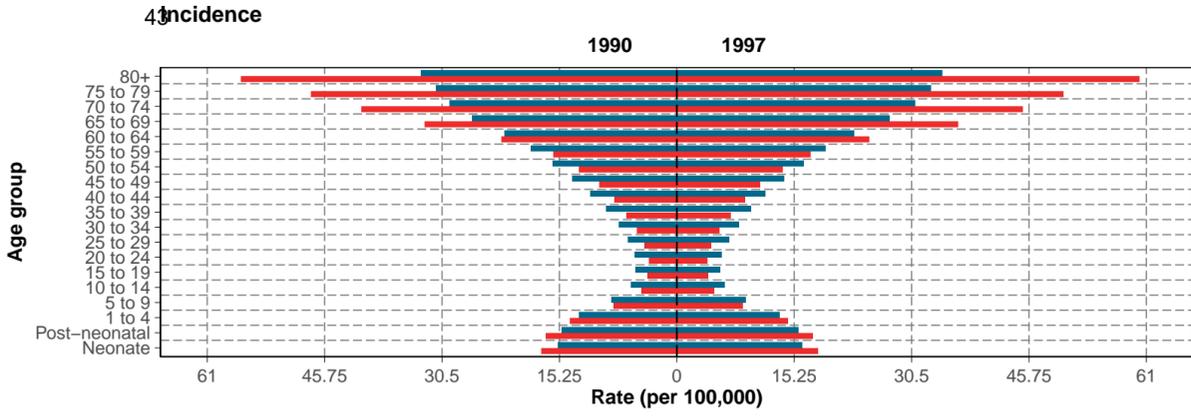
Deaths



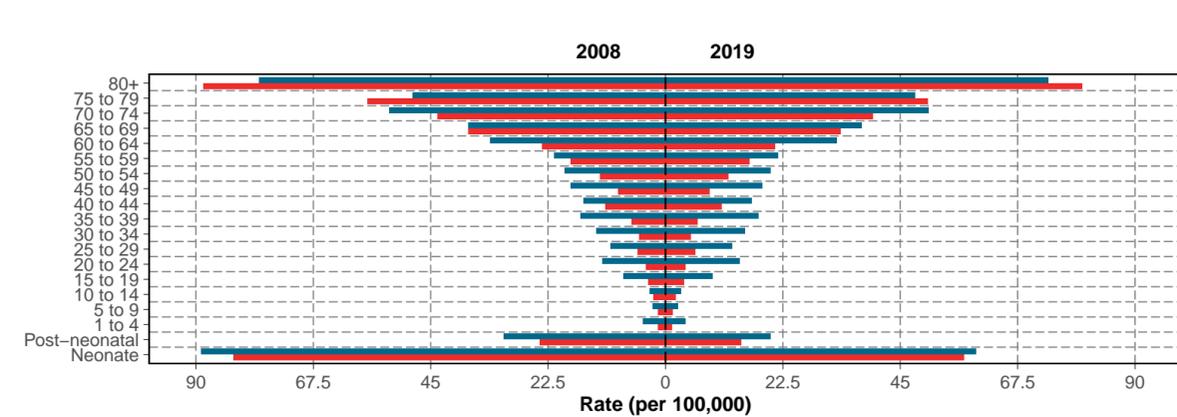
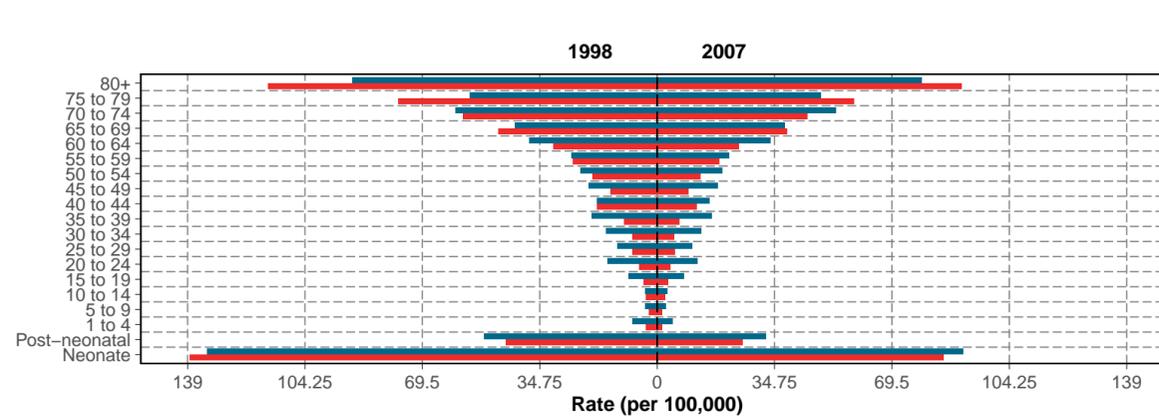
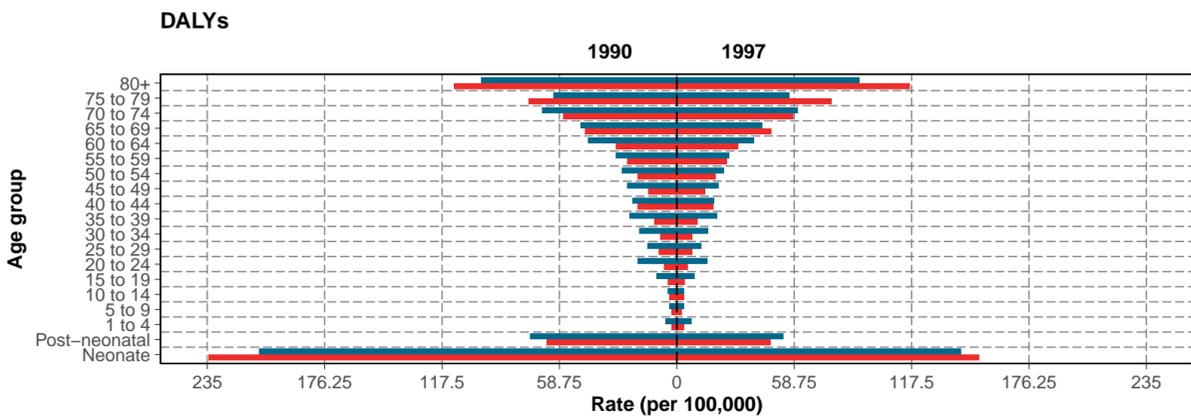
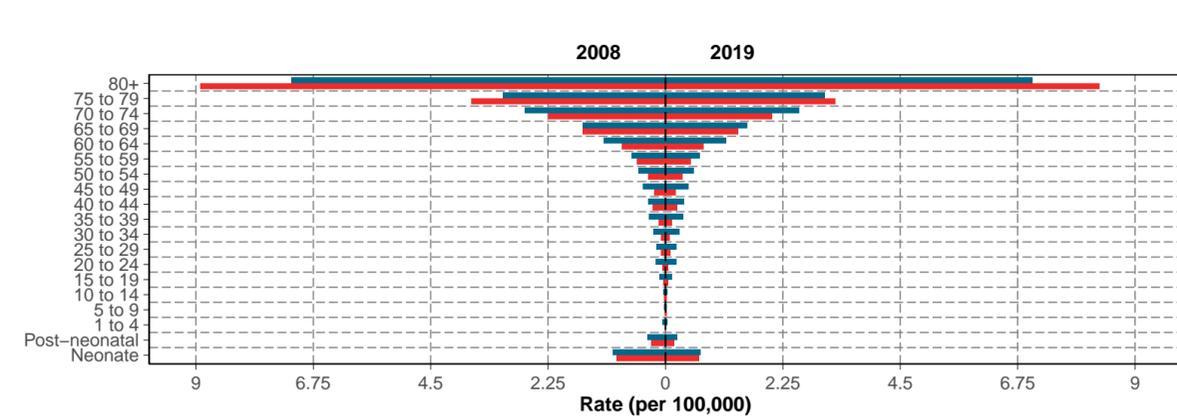
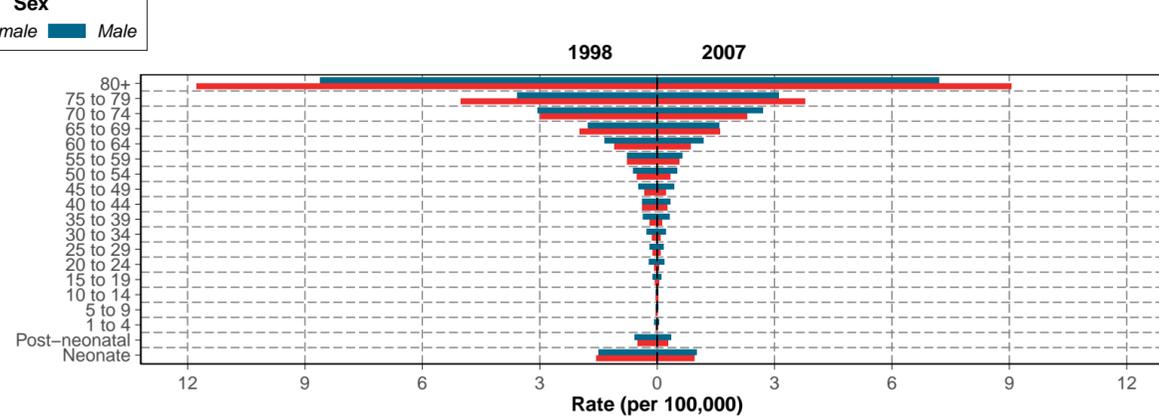
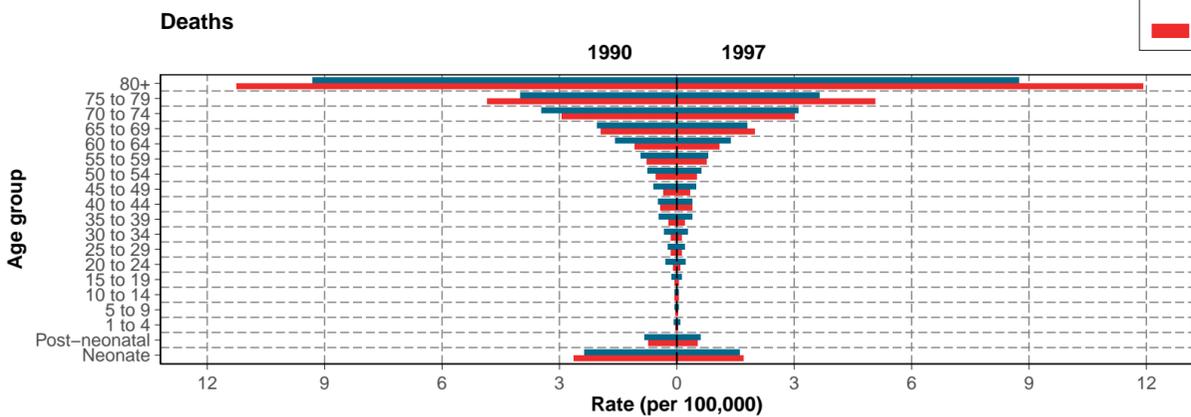
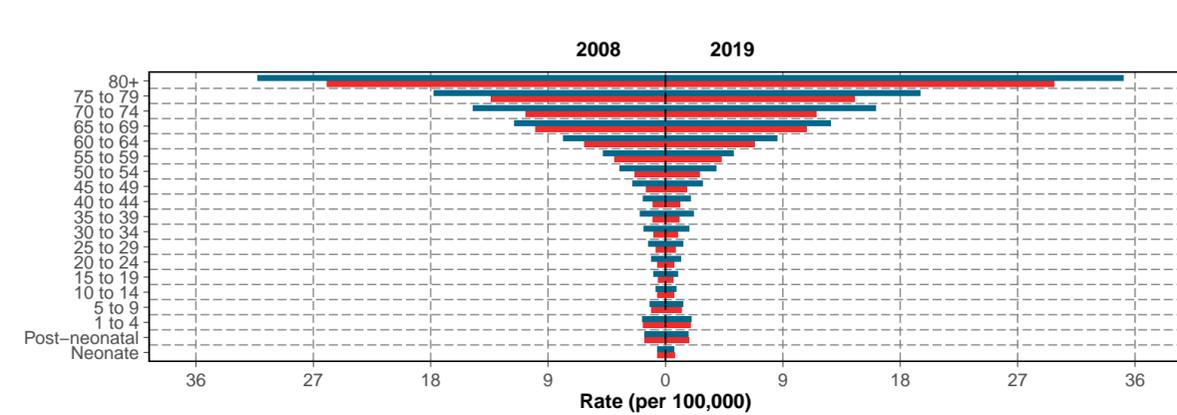
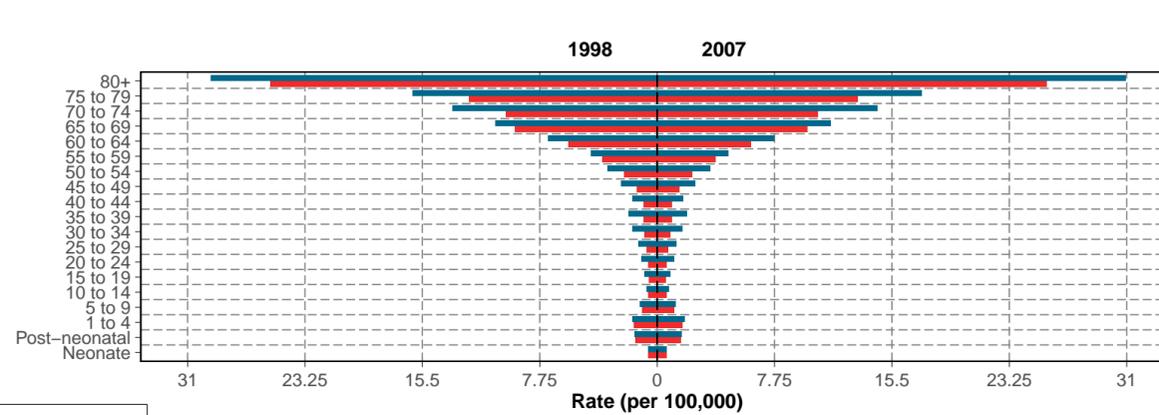
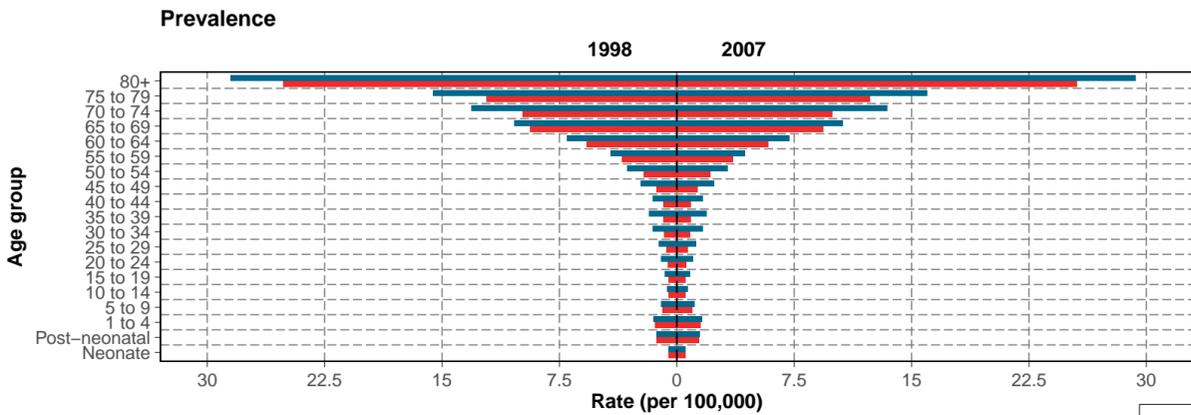
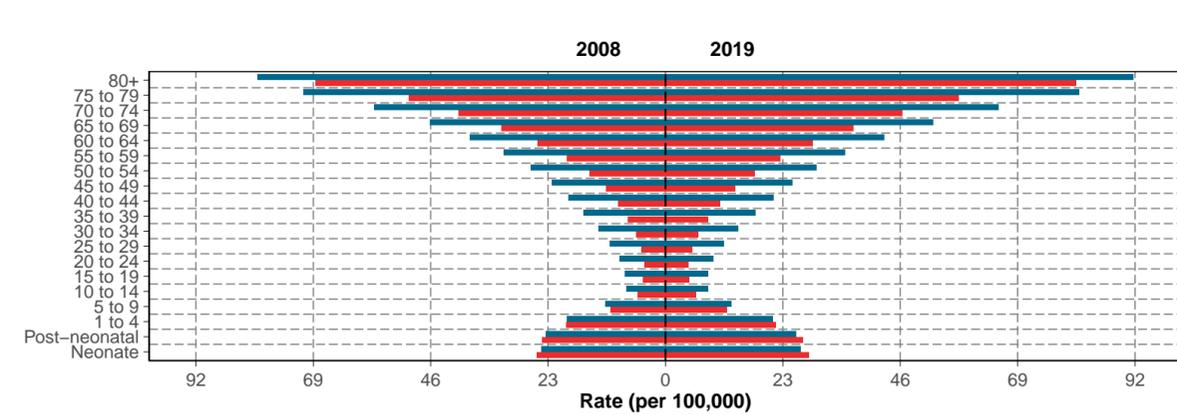
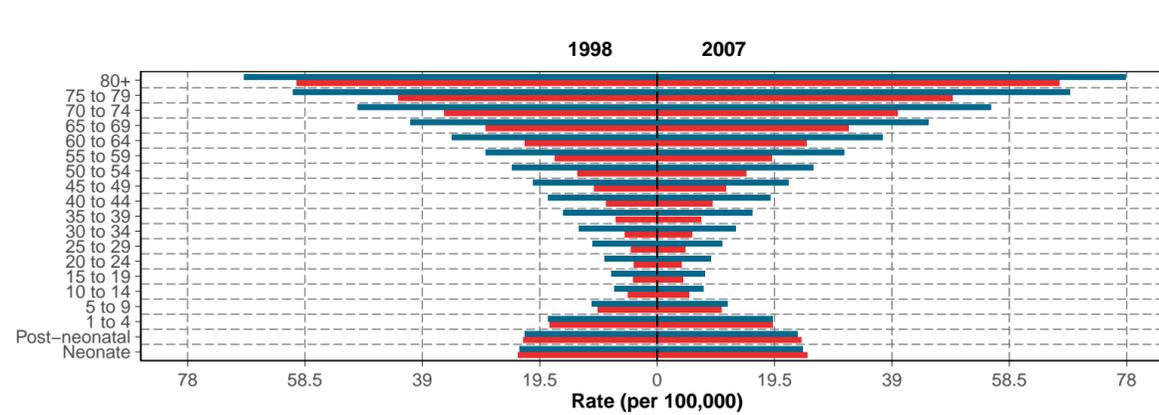
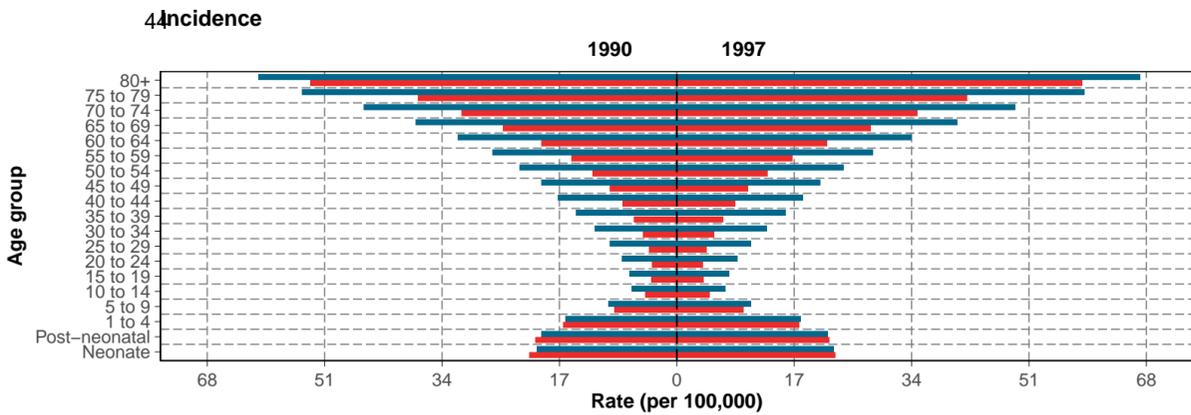
DALYs



Kuwait

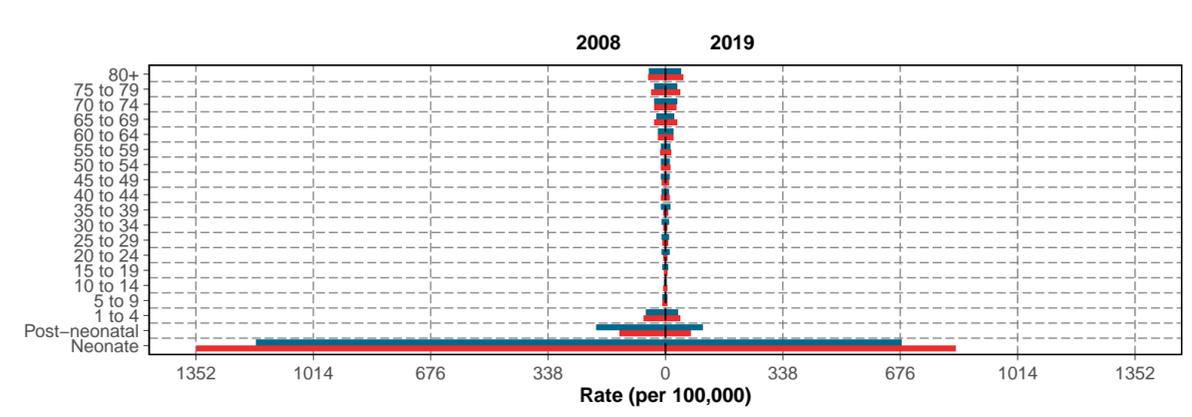
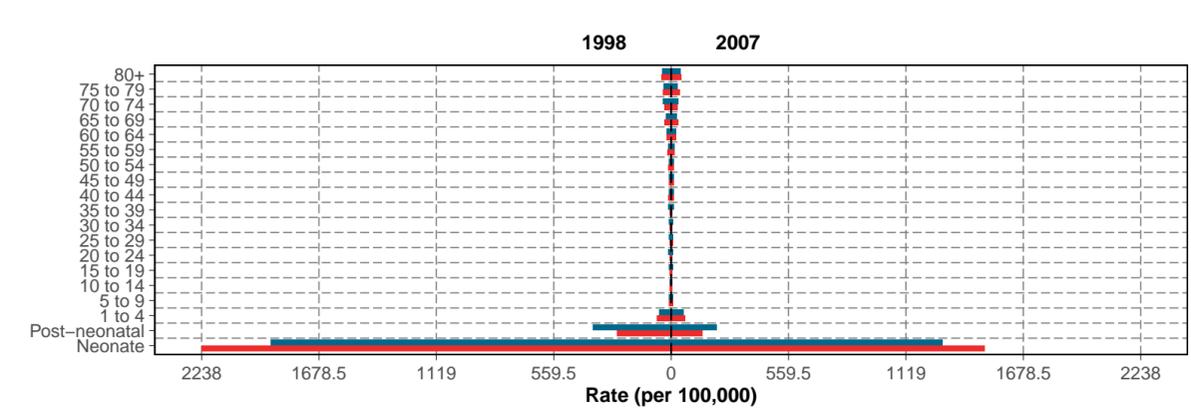
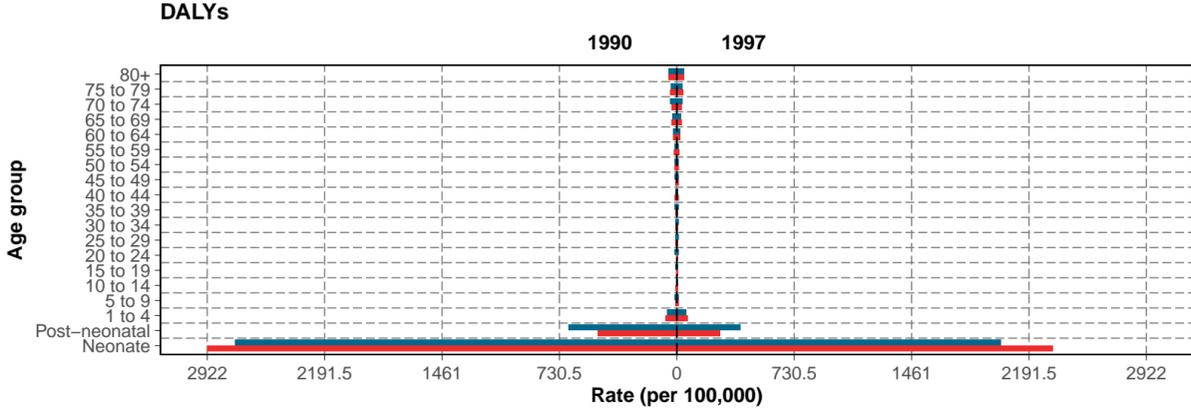
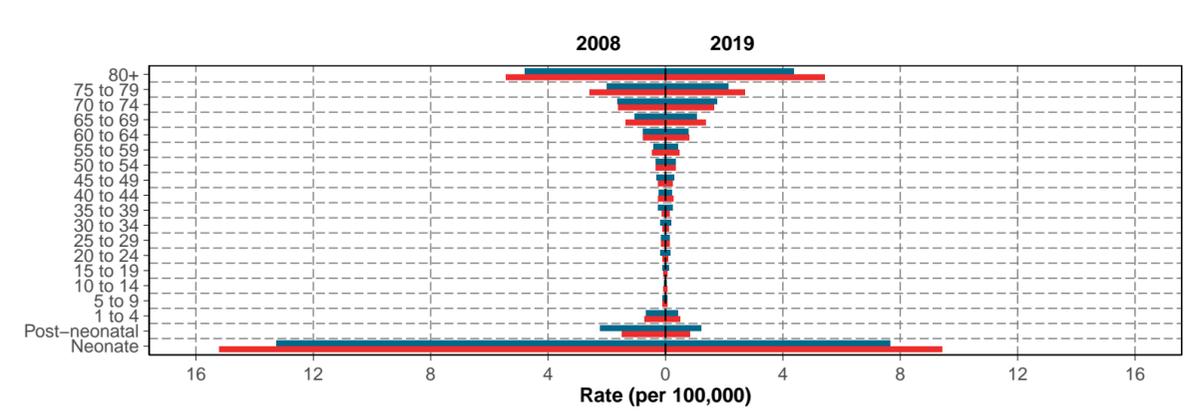
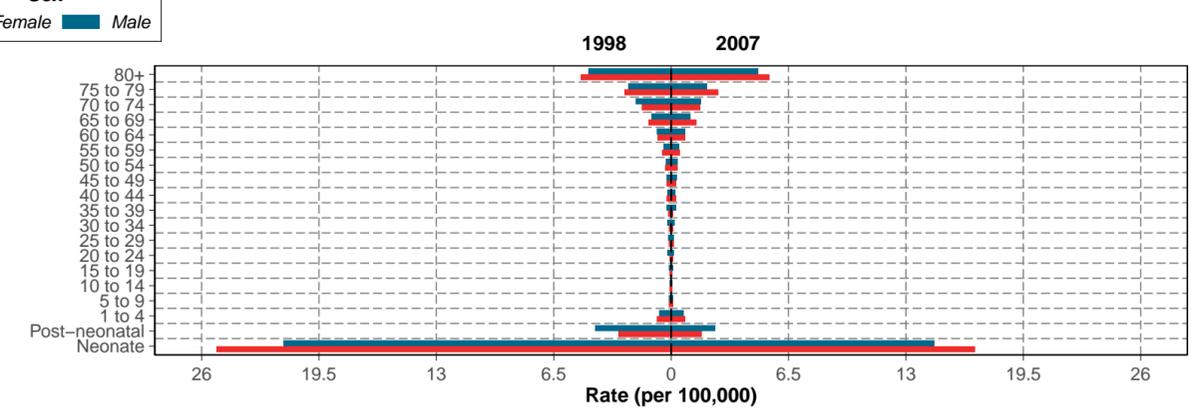
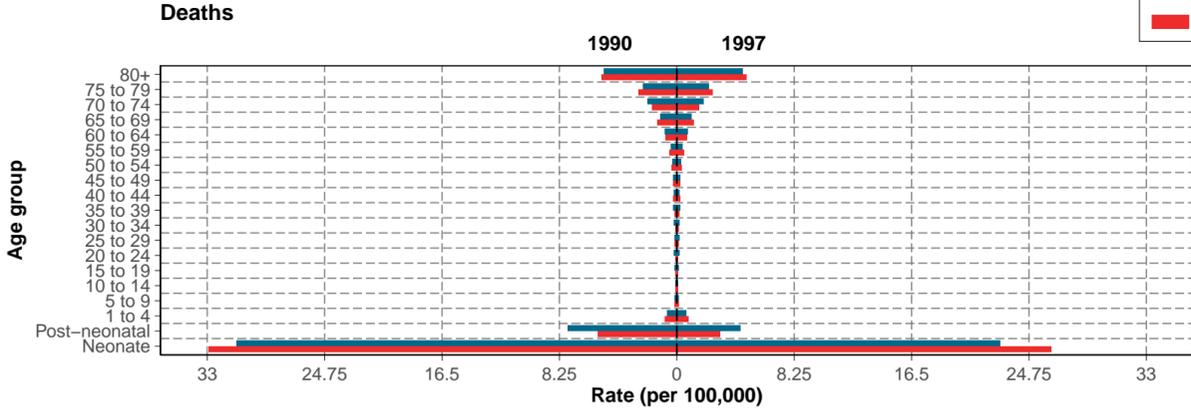
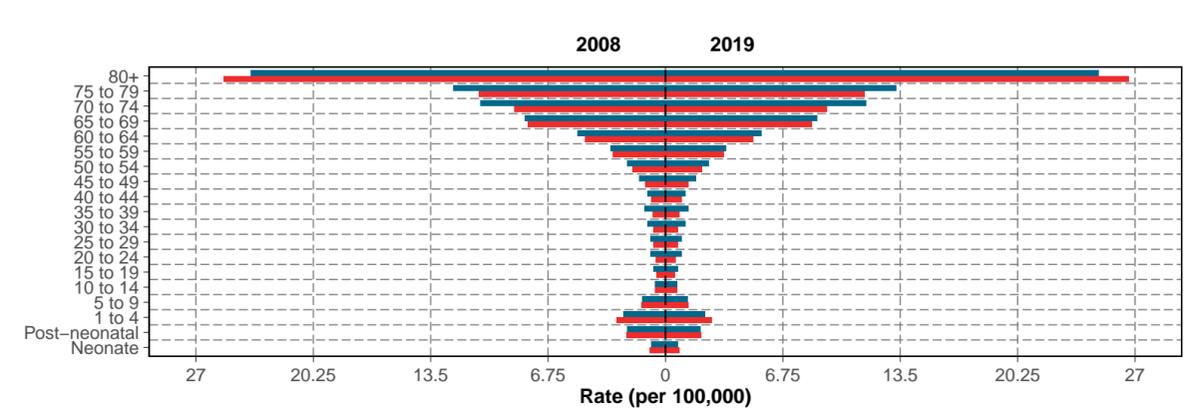
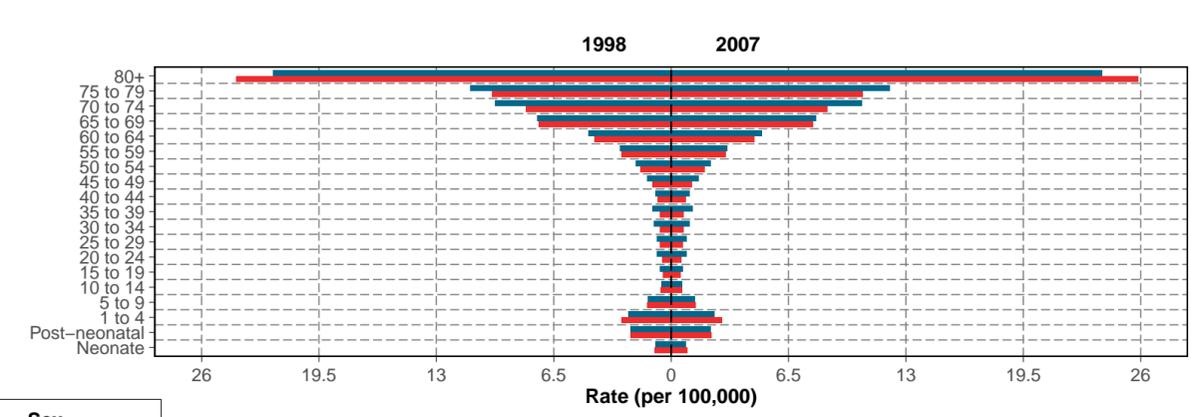
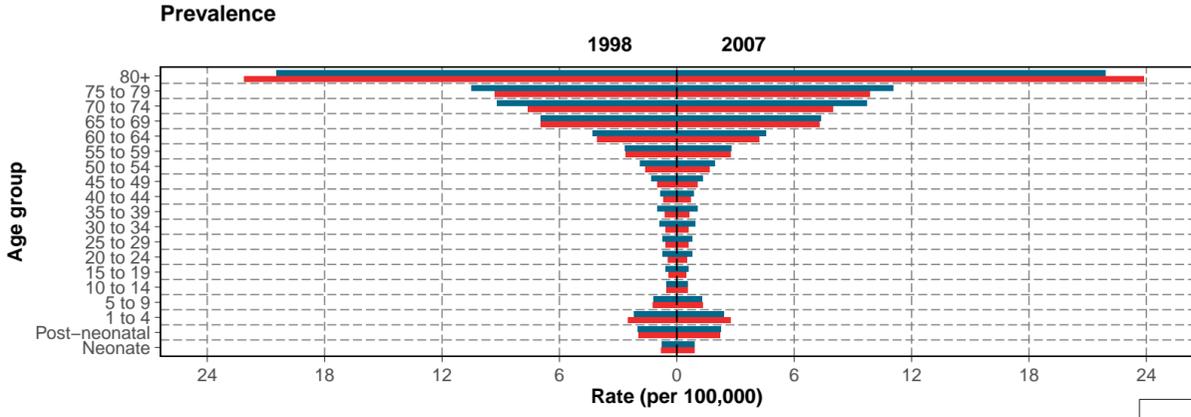
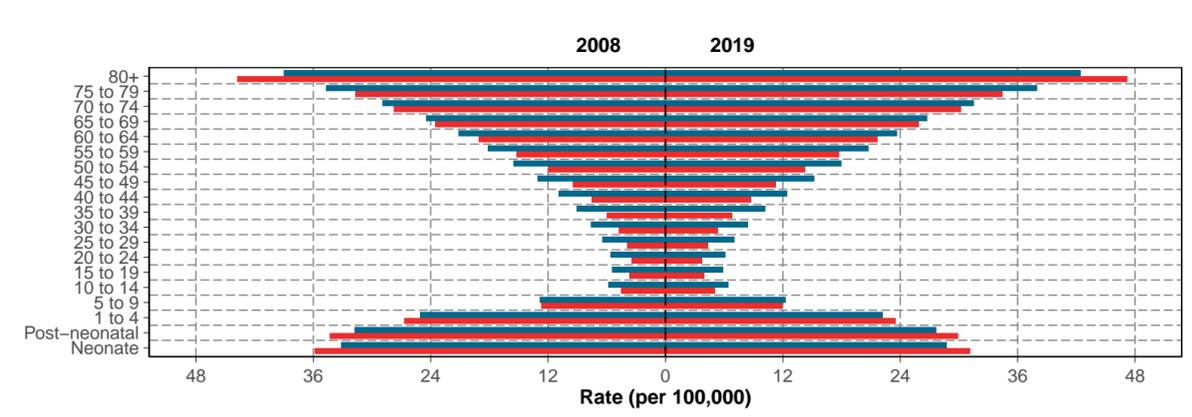
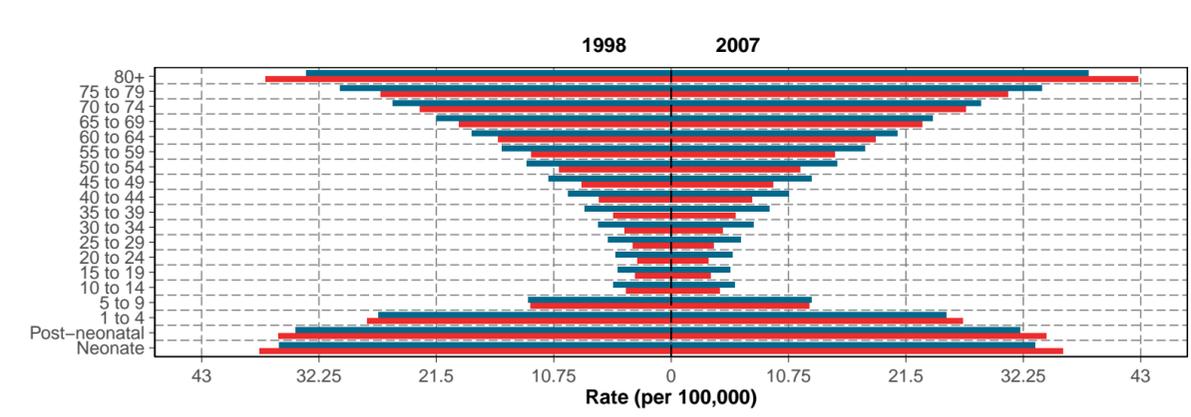
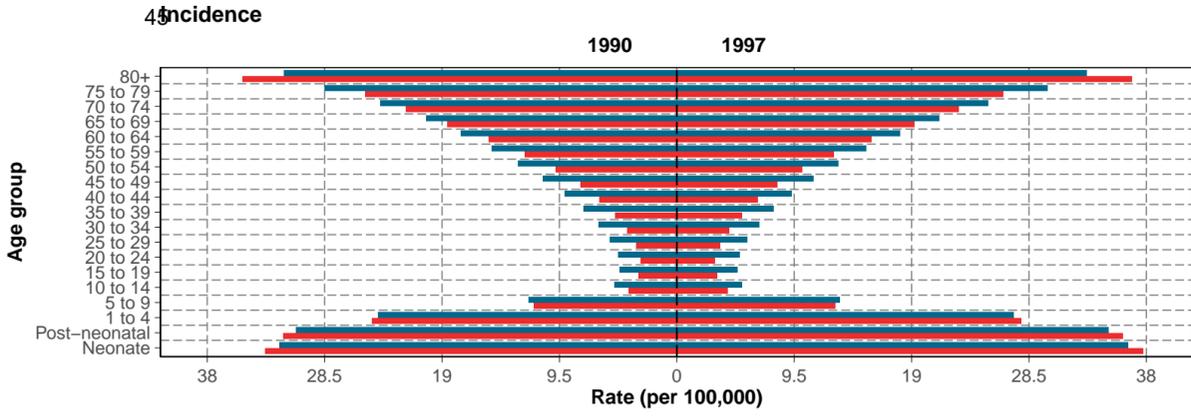


Lebanon

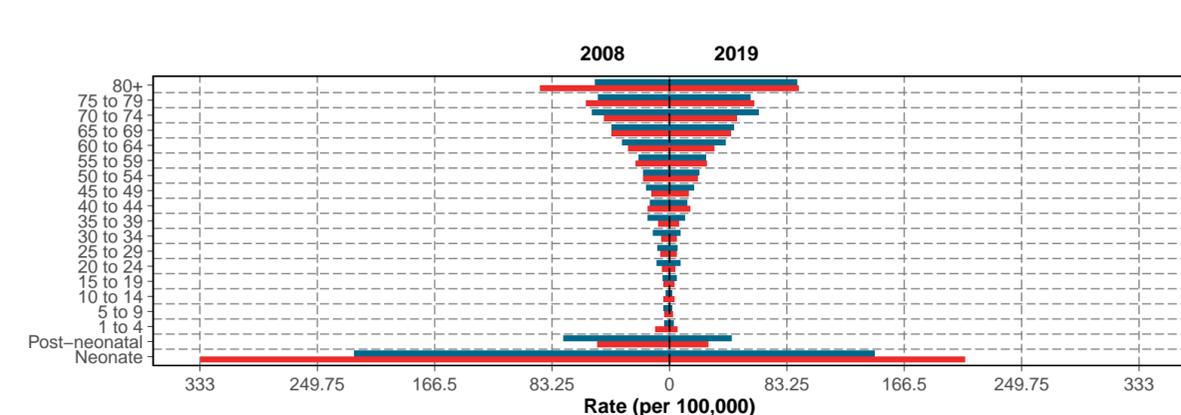
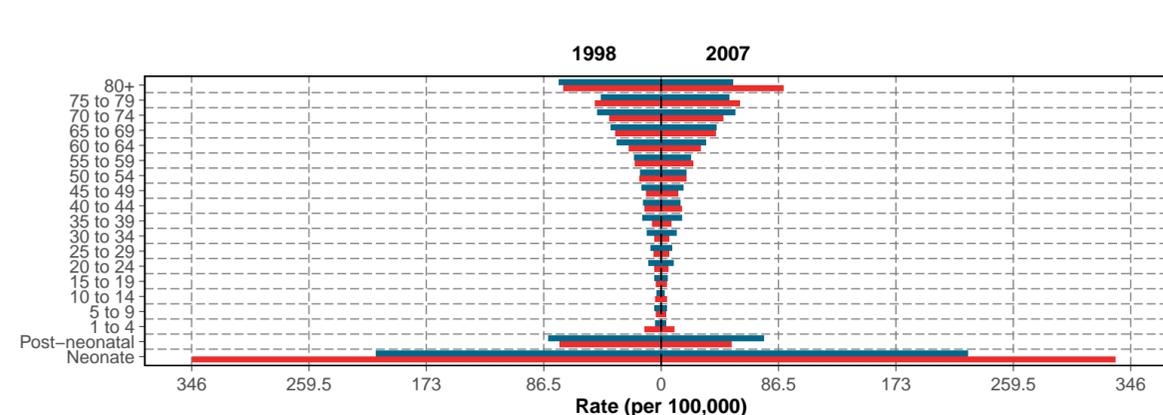
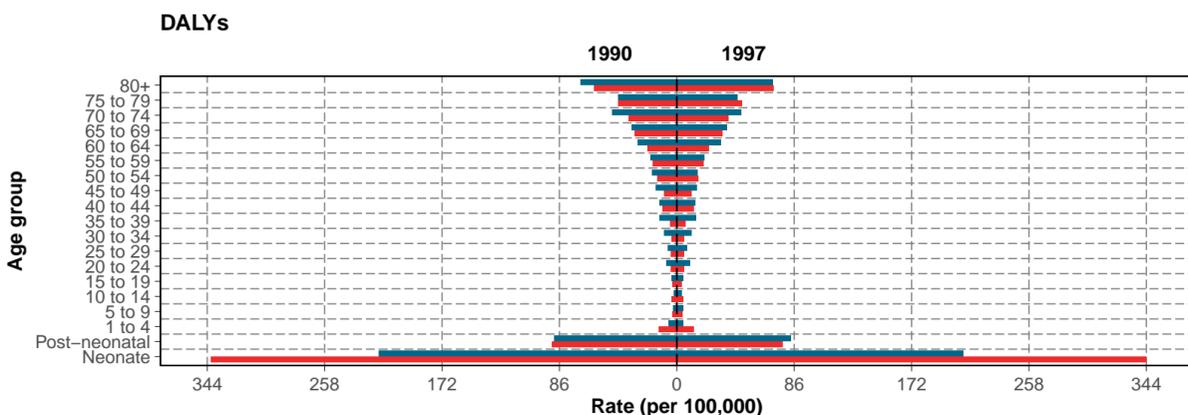
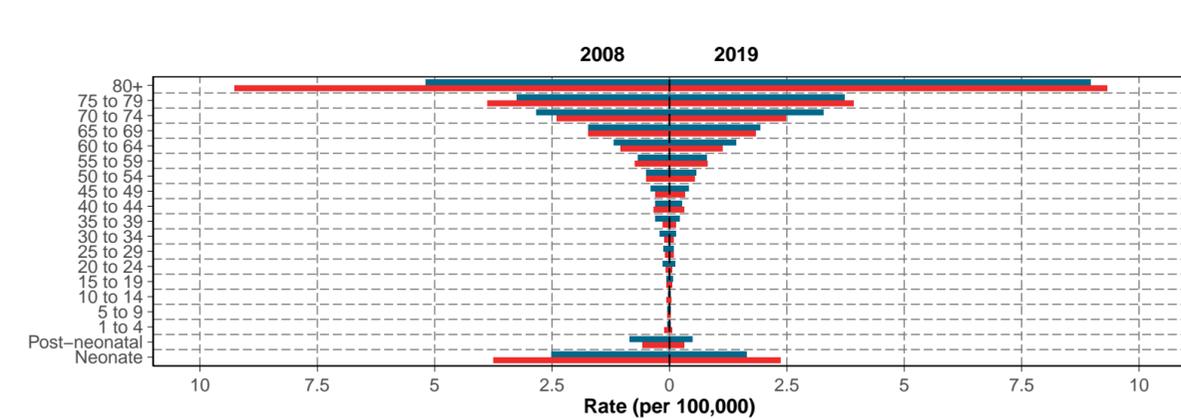
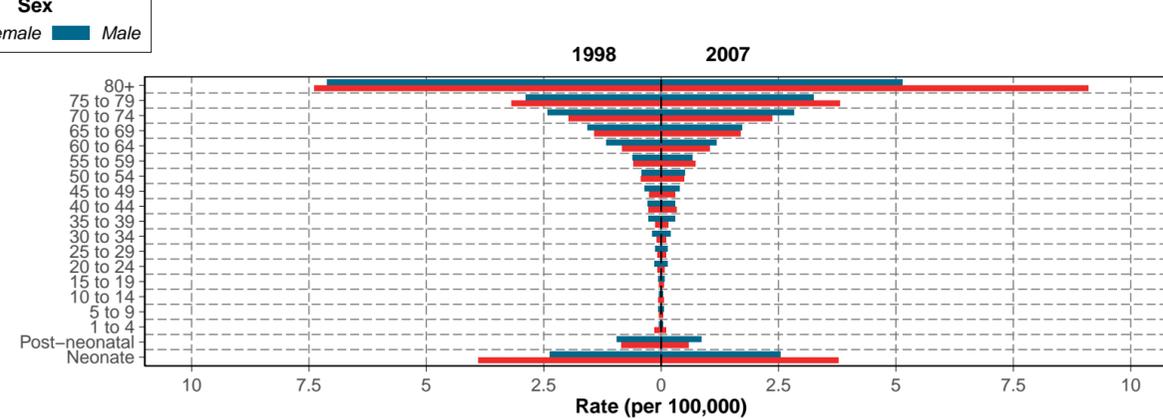
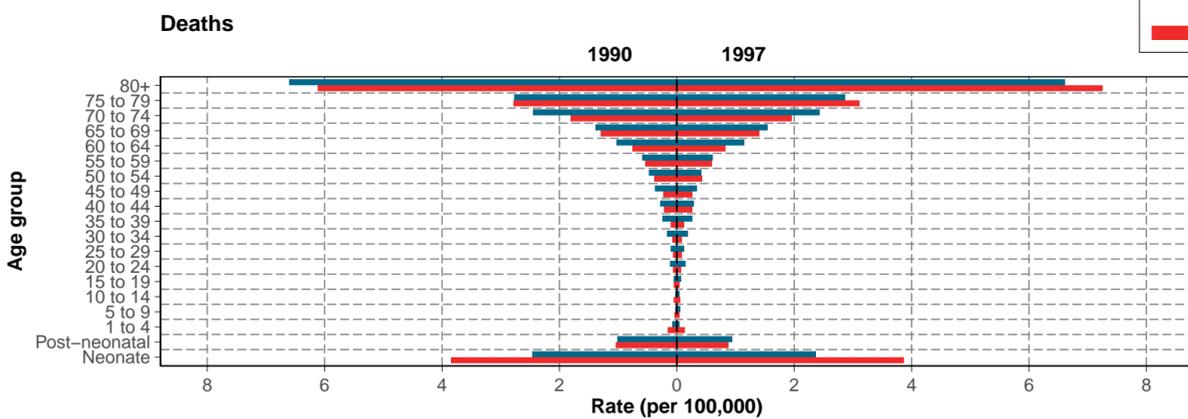
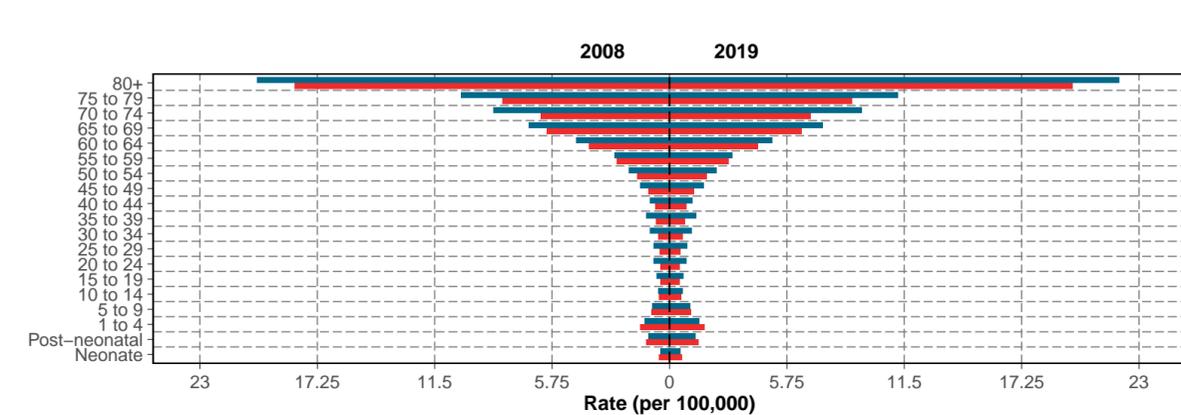
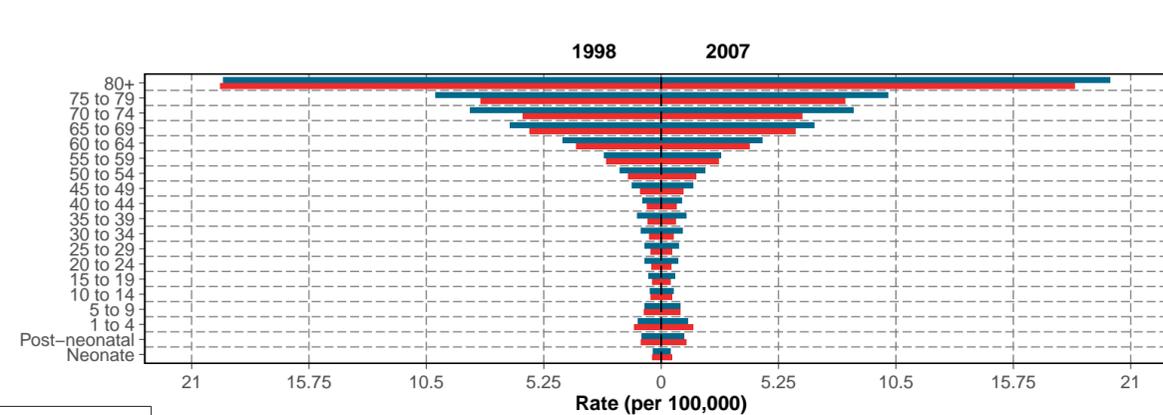
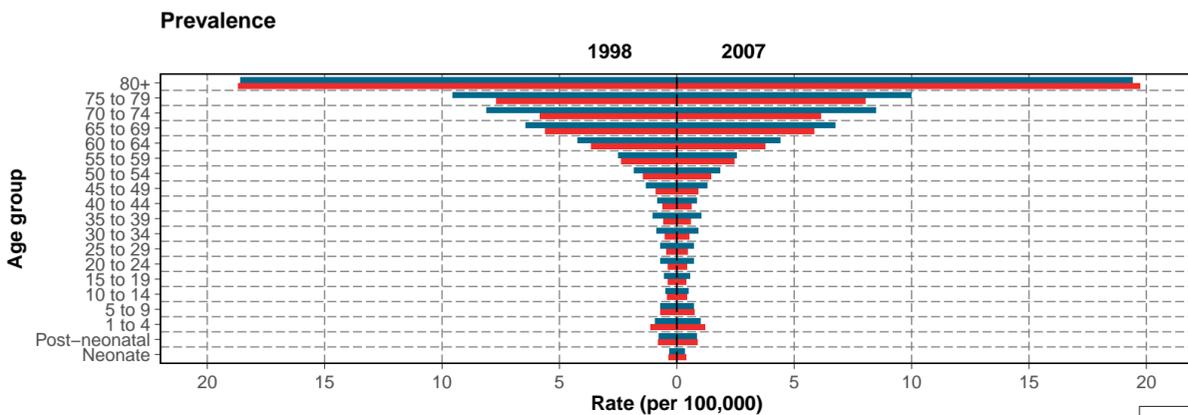
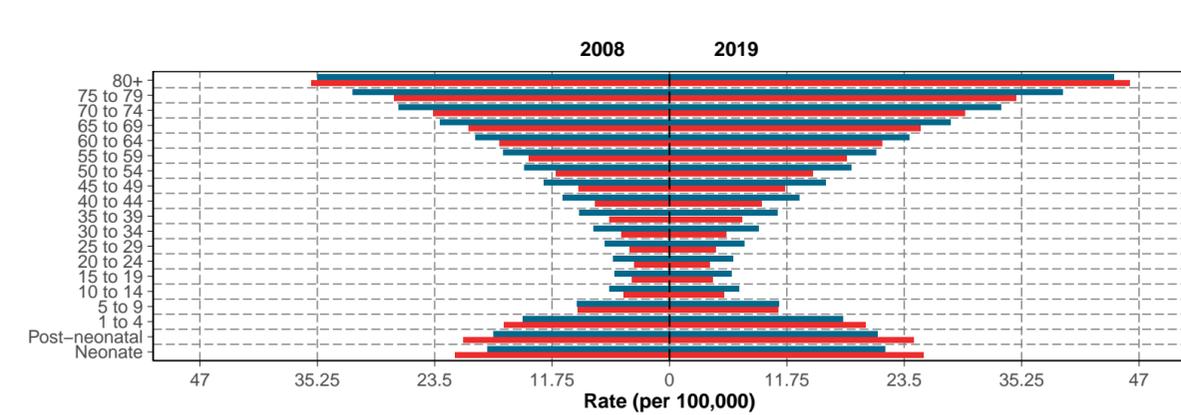
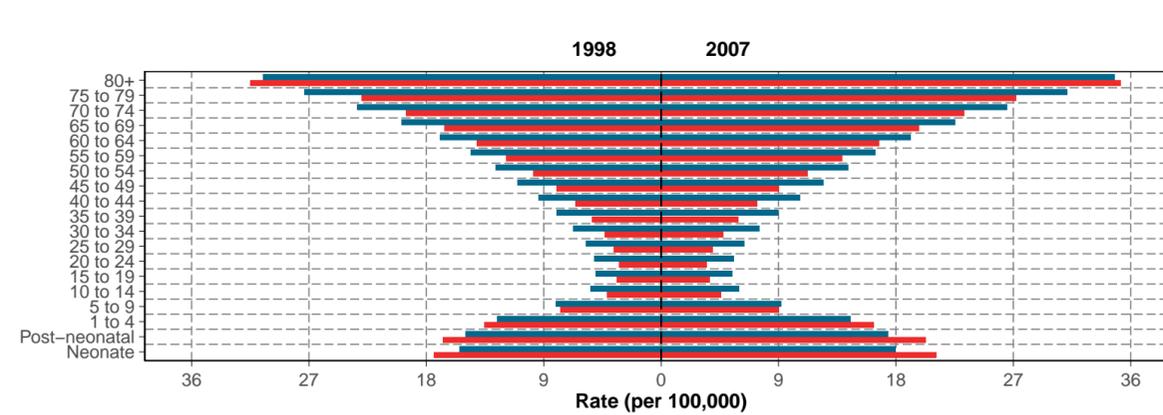
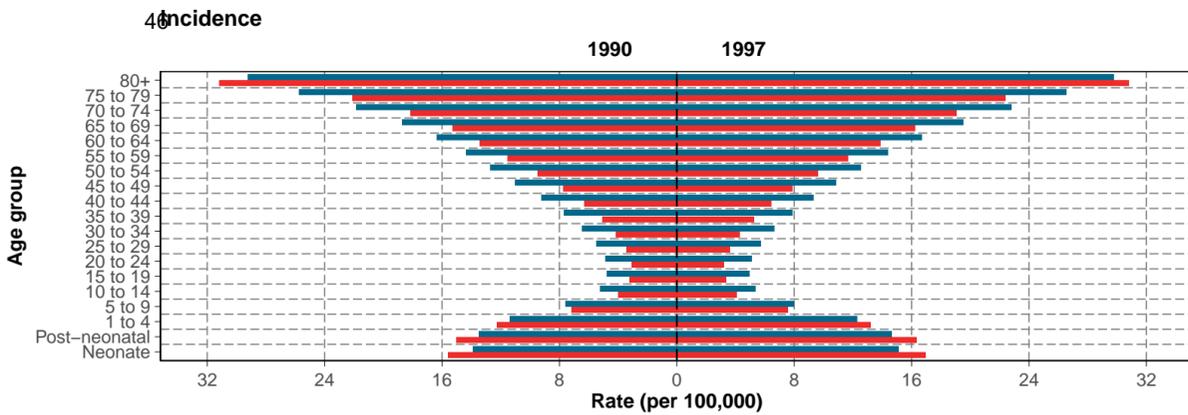


Sex
Female Male

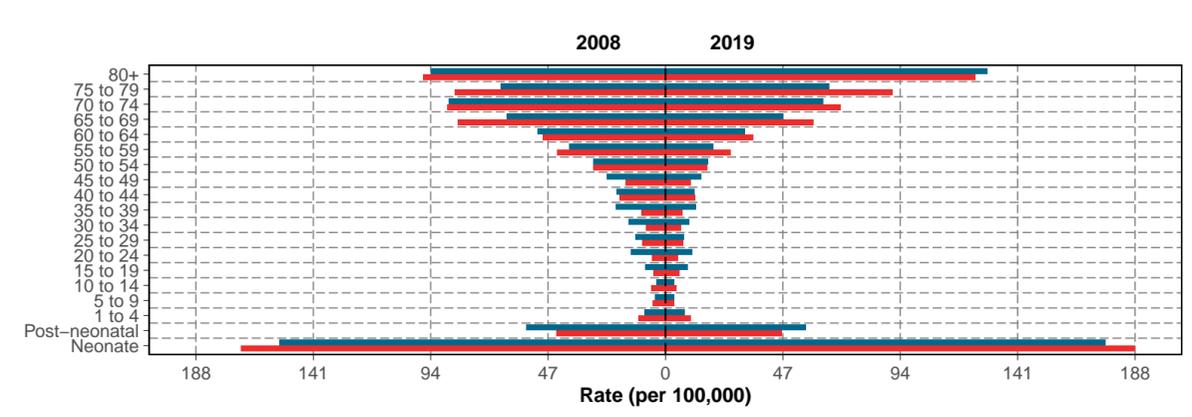
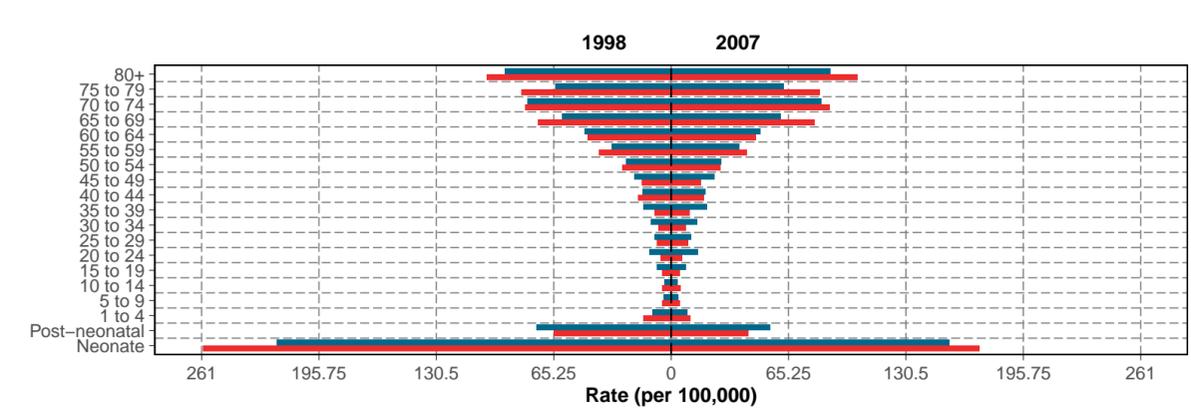
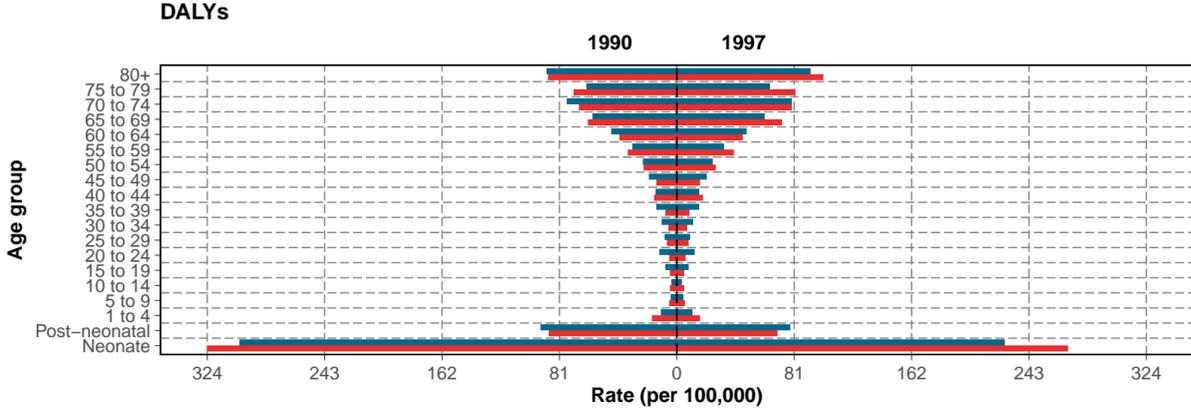
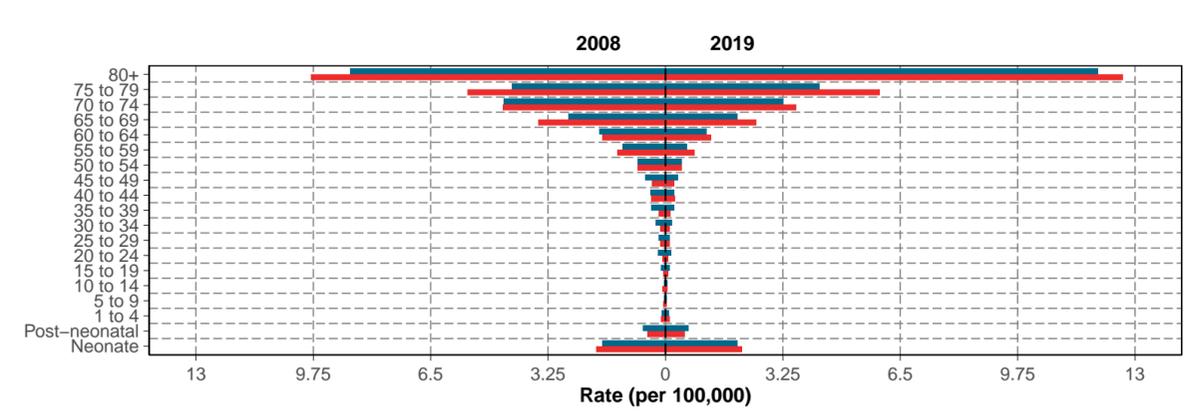
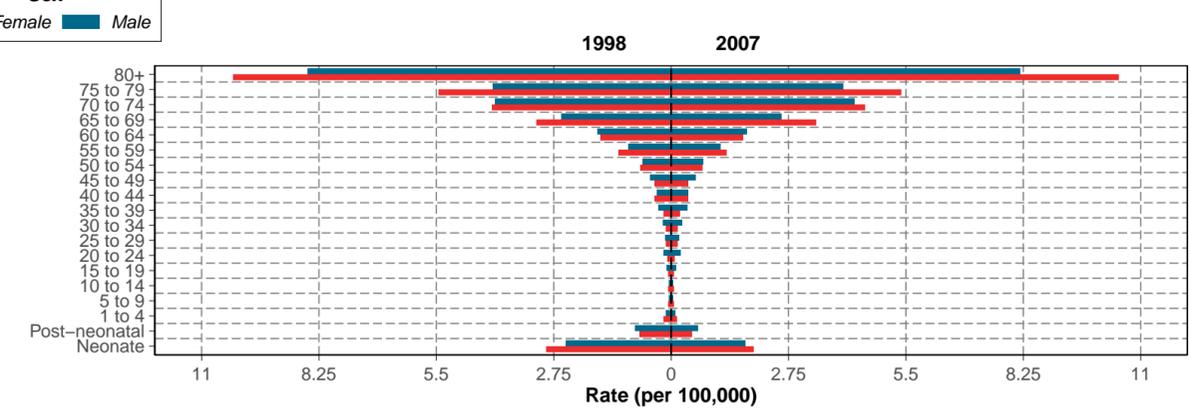
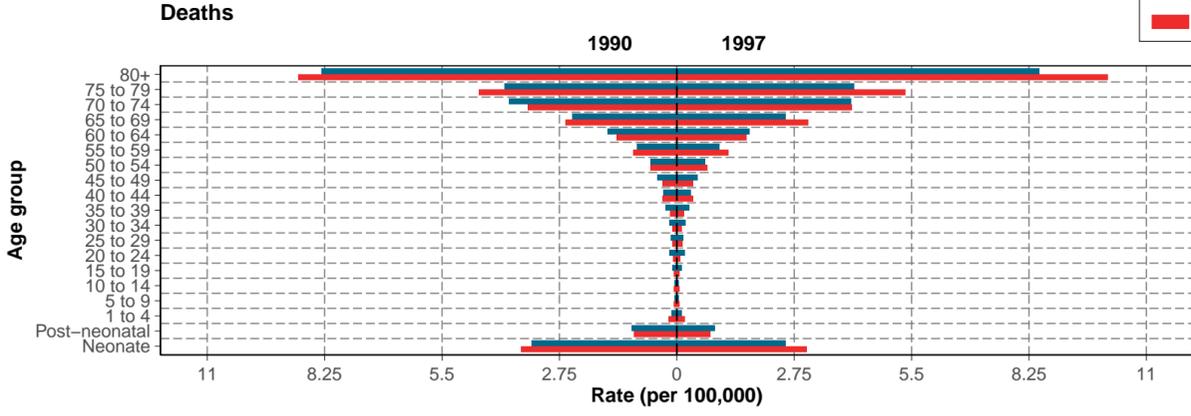
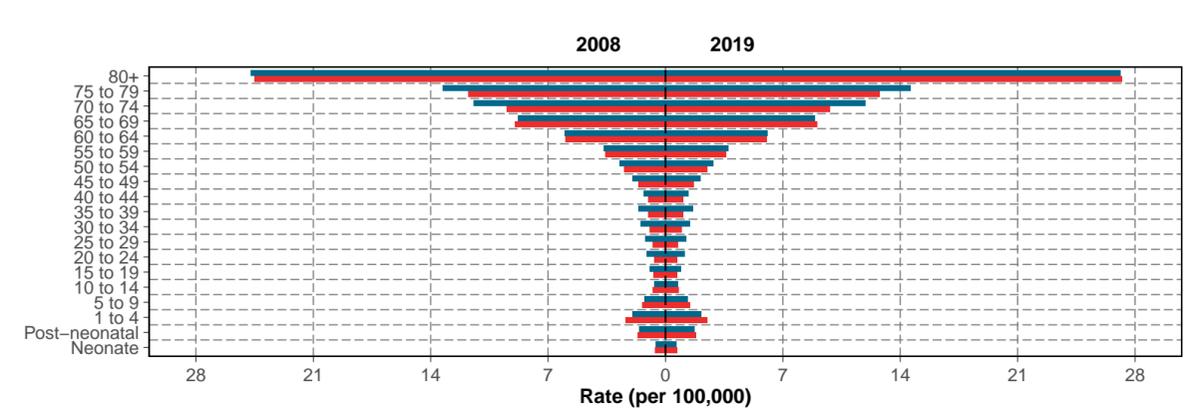
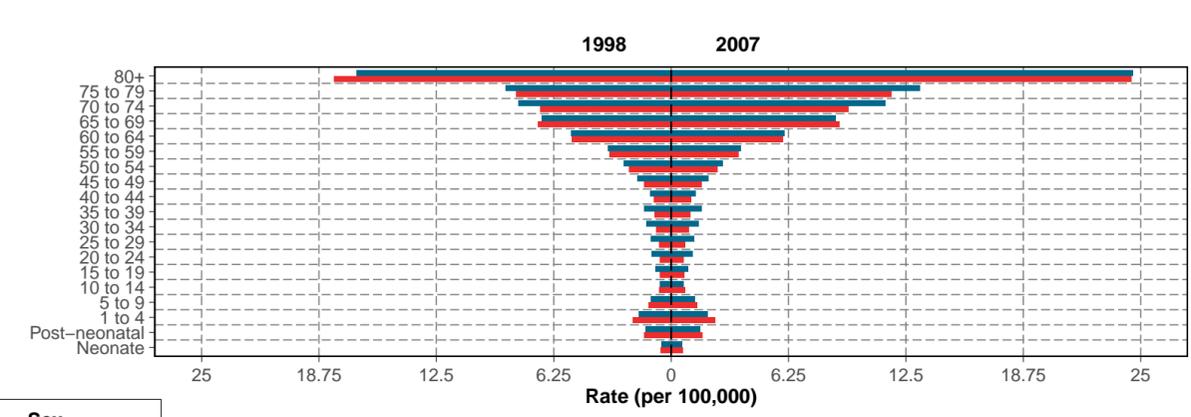
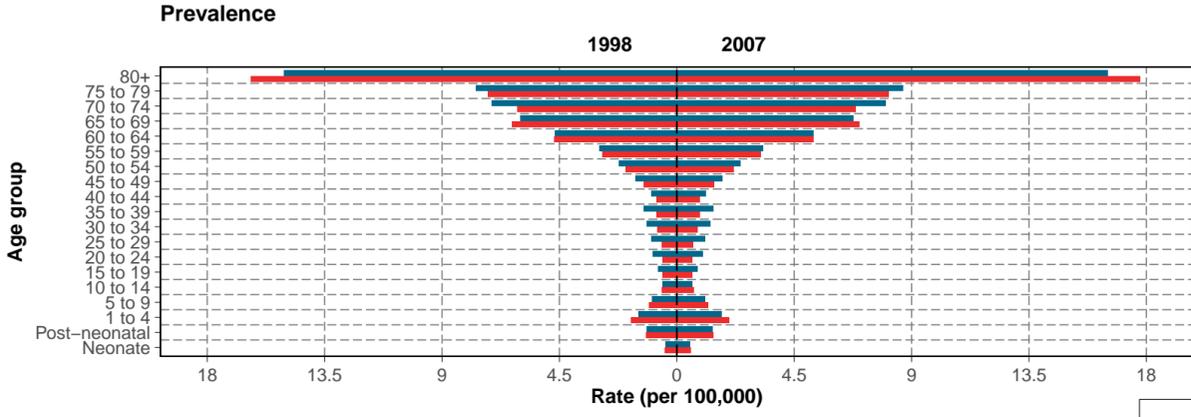
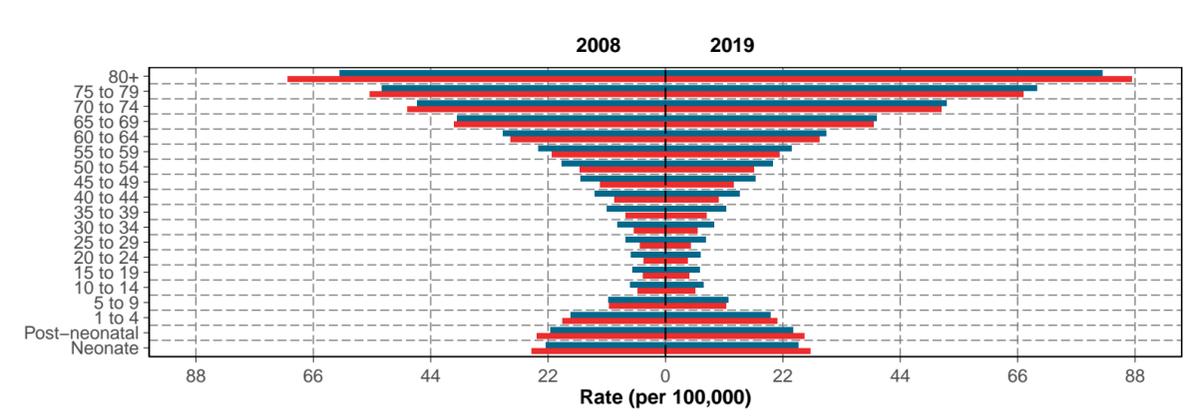
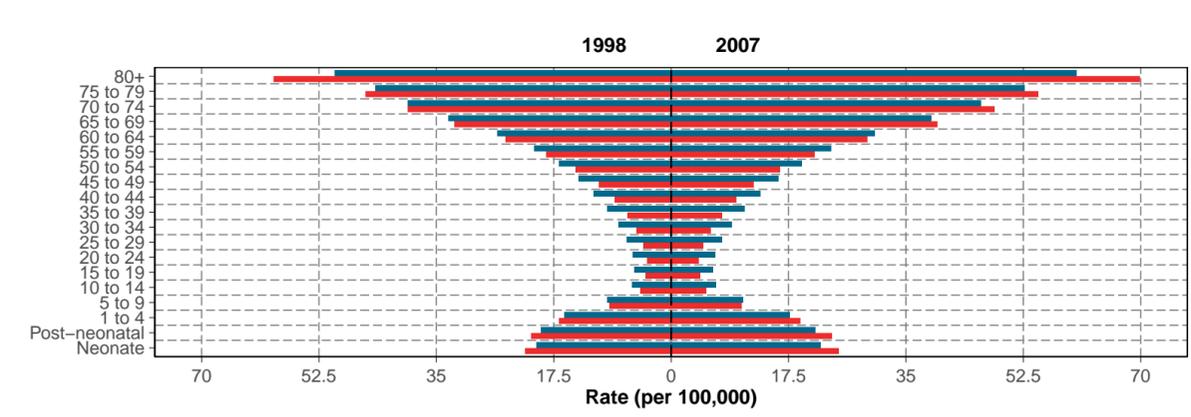
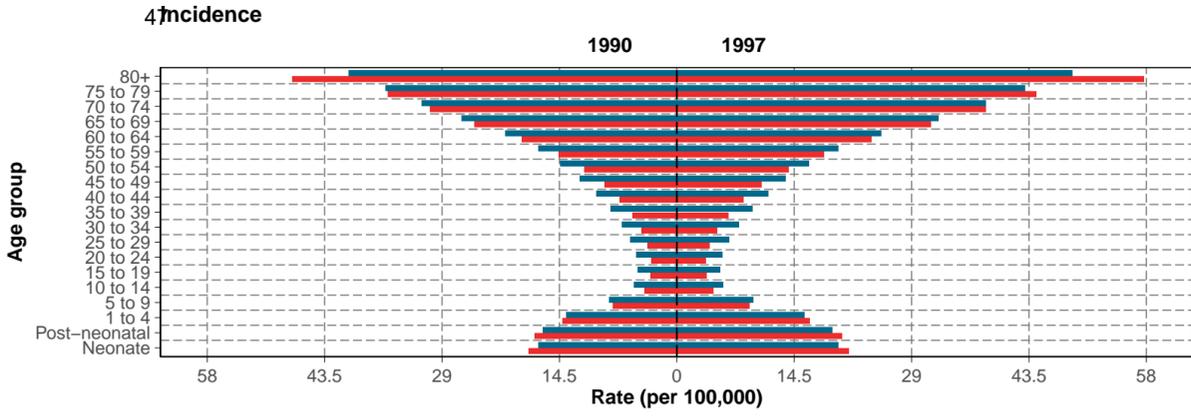
Libya



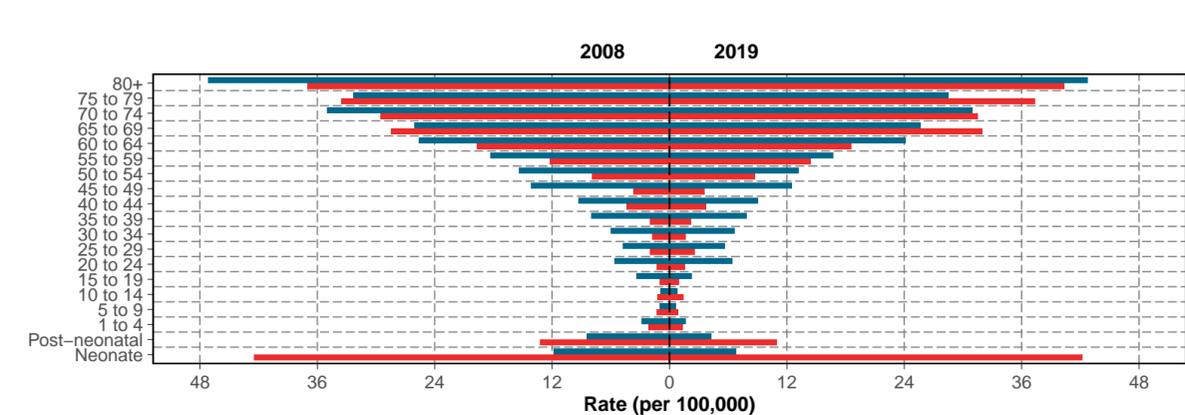
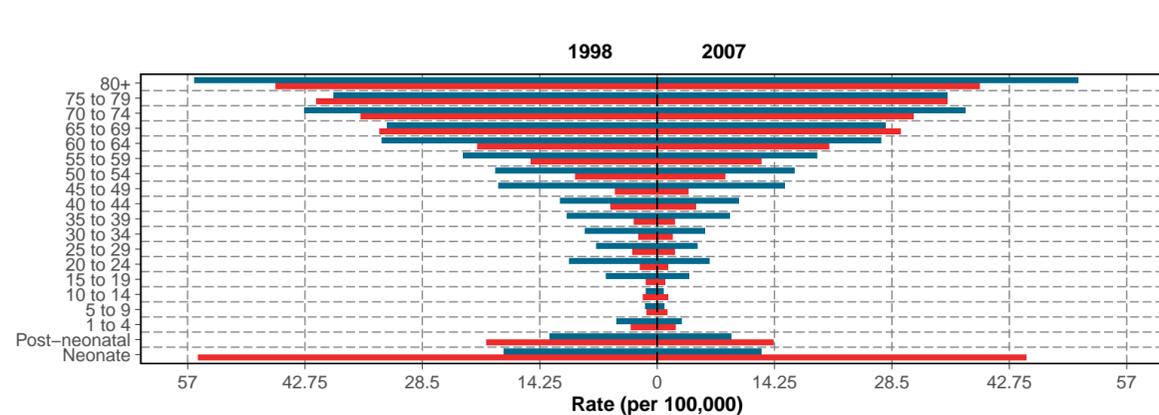
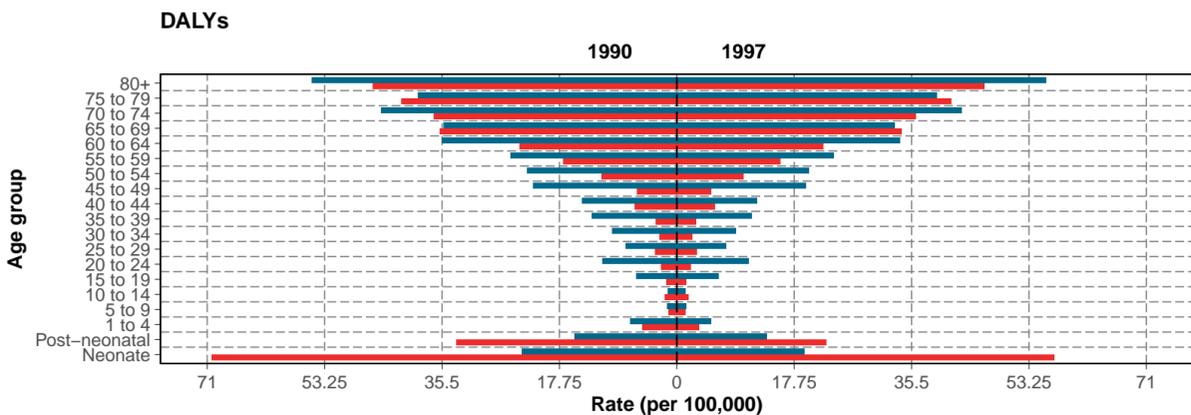
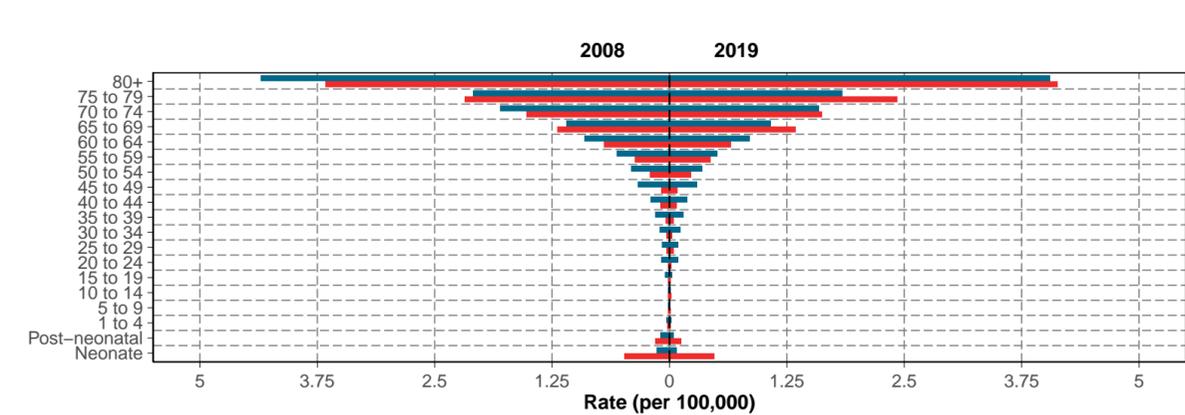
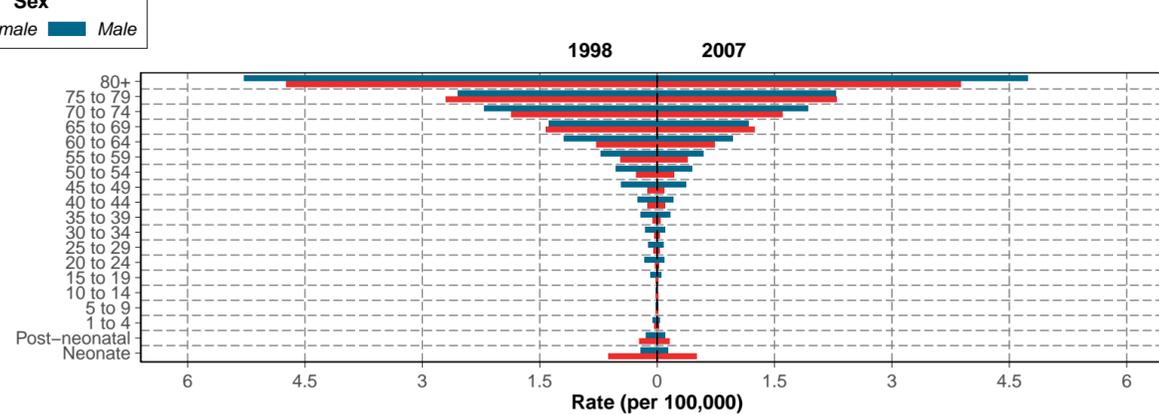
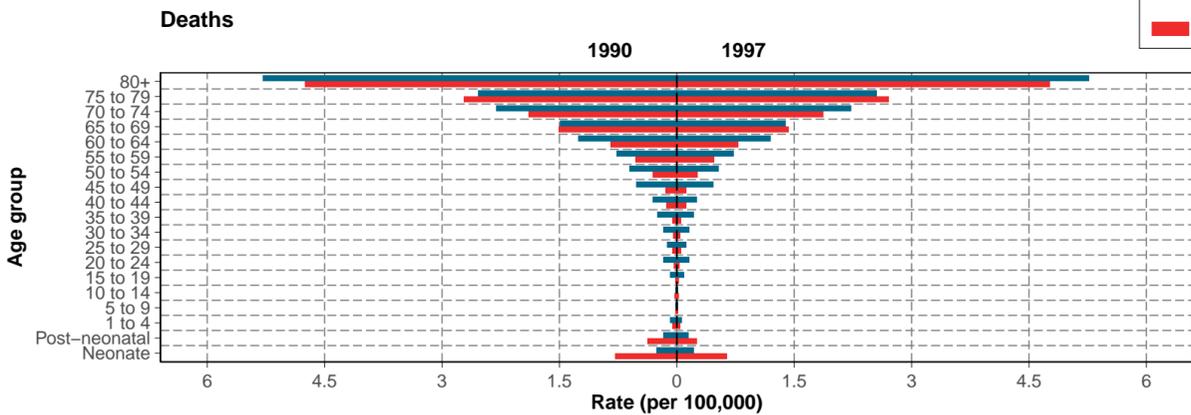
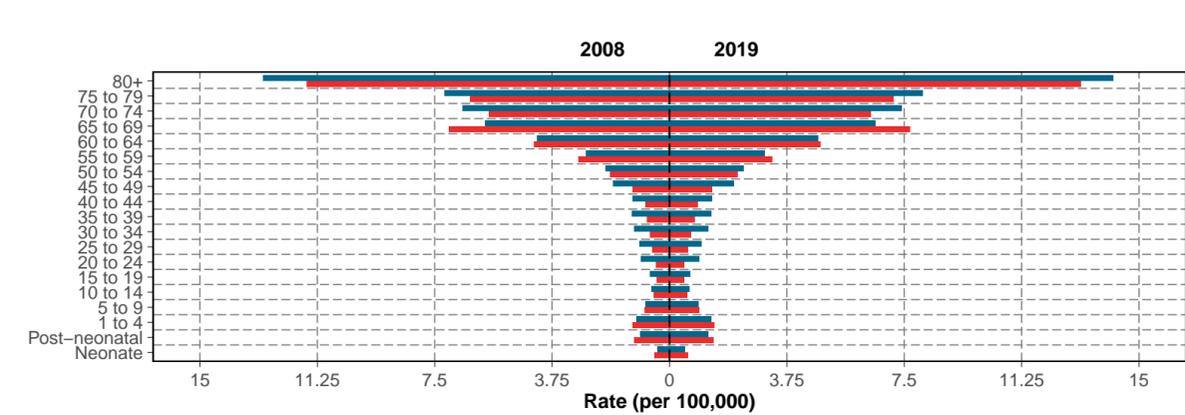
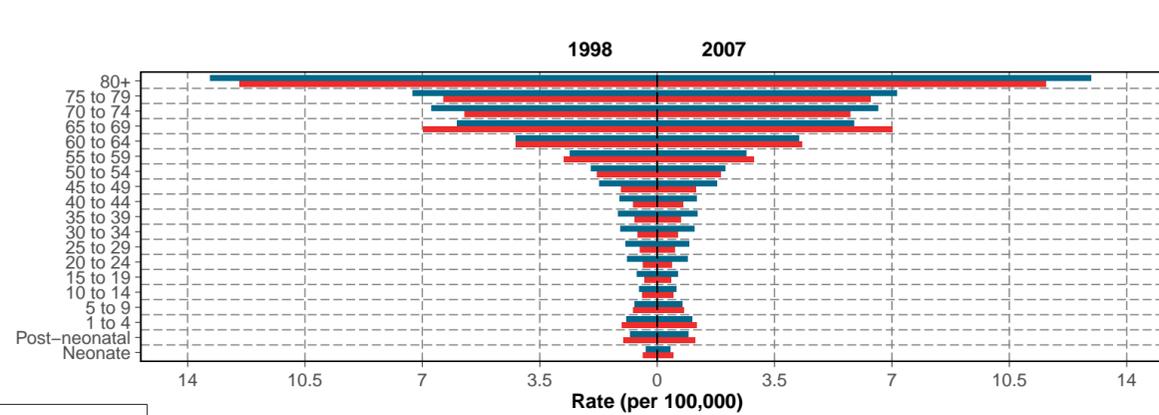
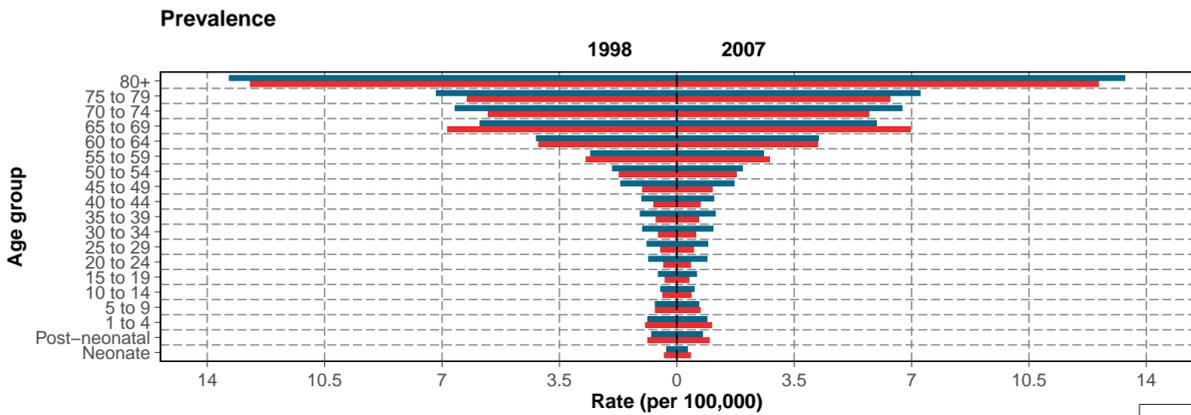
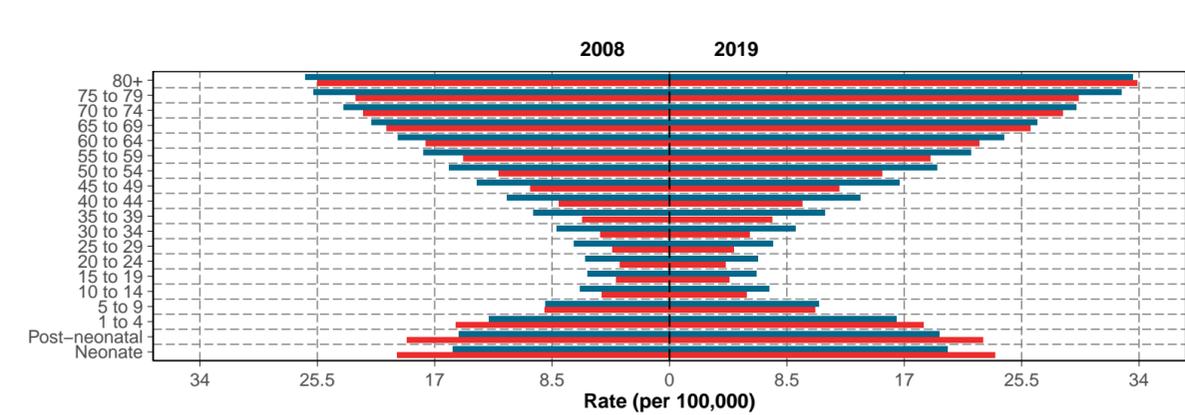
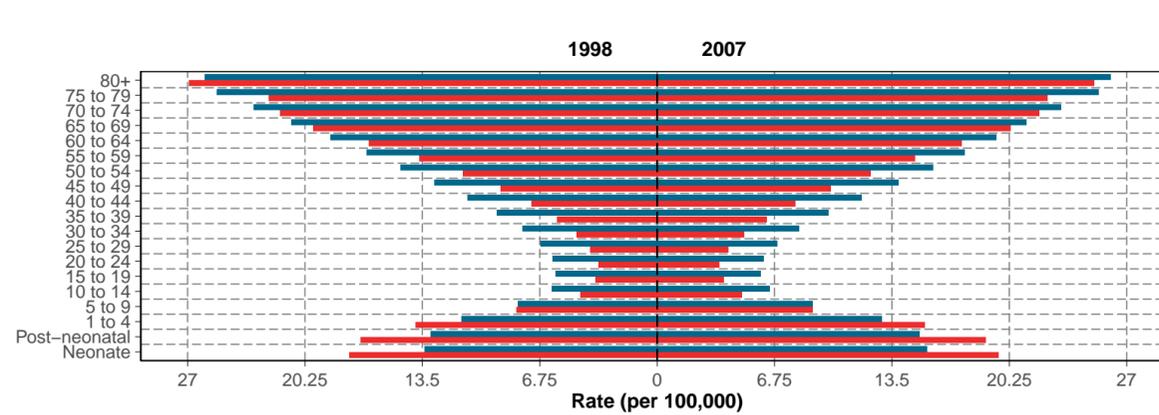
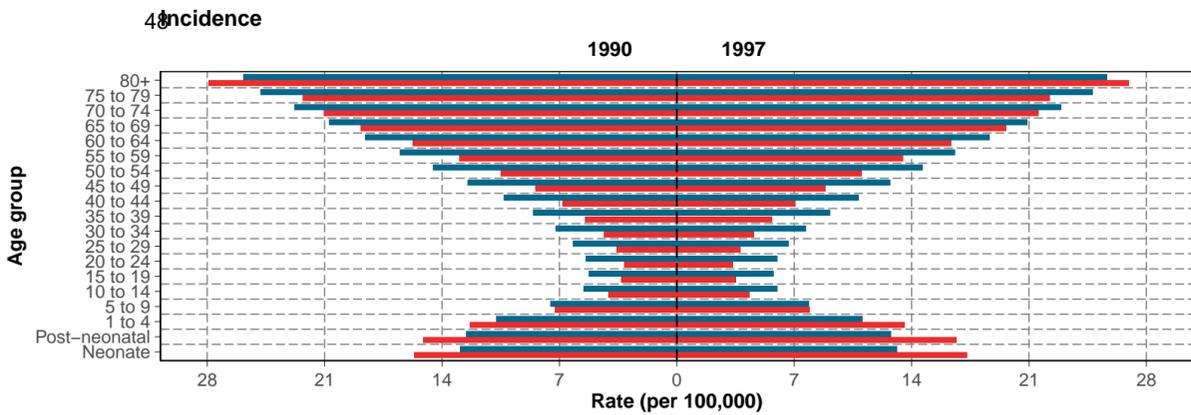
Morocco



Oman

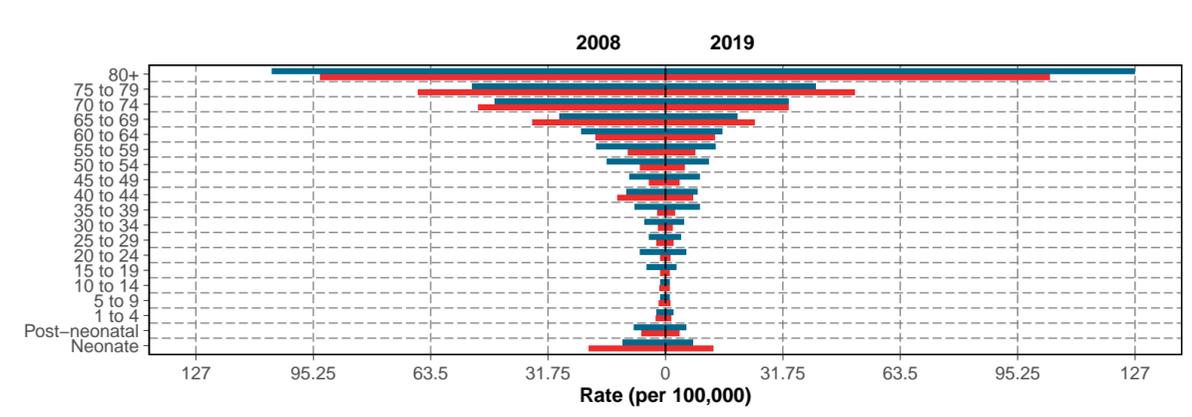
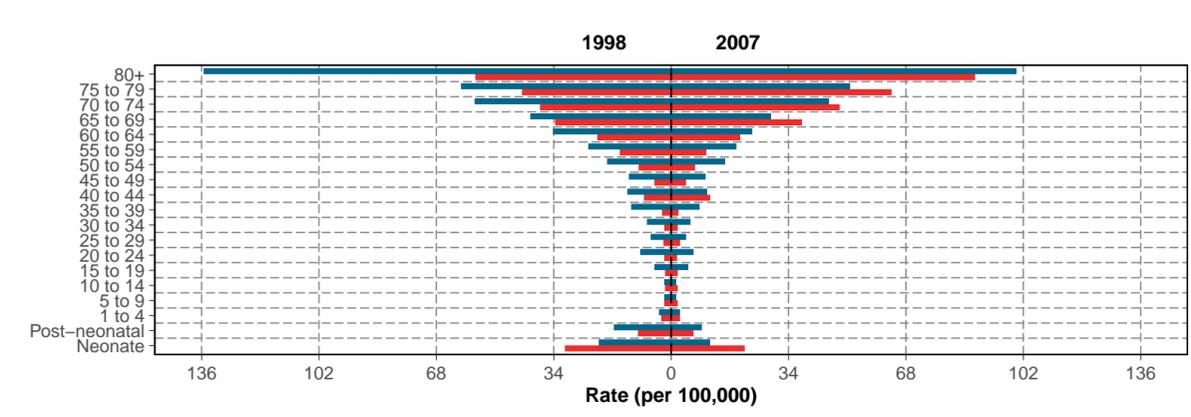
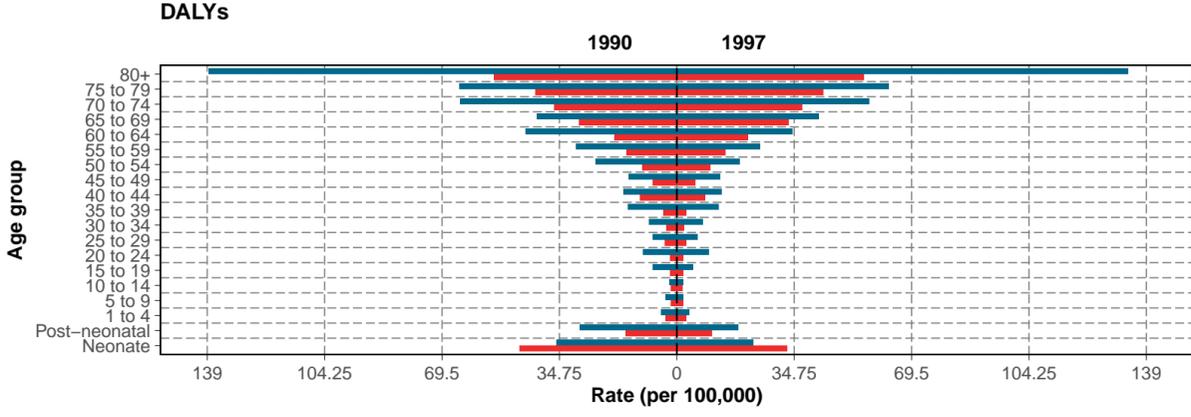
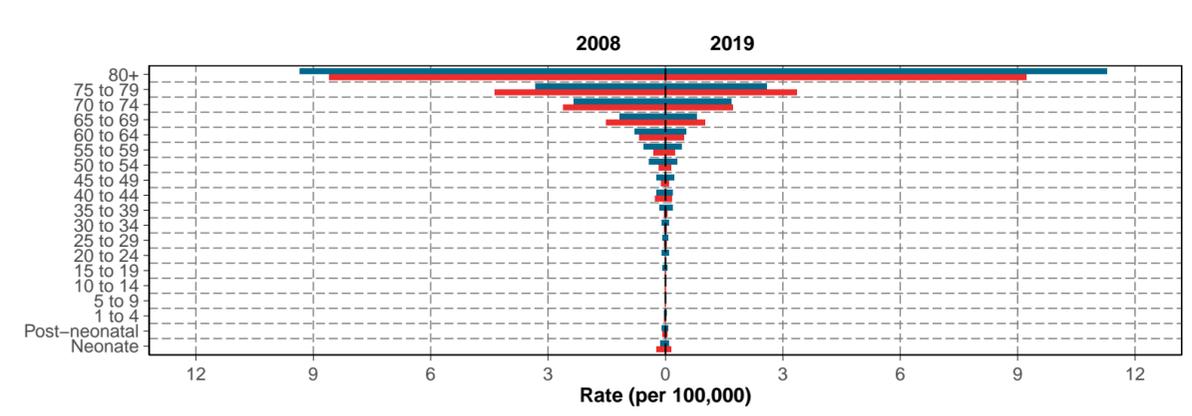
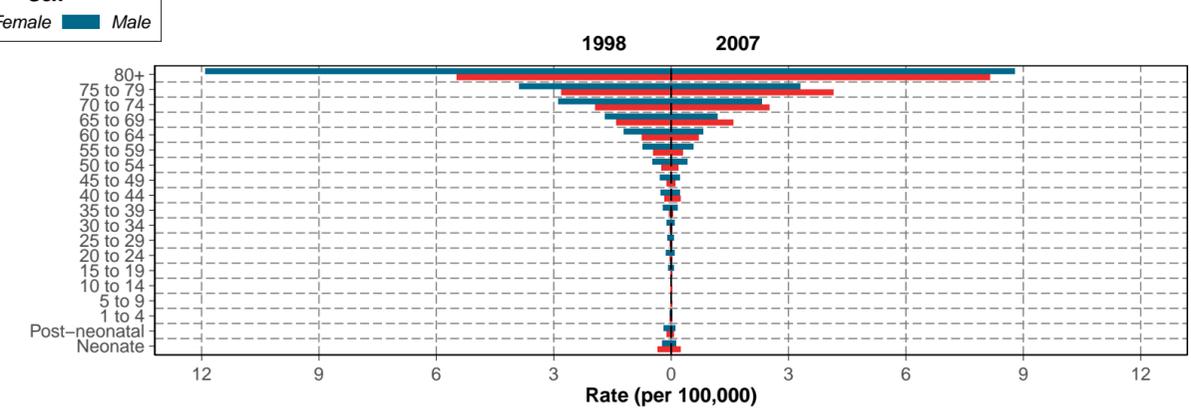
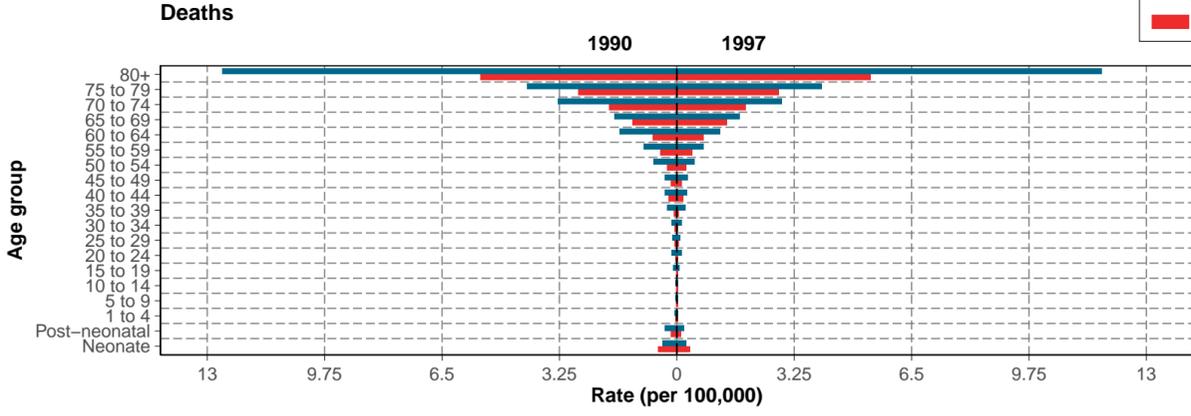
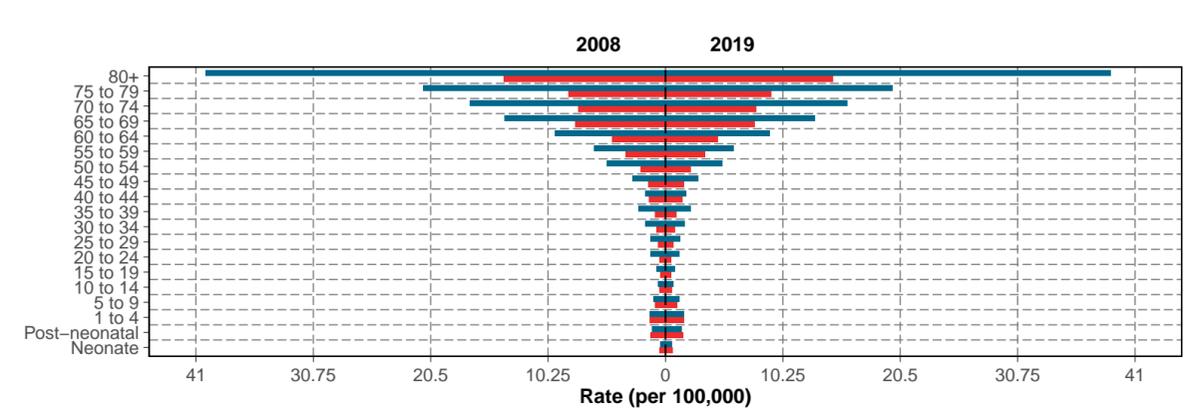
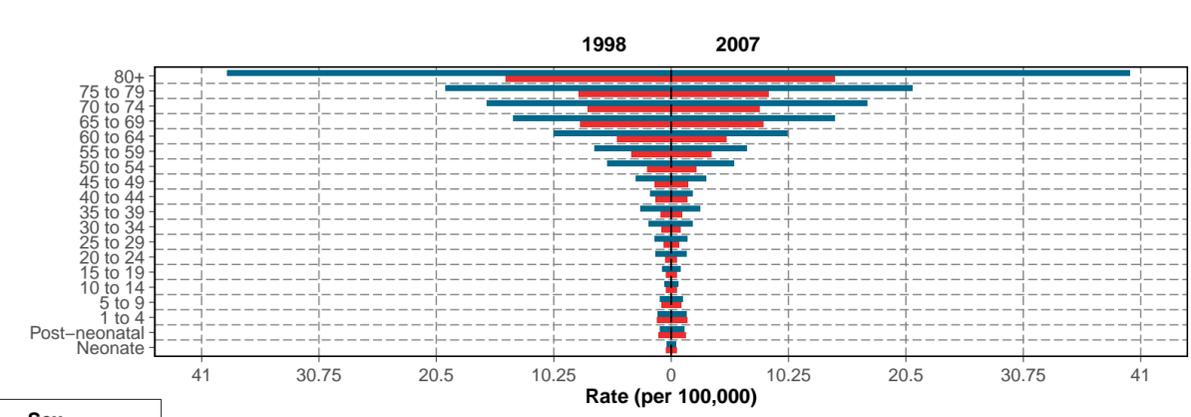
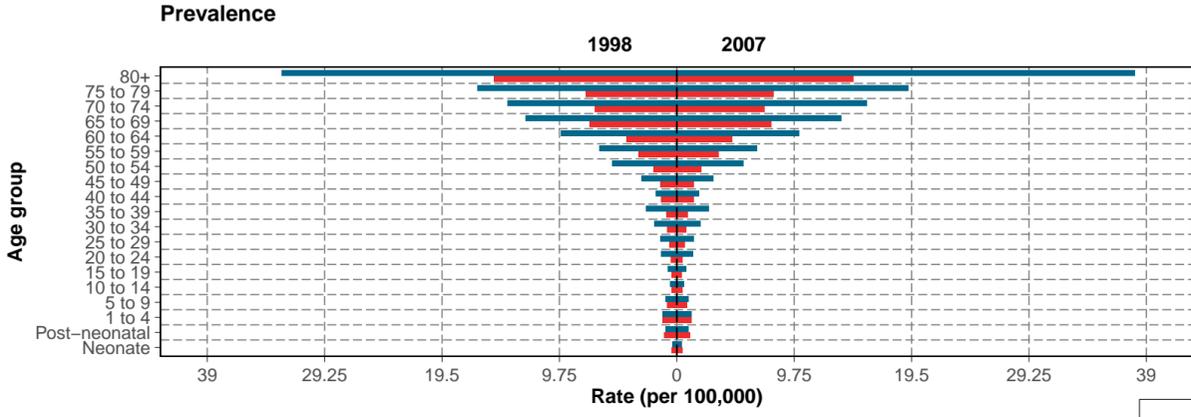
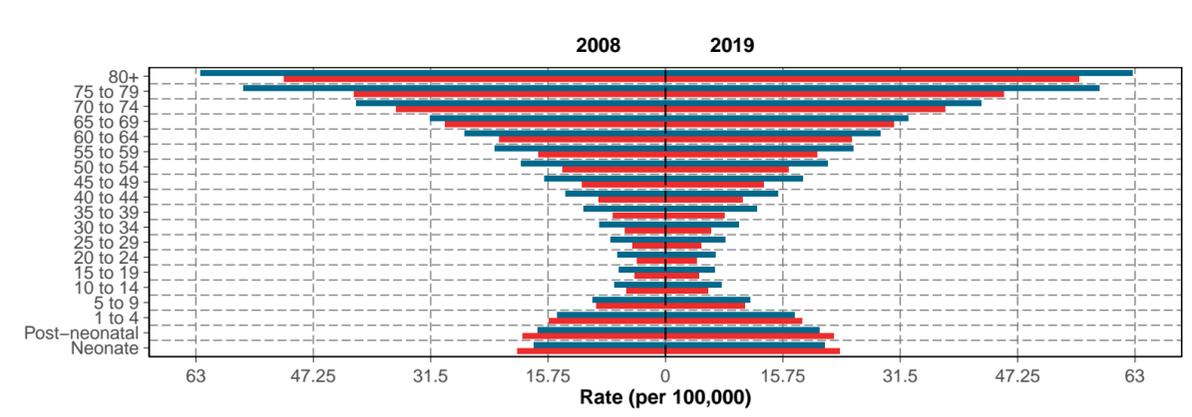
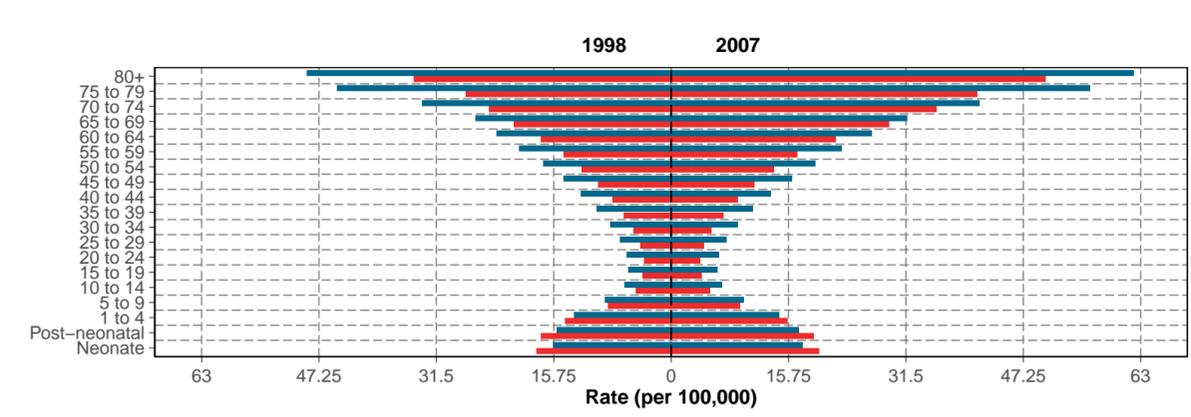
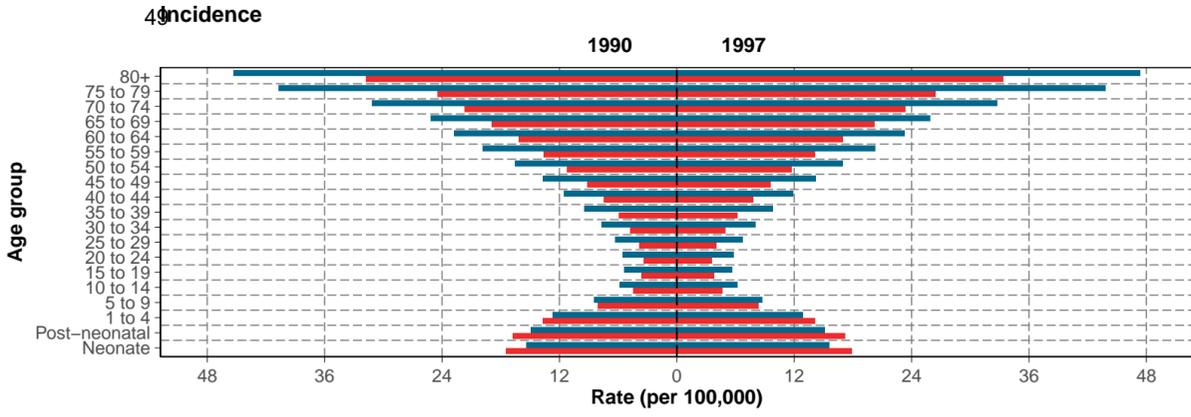


Palestine

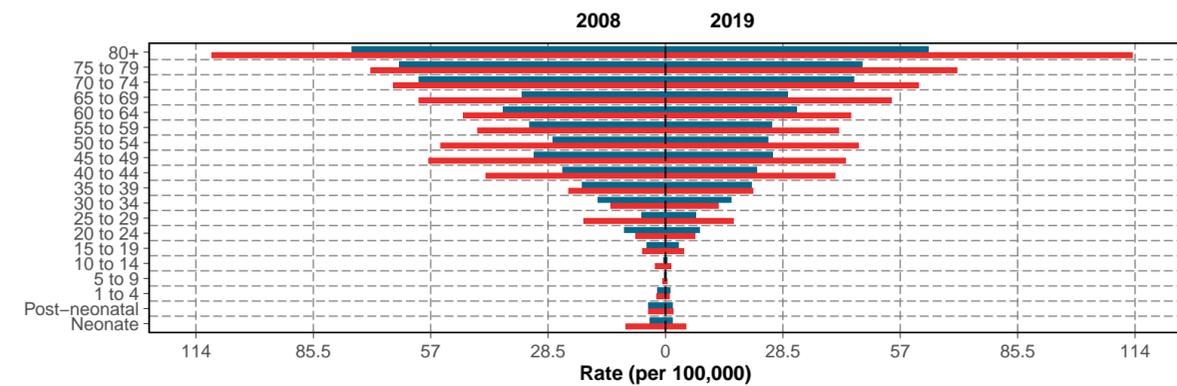
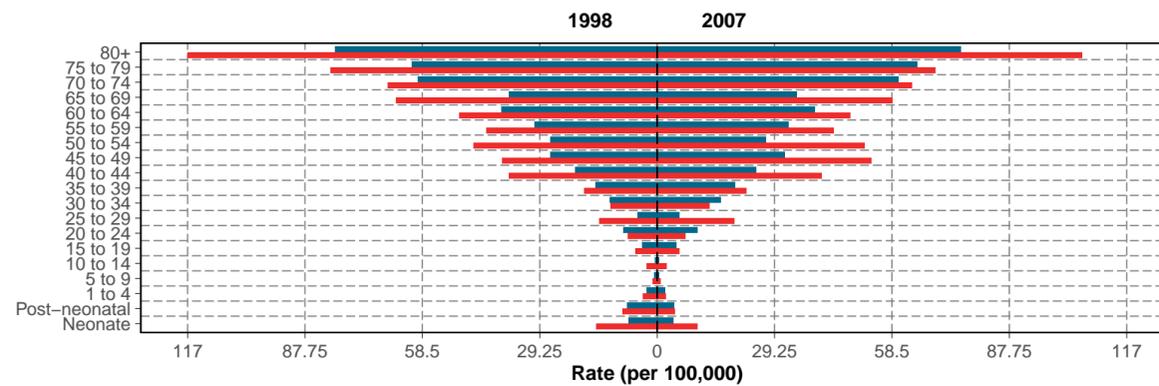
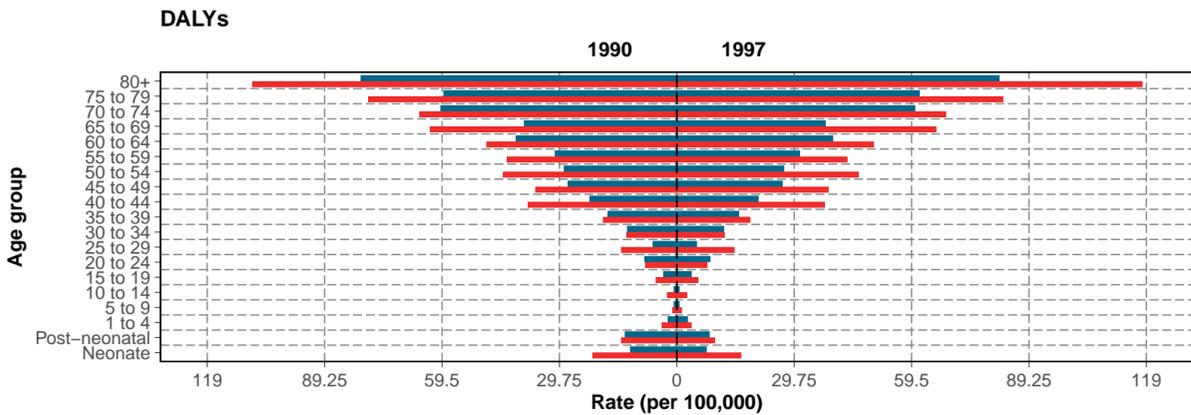
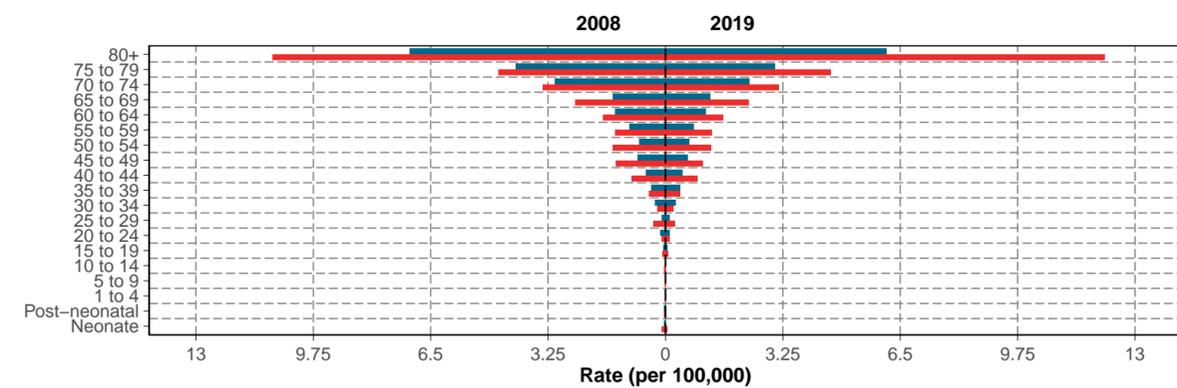
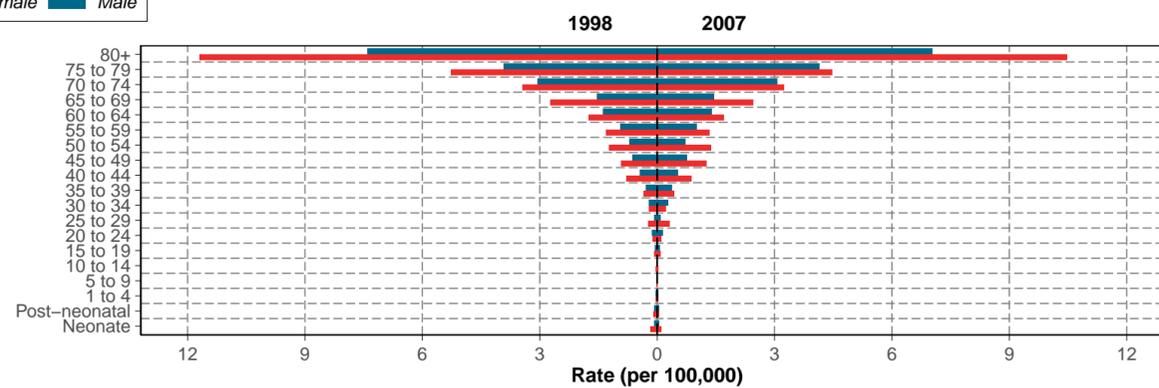
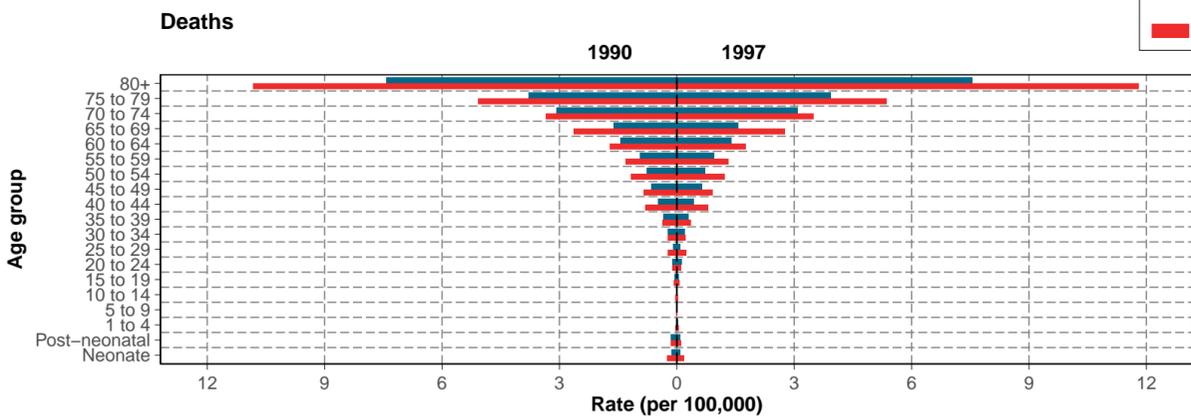
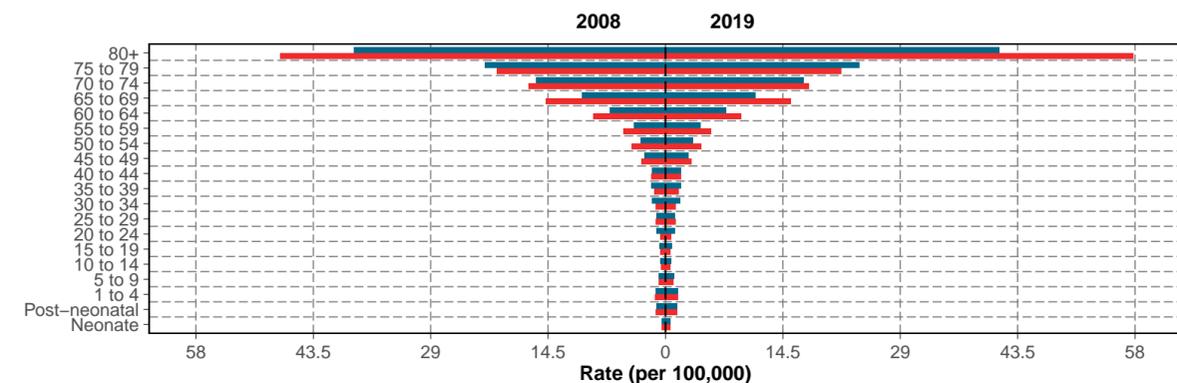
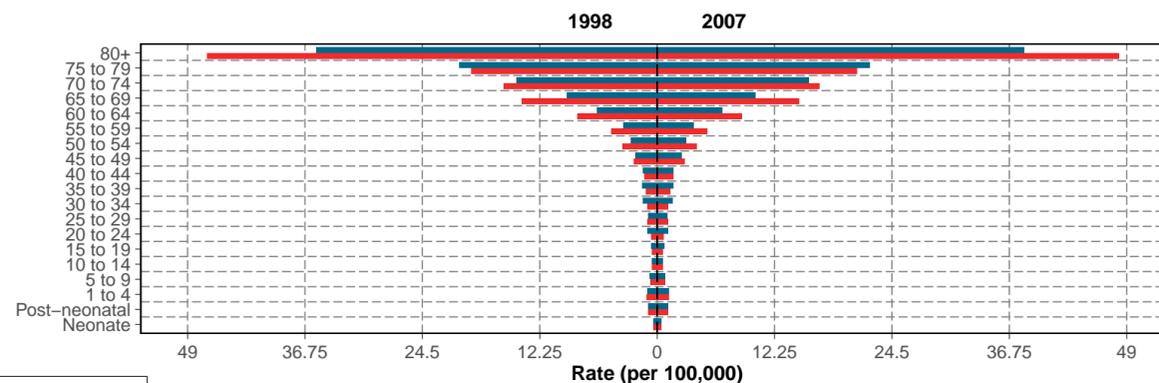
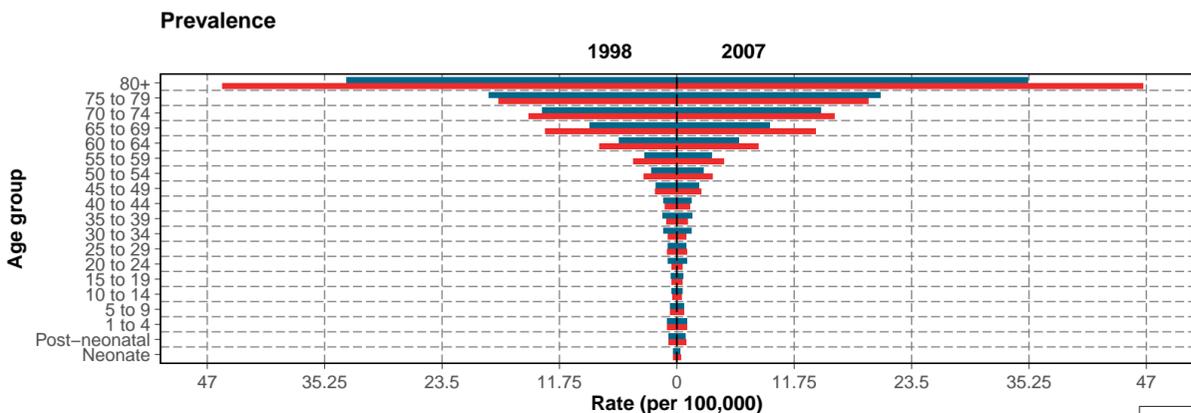
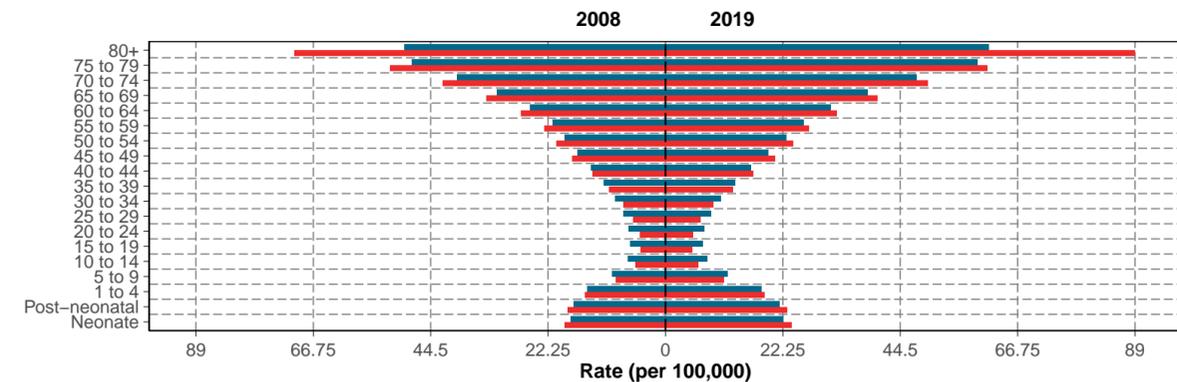
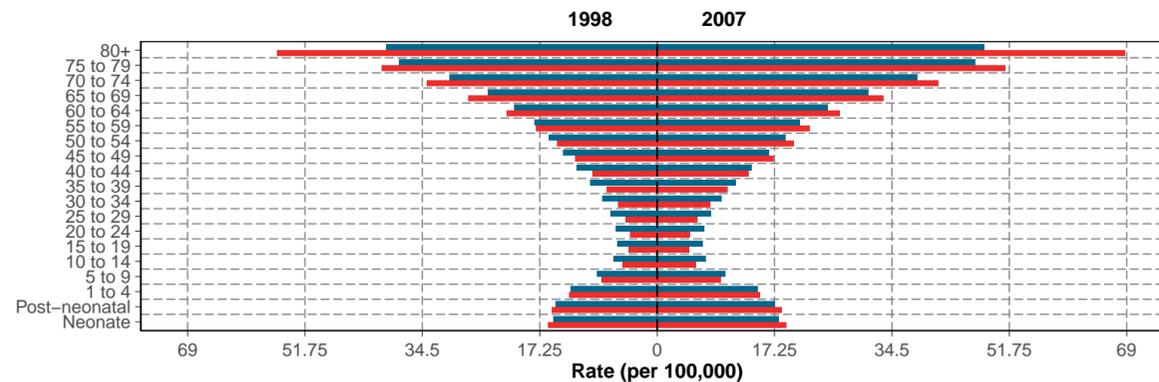
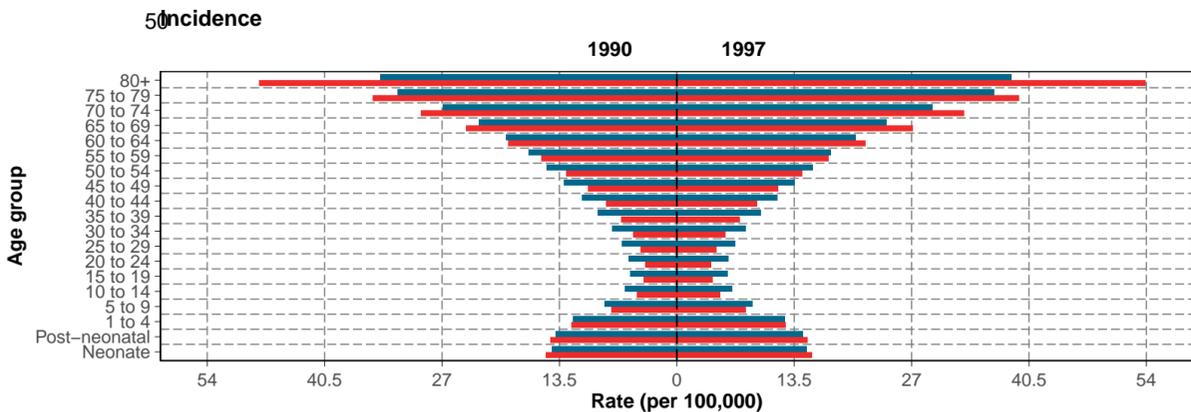


Sex
Female Male

Qatar



Saudi Arabia

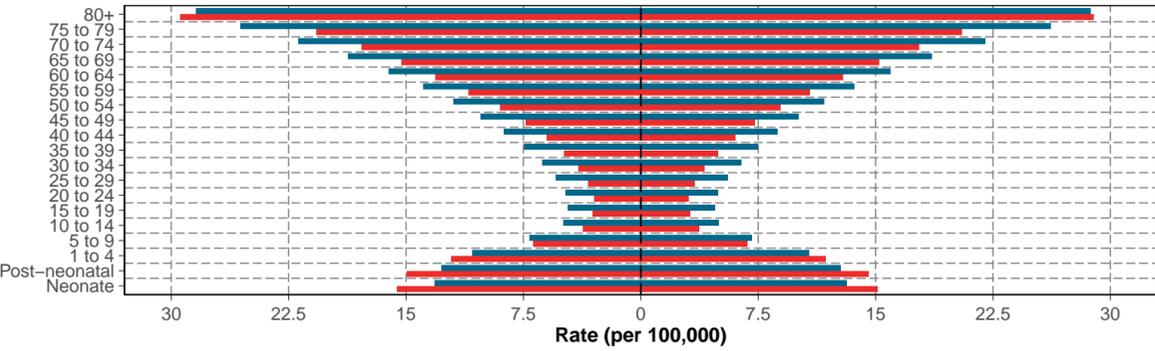


Sex
Female Male

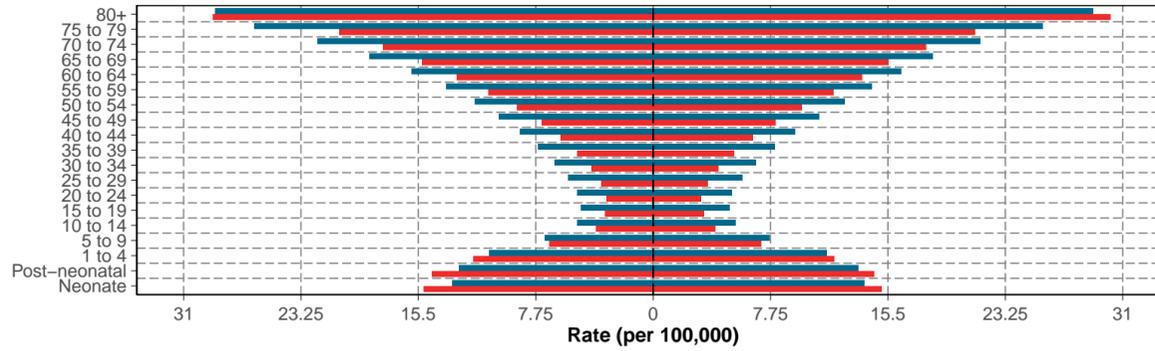
Sudan

Incidence

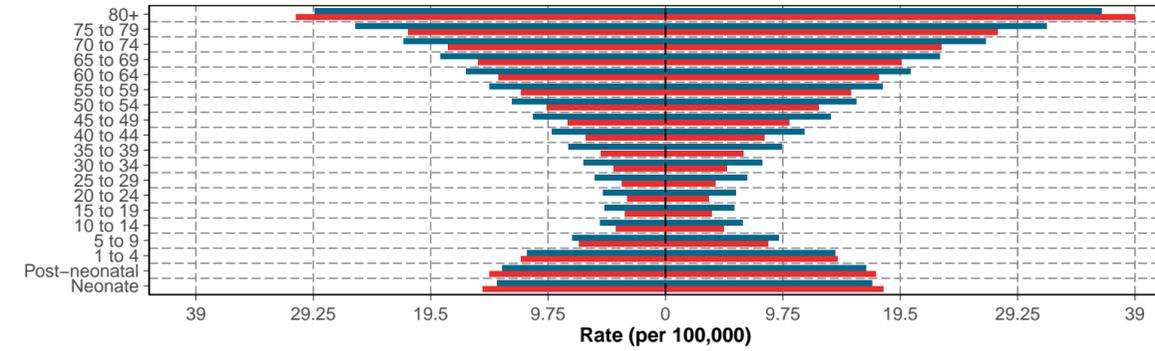
1990 1997



1998 2007

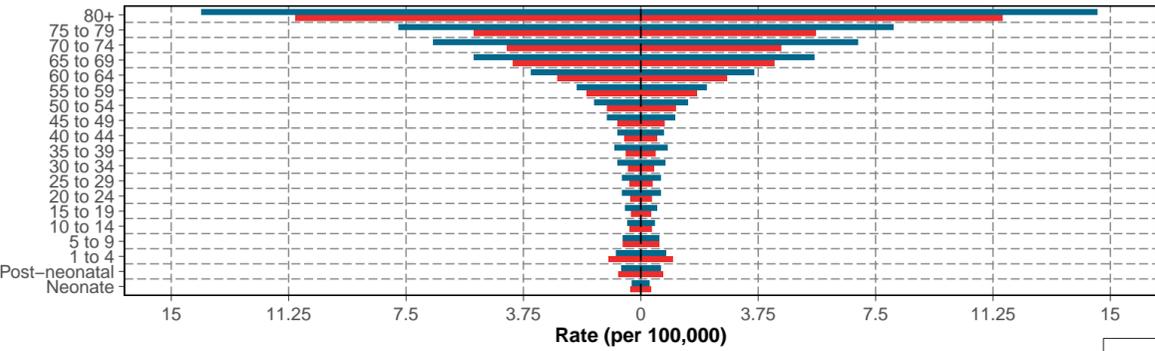


2008 2019

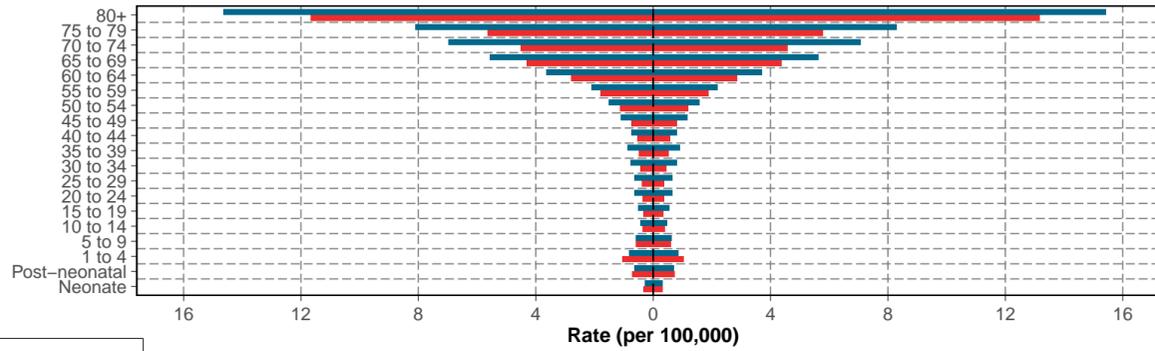


Prevalence

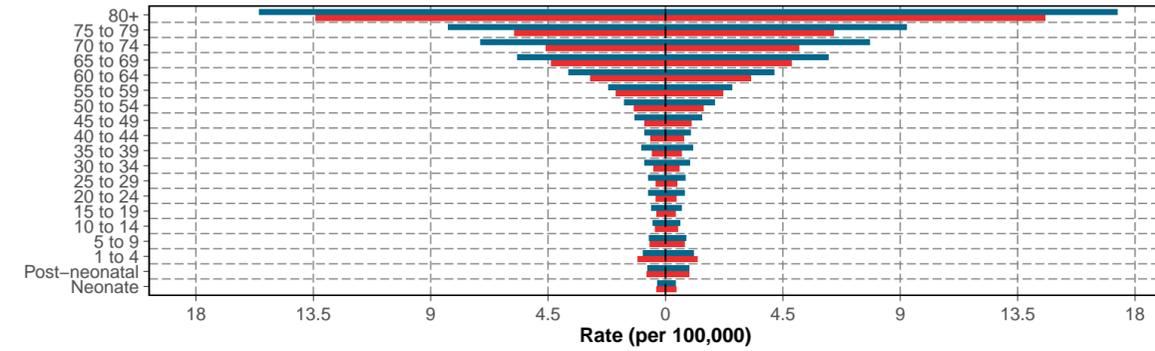
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1998 2007

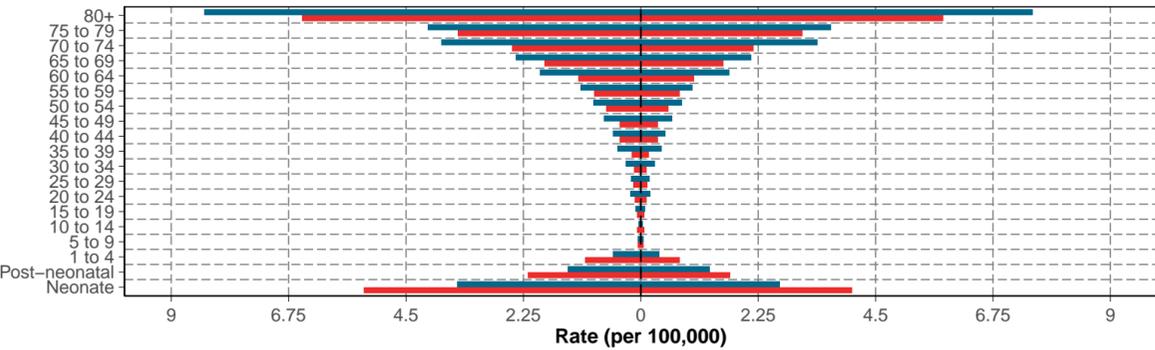


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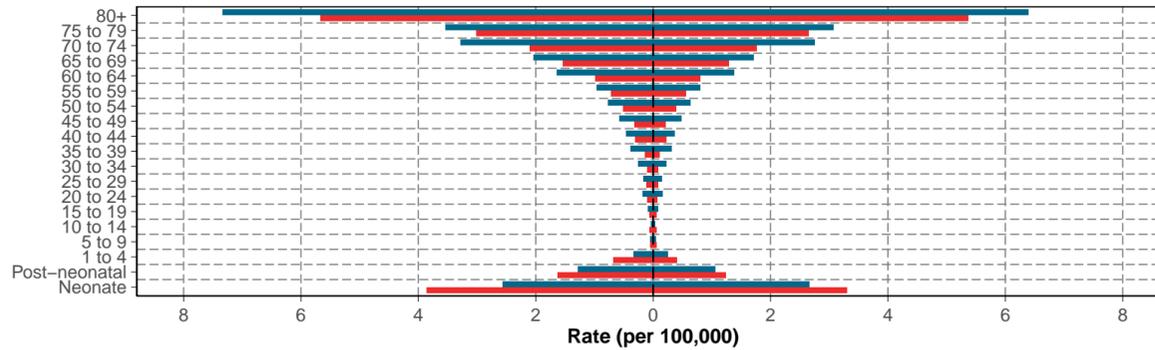


Deaths

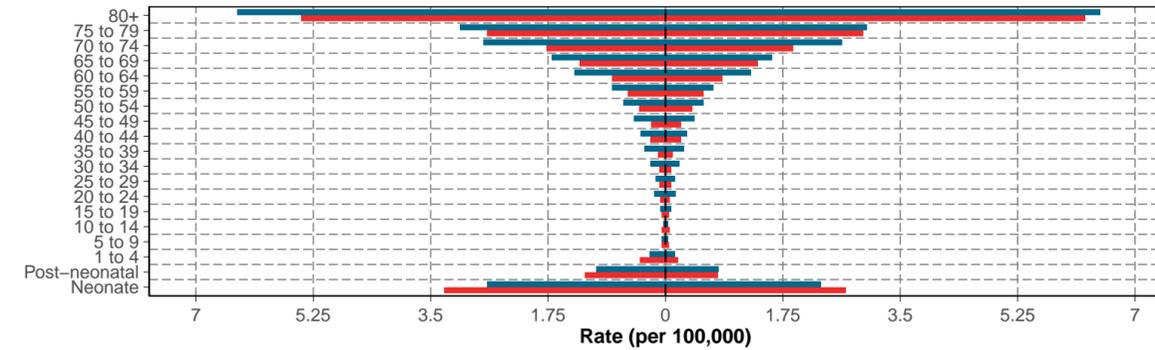
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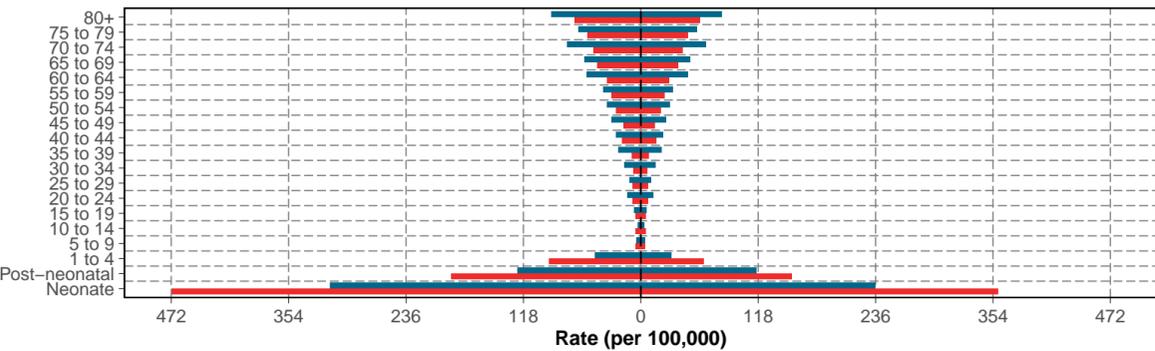


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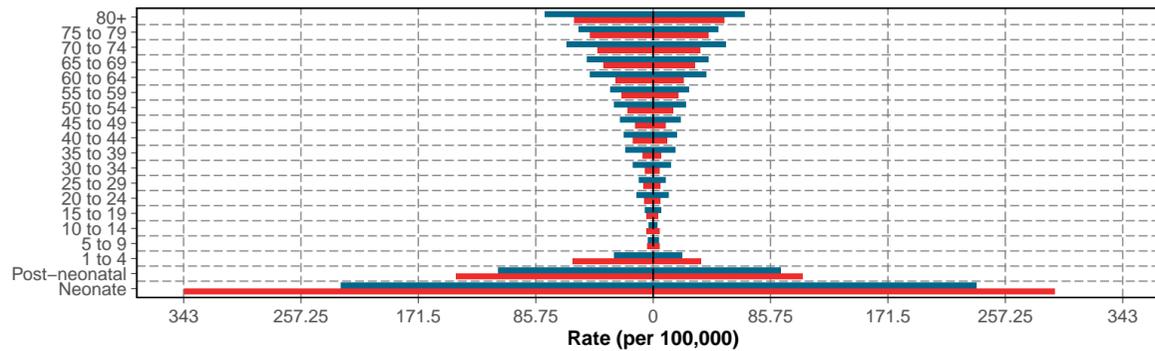


DALYs

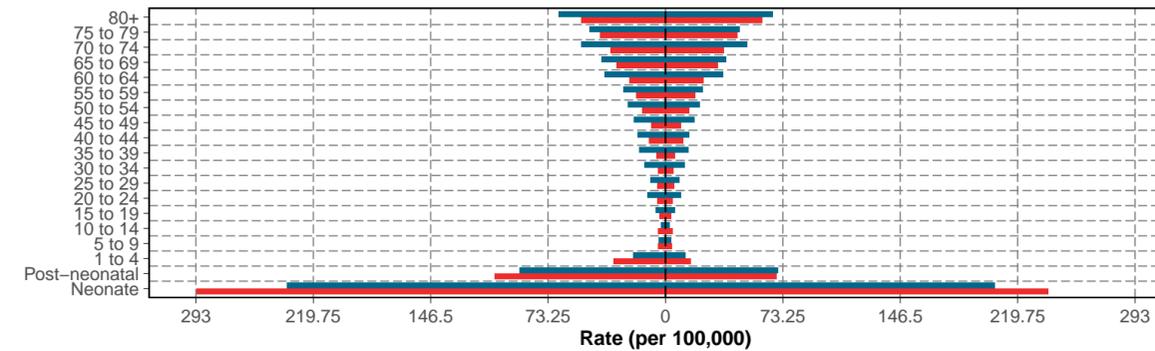
1990 1997



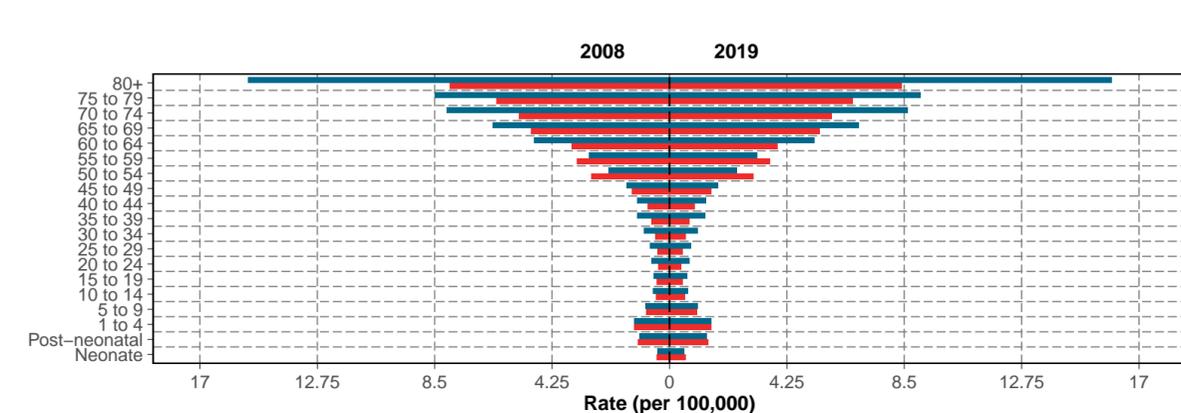
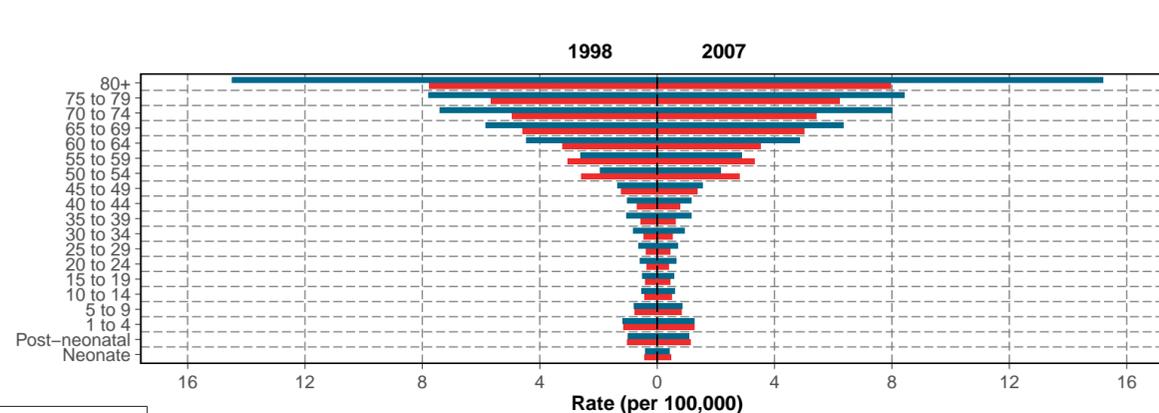
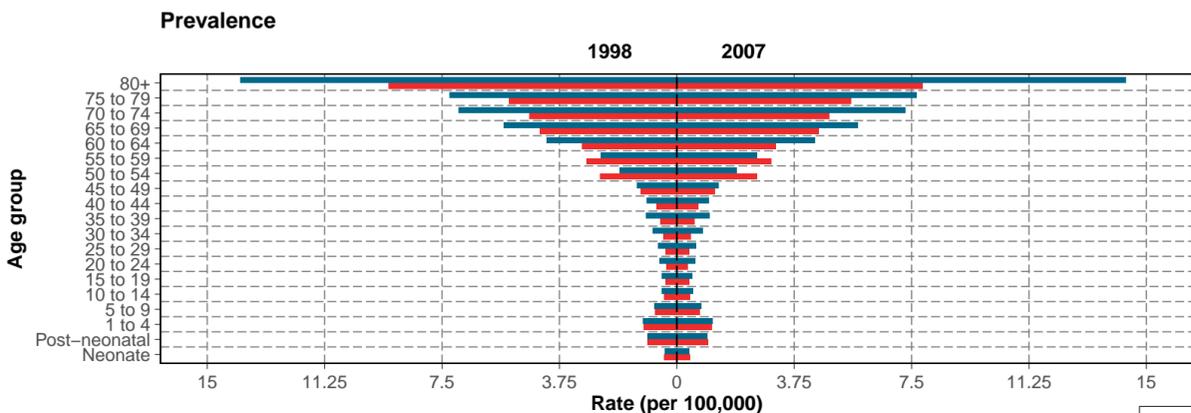
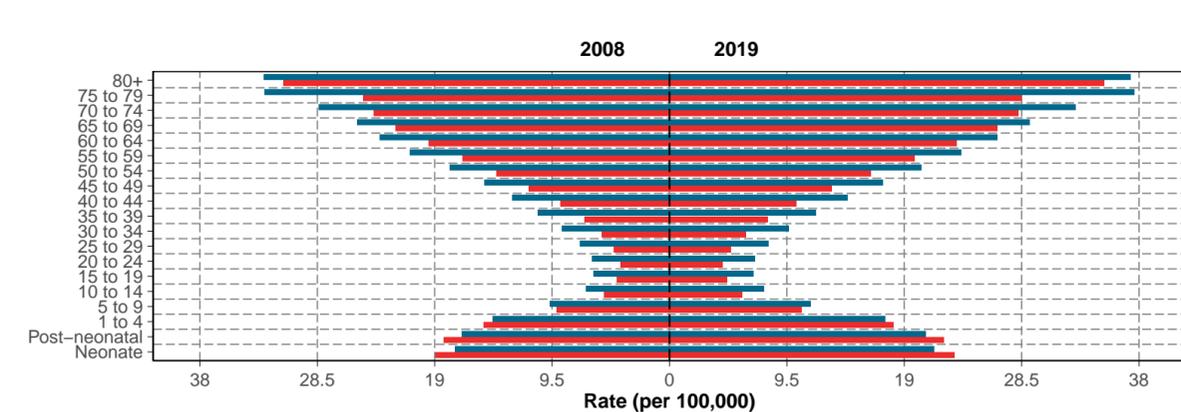
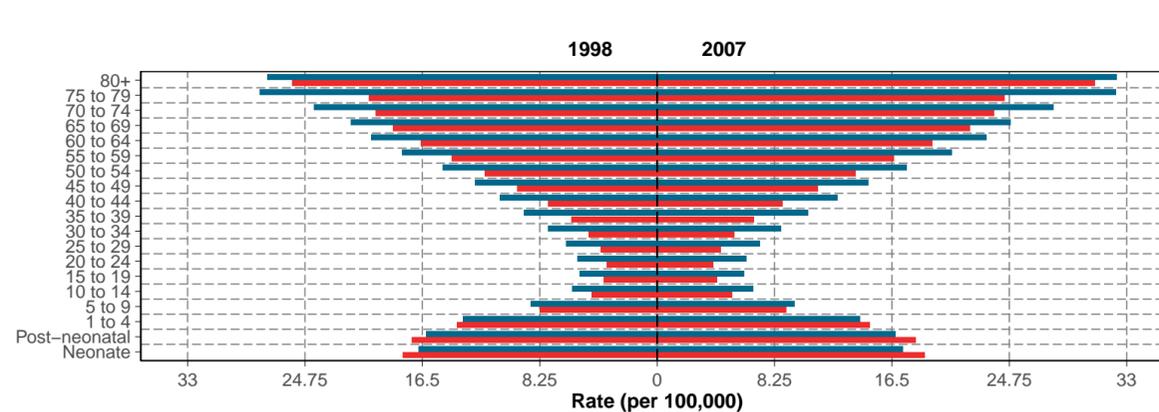
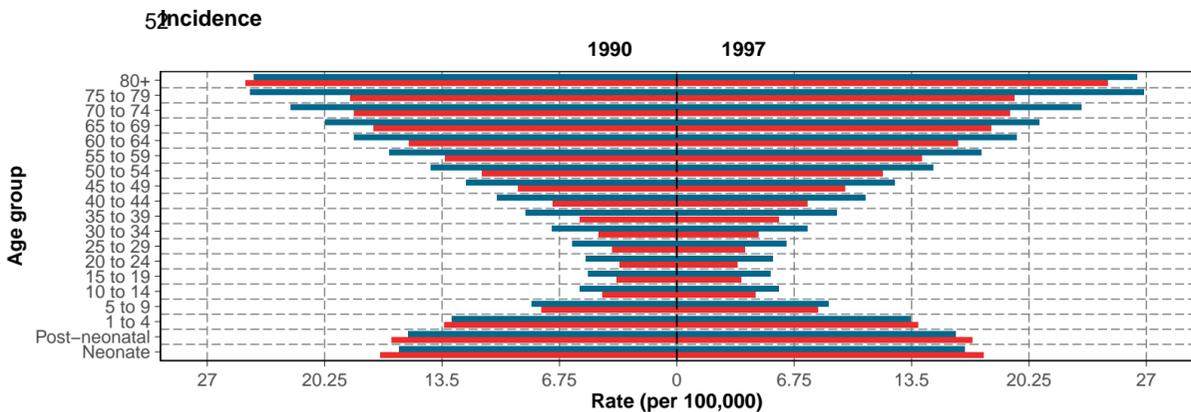
1998 2007



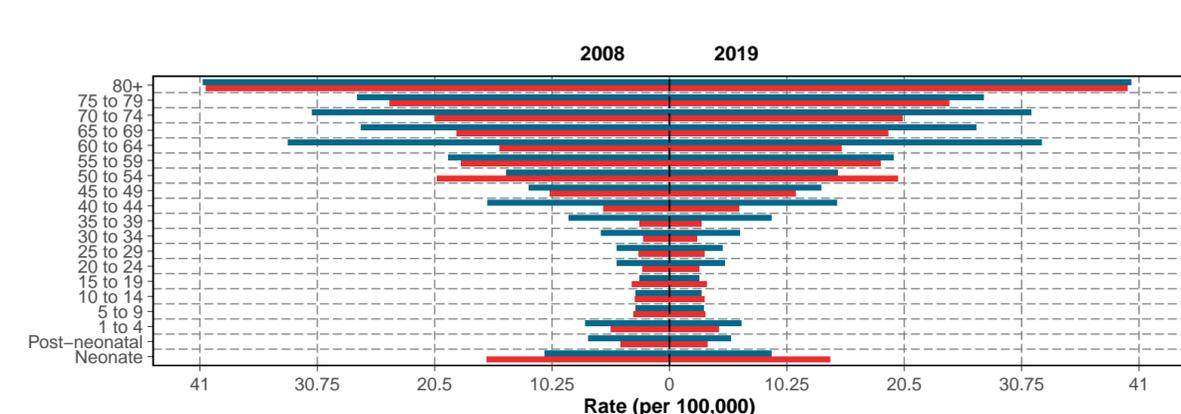
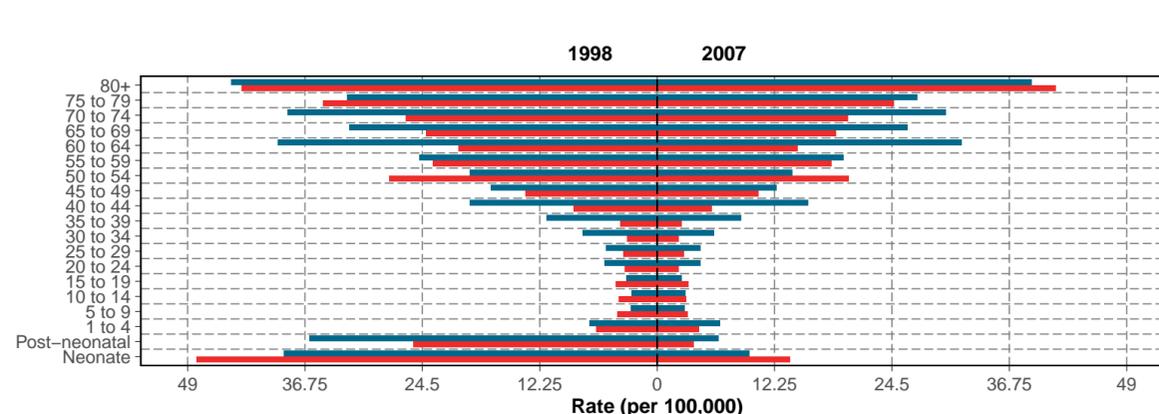
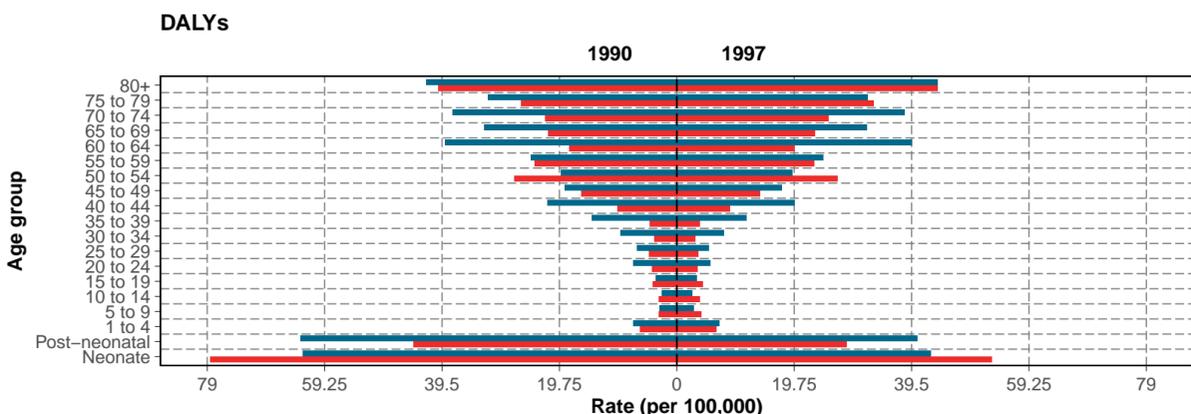
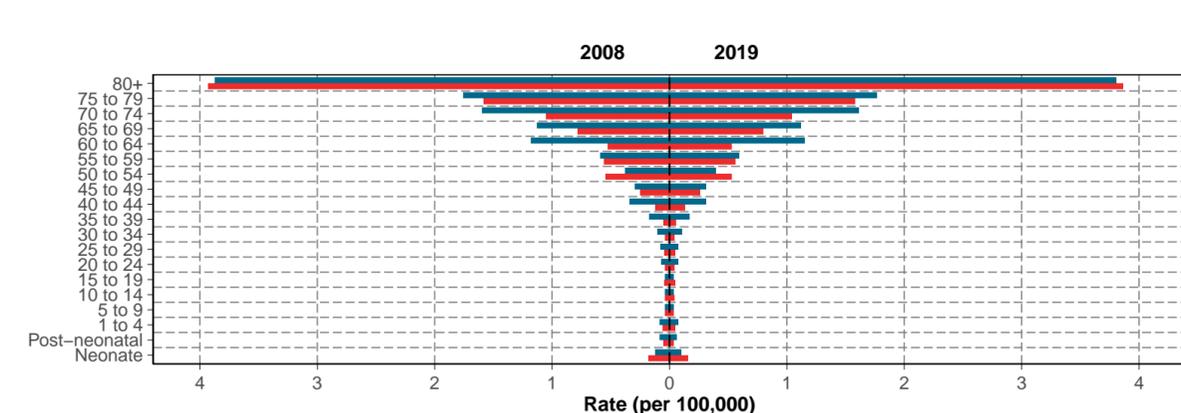
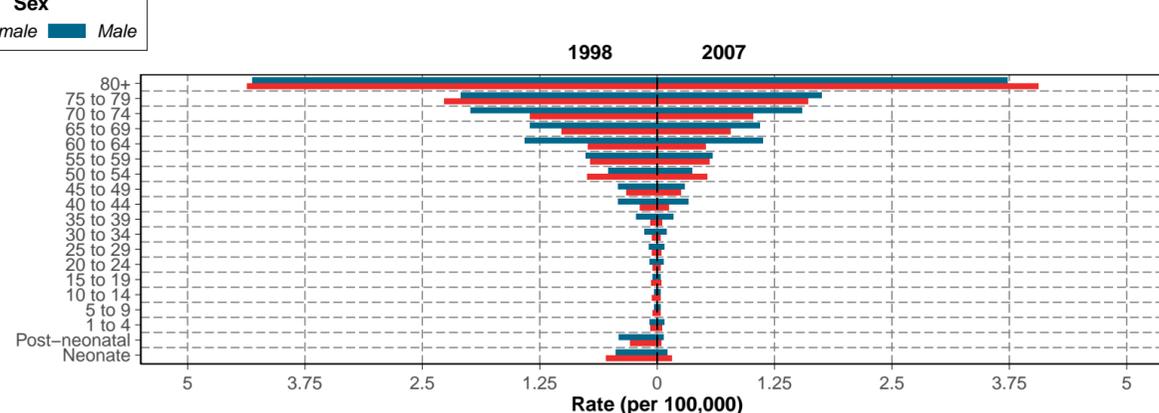
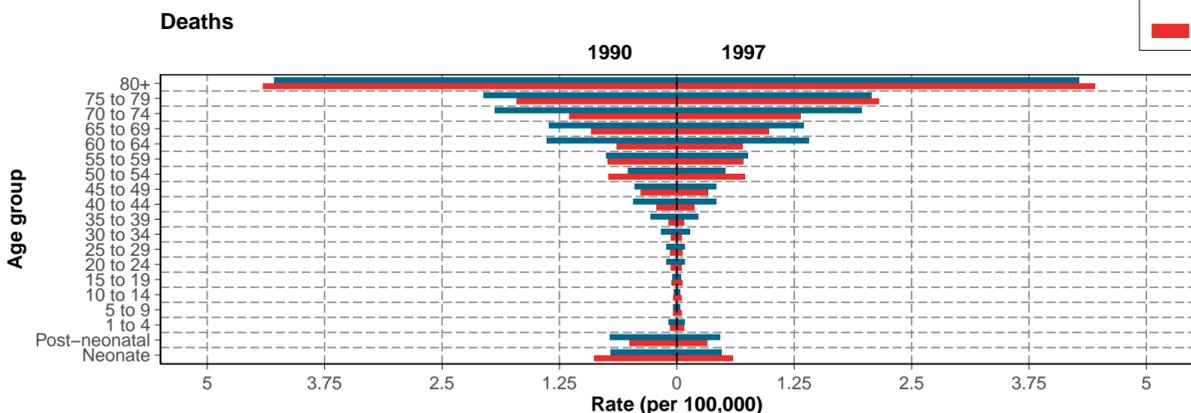
2008 2019



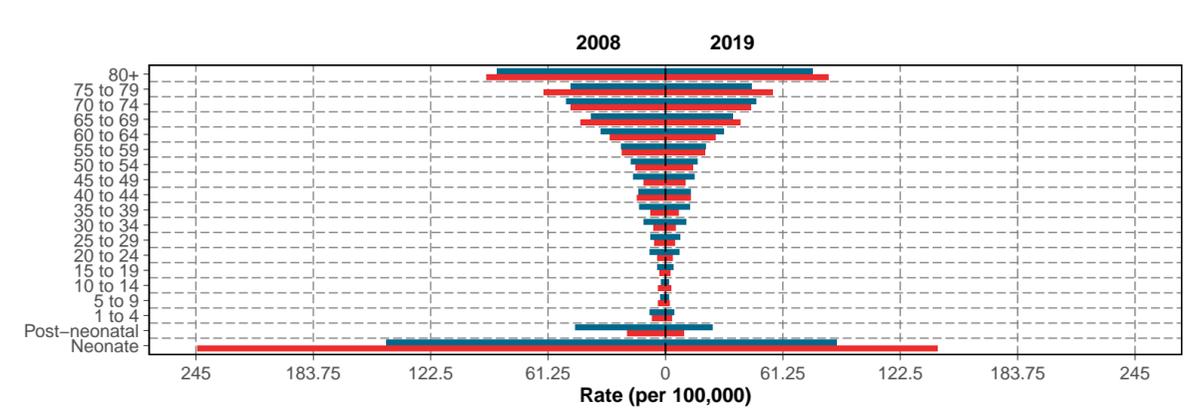
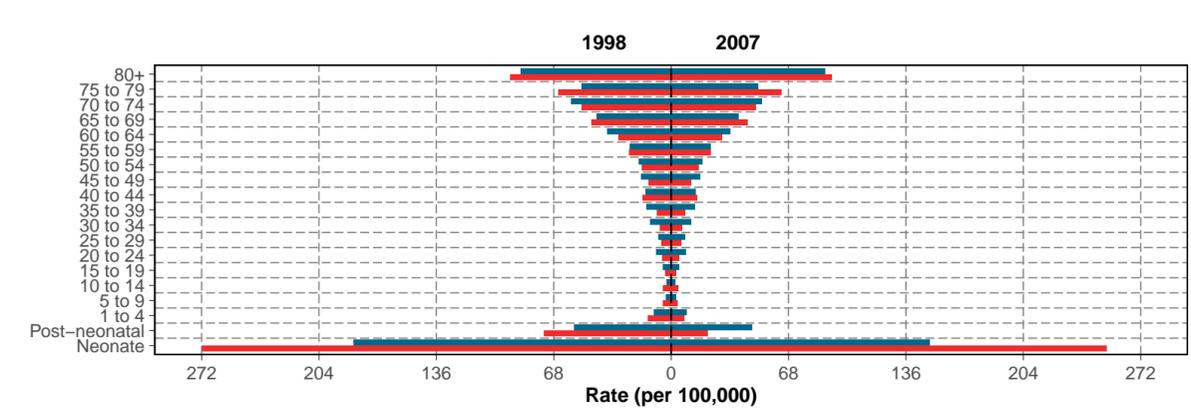
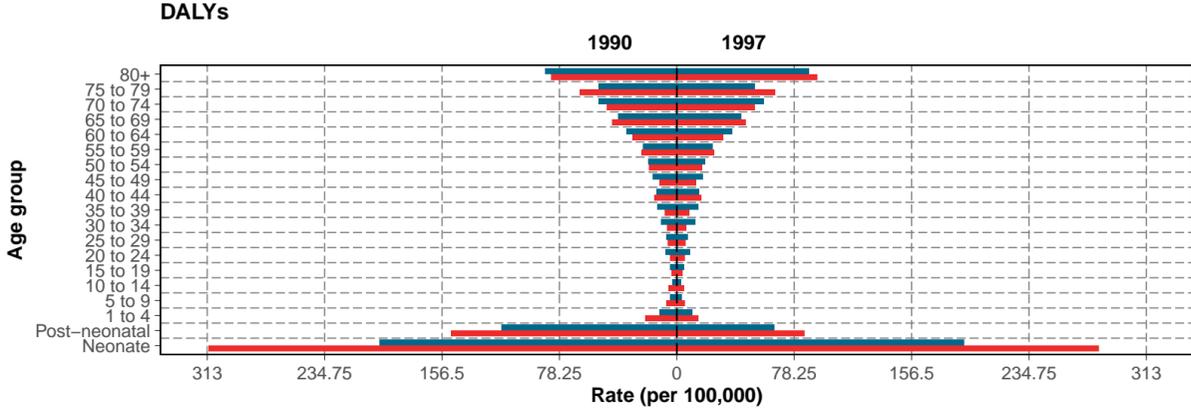
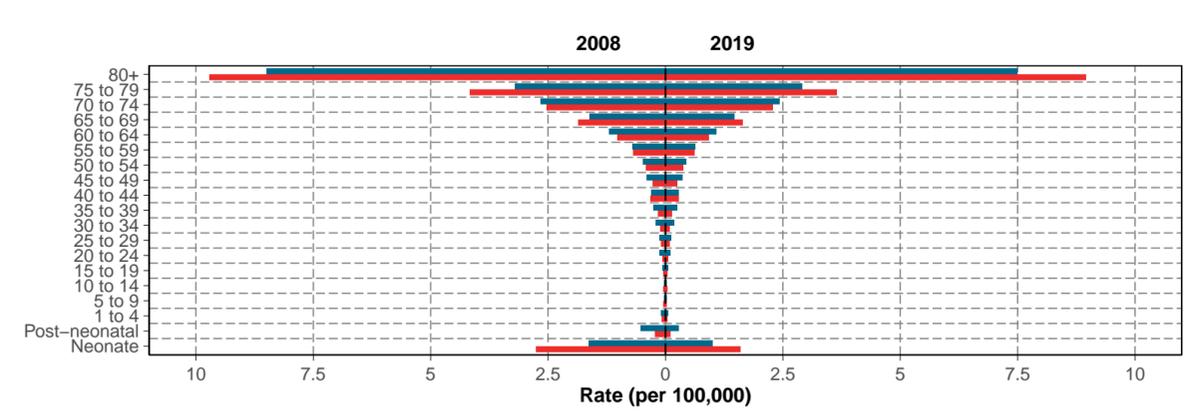
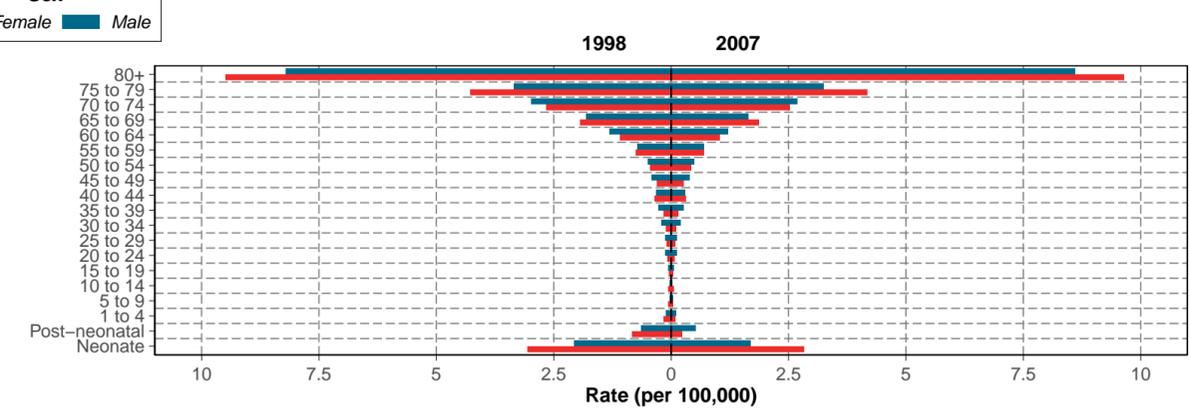
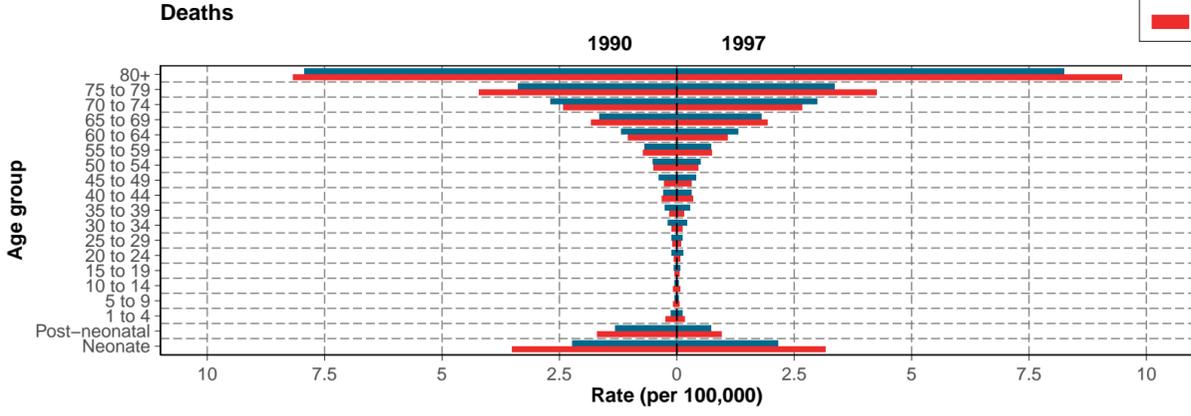
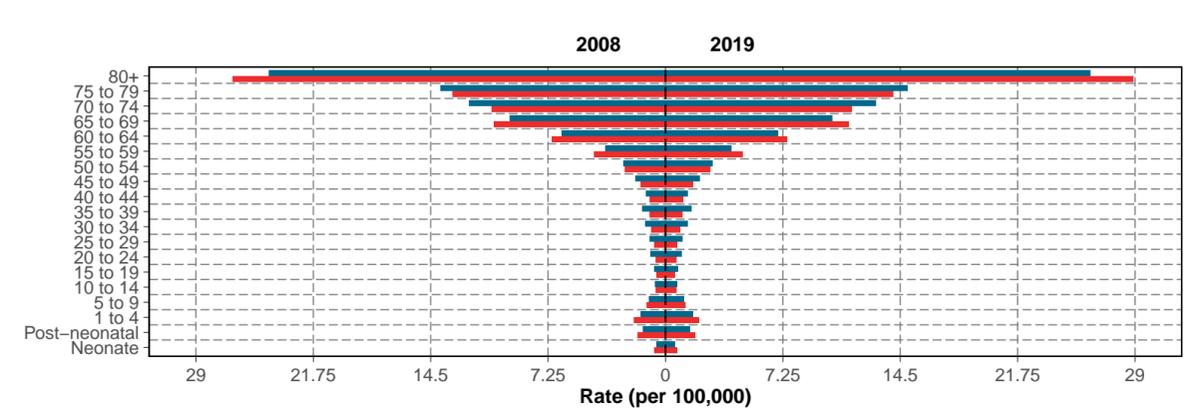
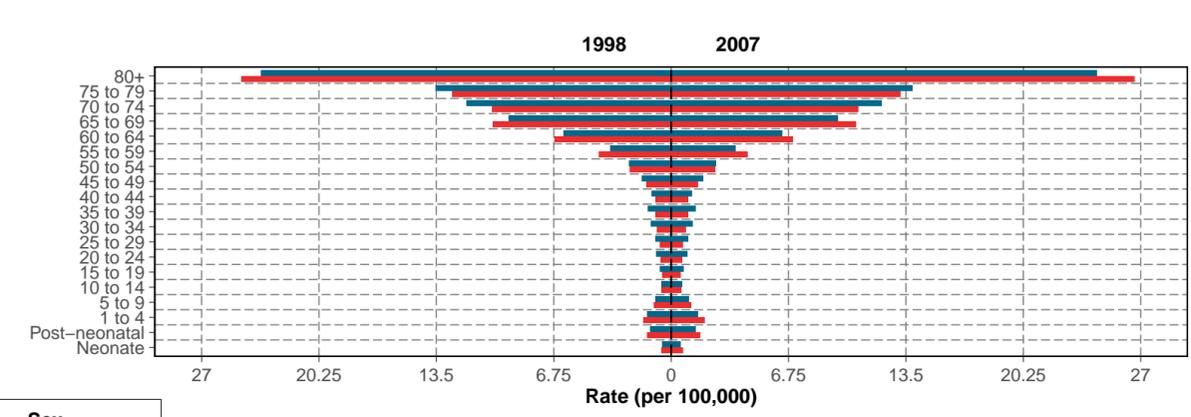
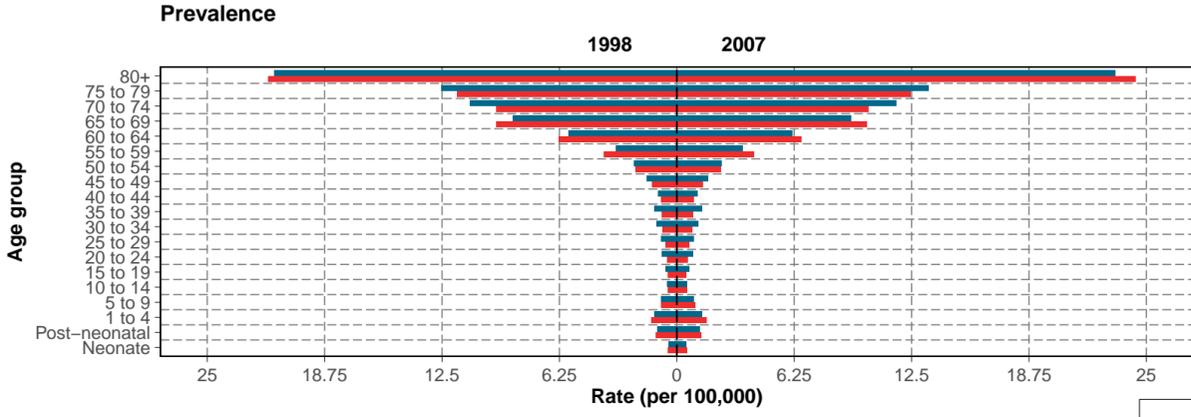
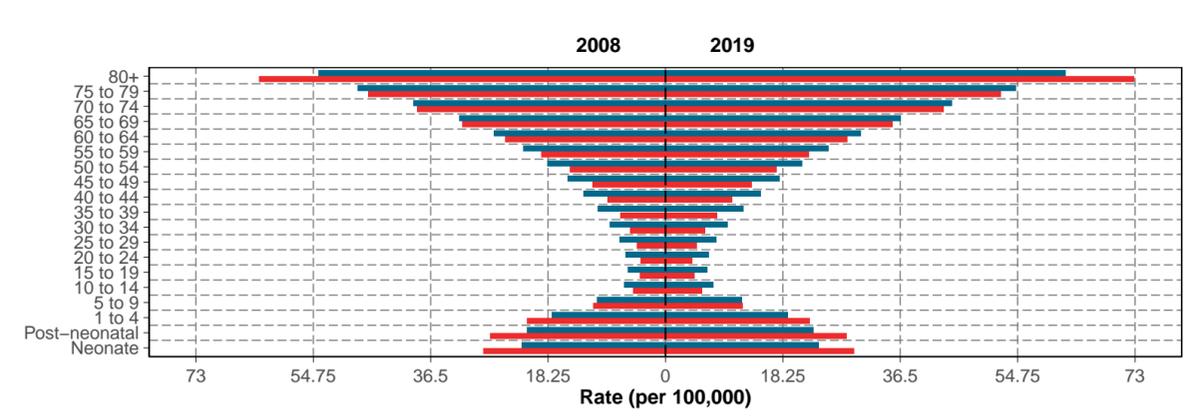
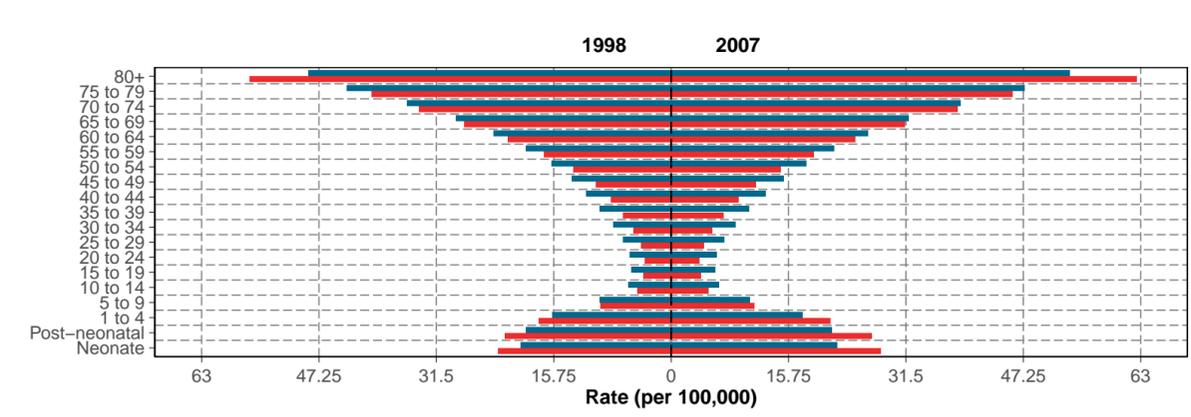
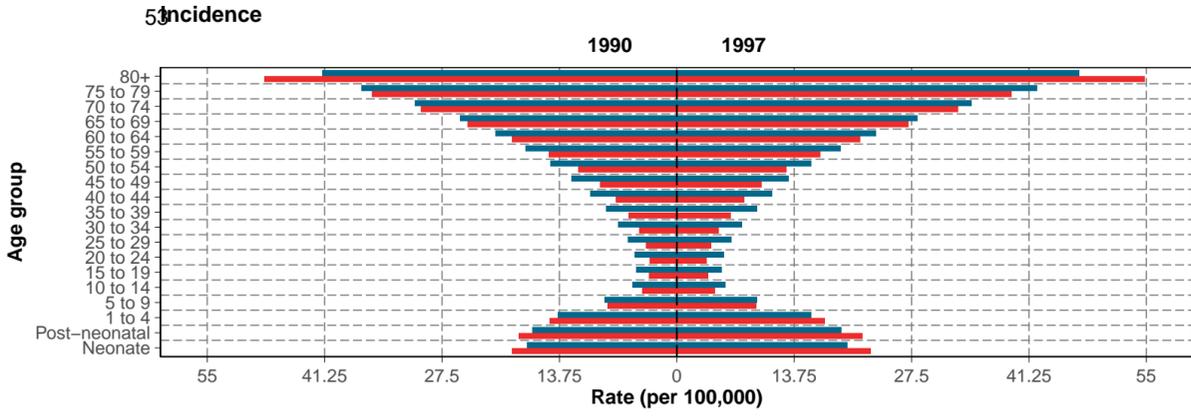
Syrian Arab Republic



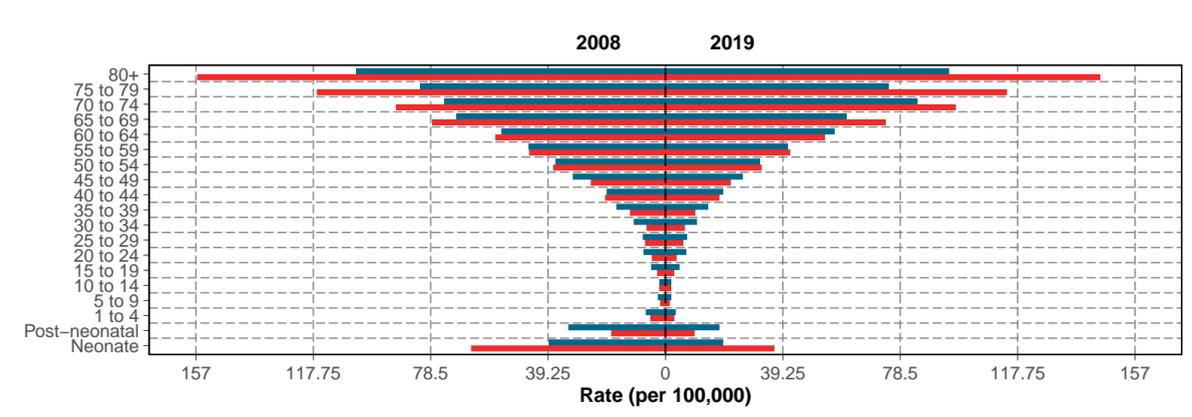
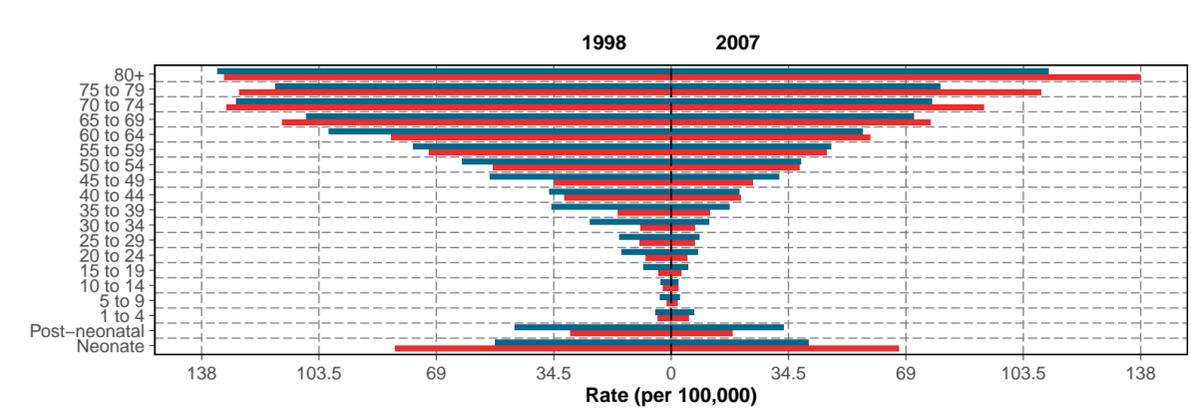
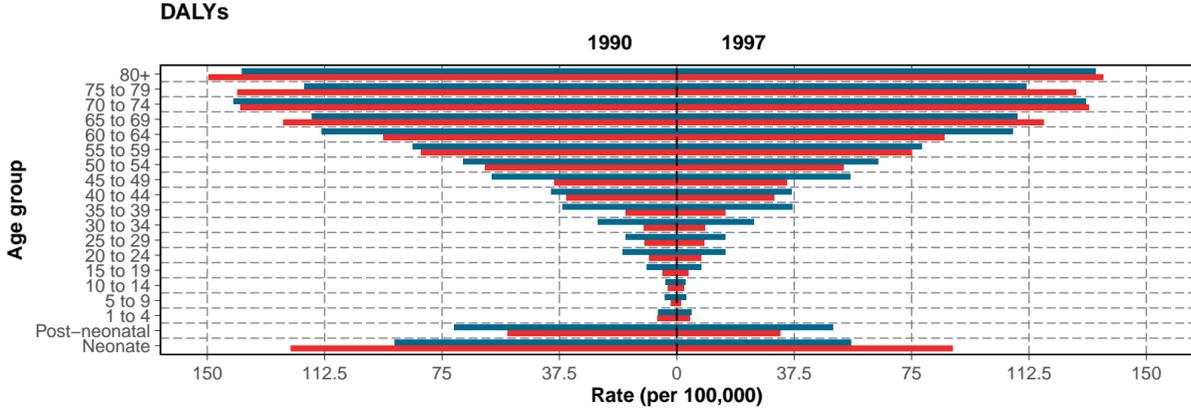
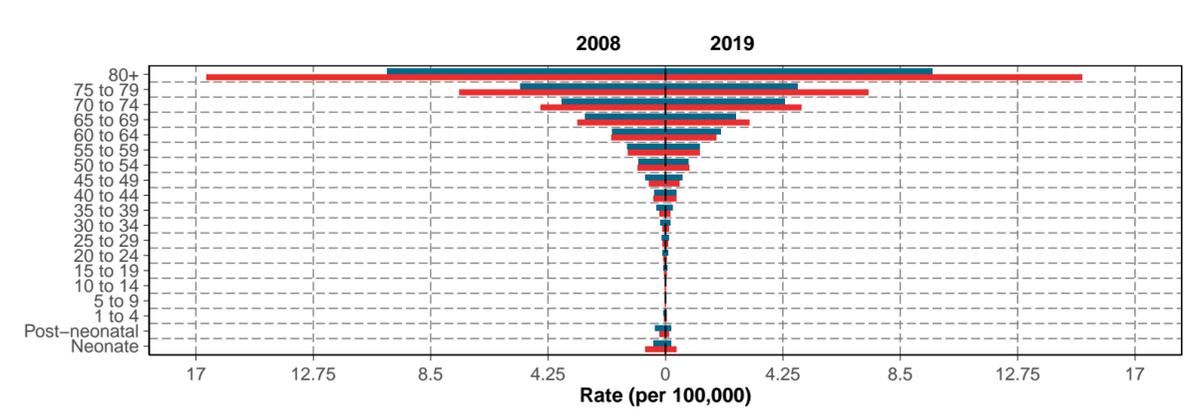
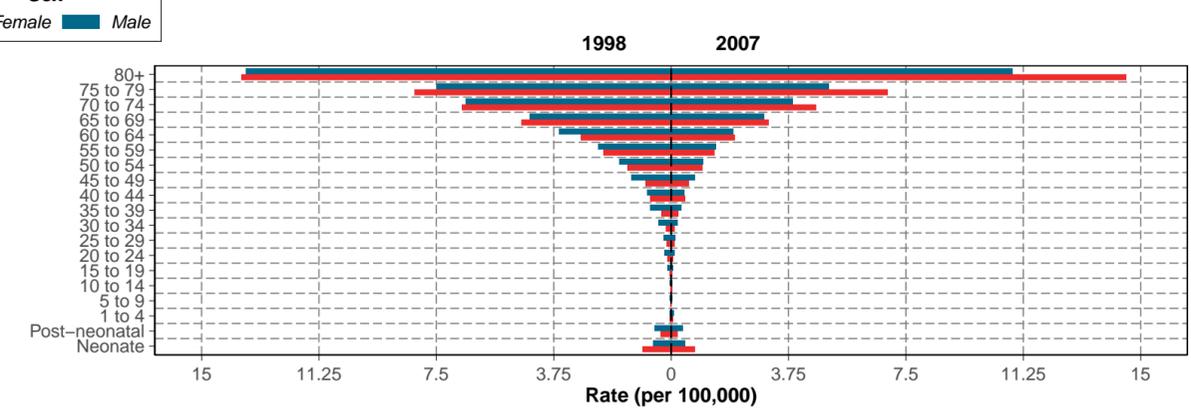
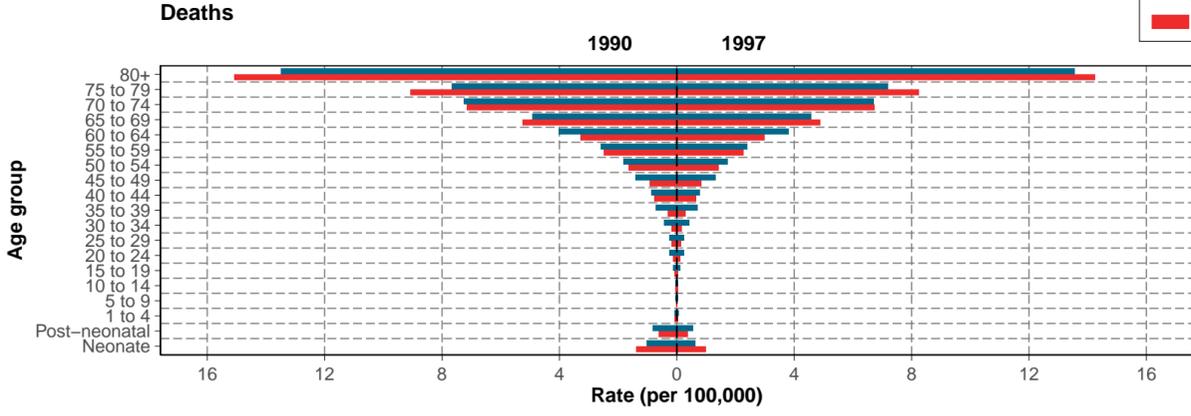
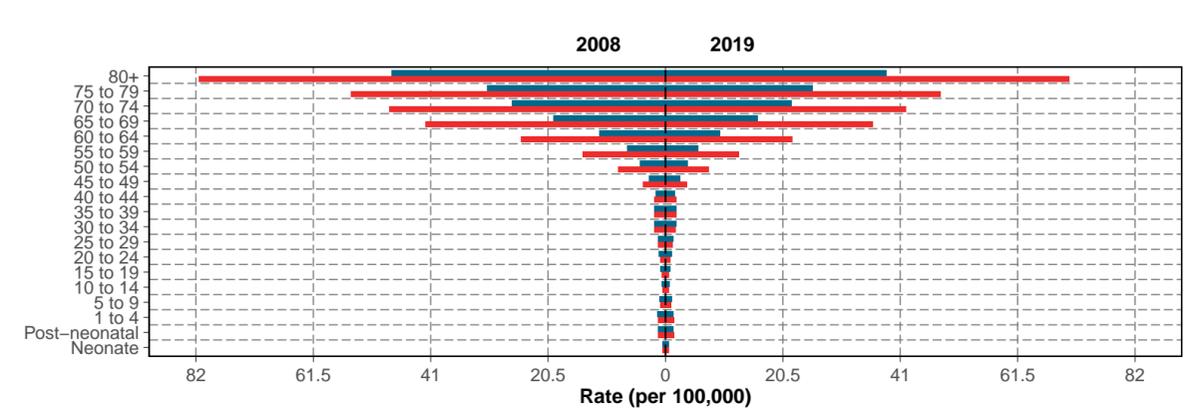
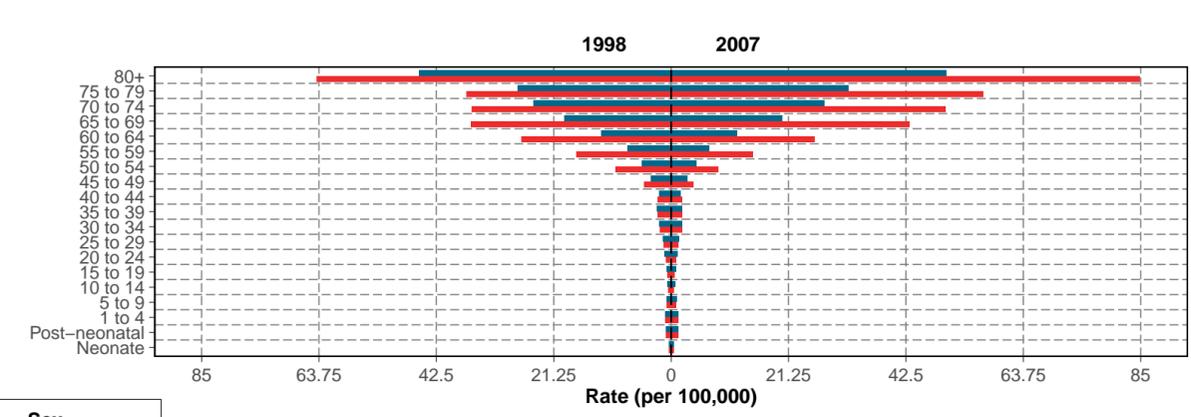
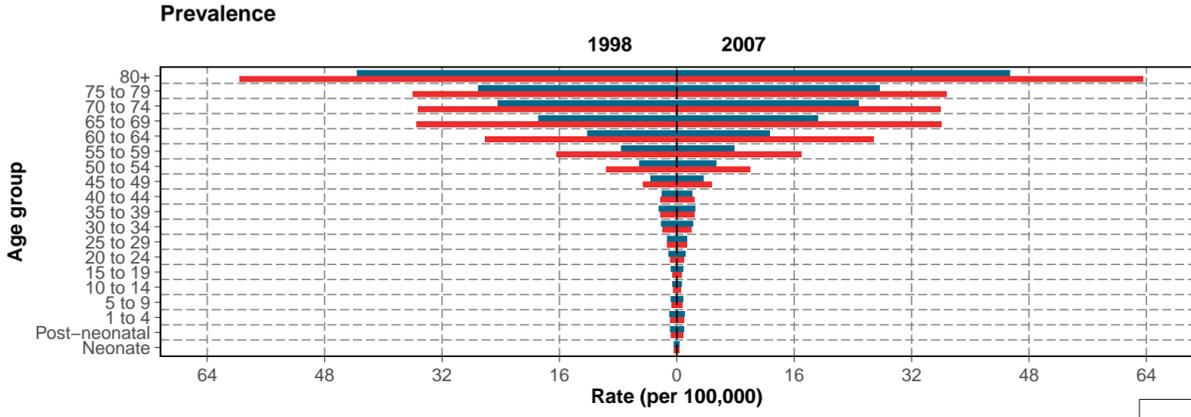
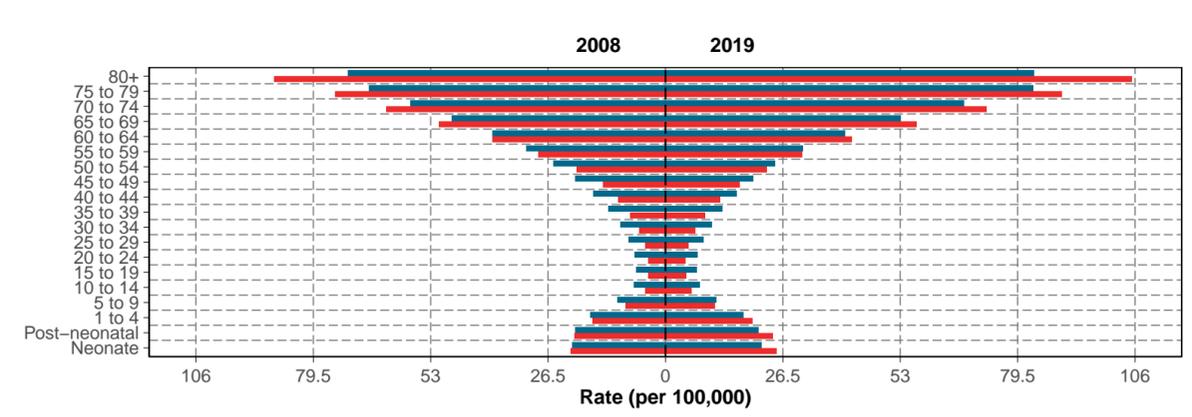
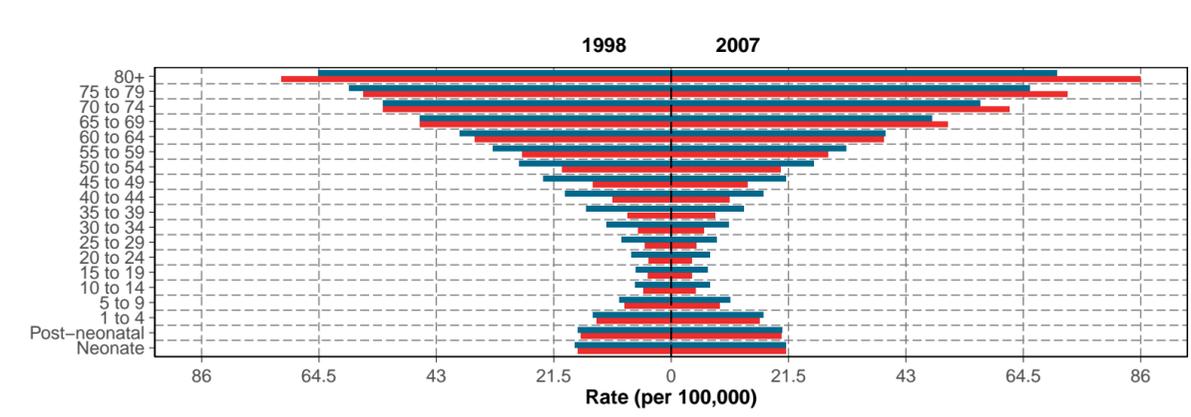
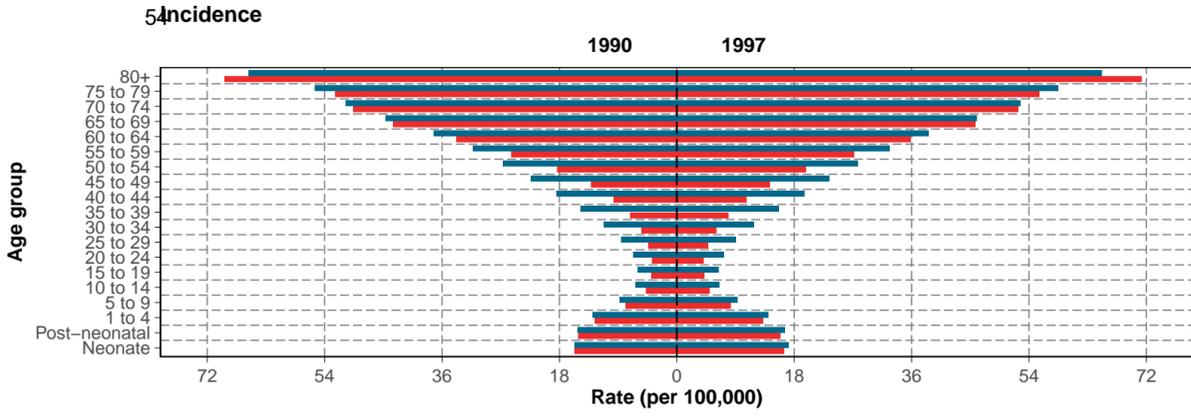
Sex
■ Female
■ Male



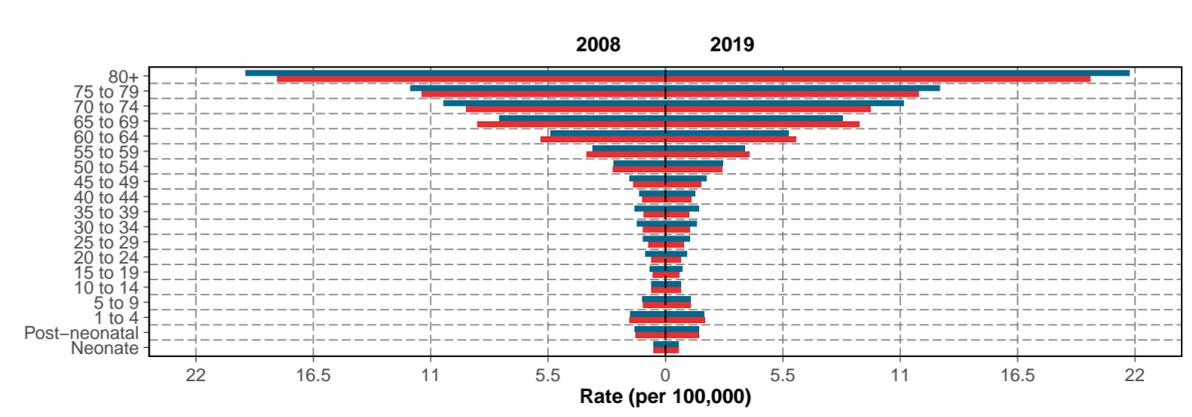
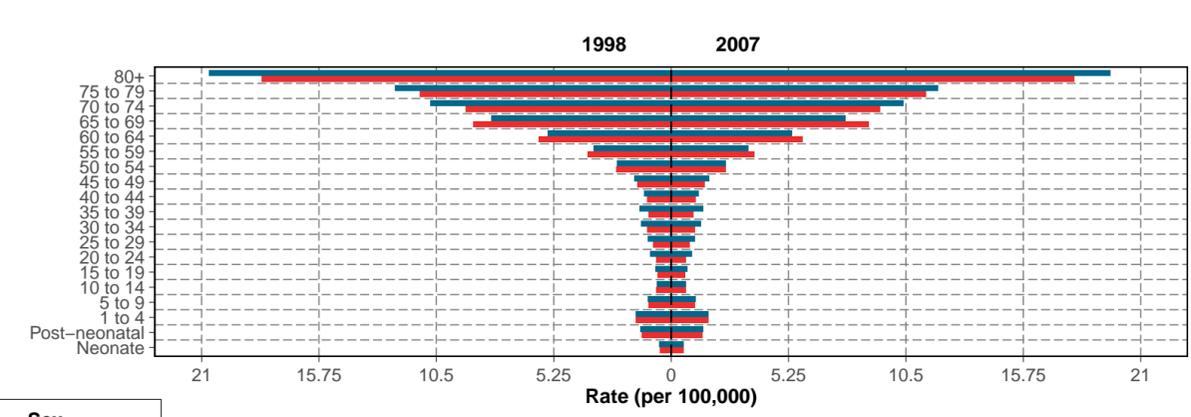
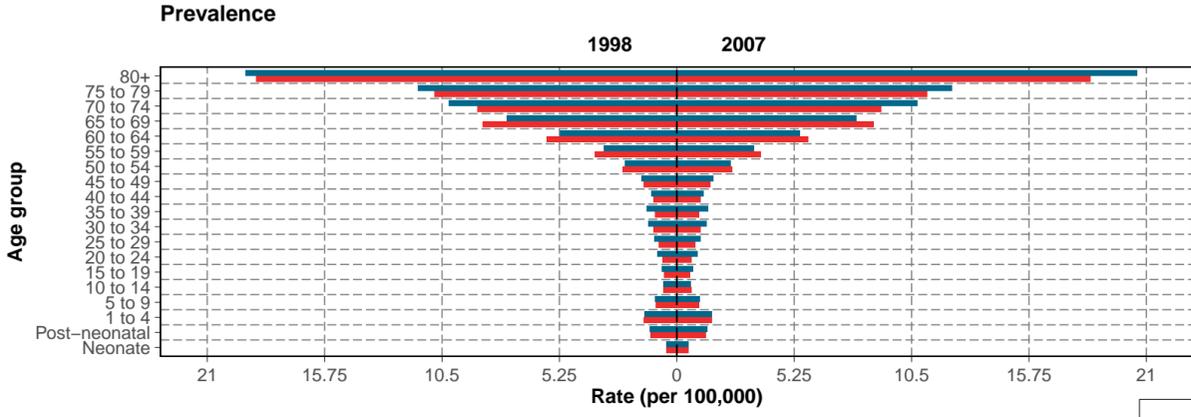
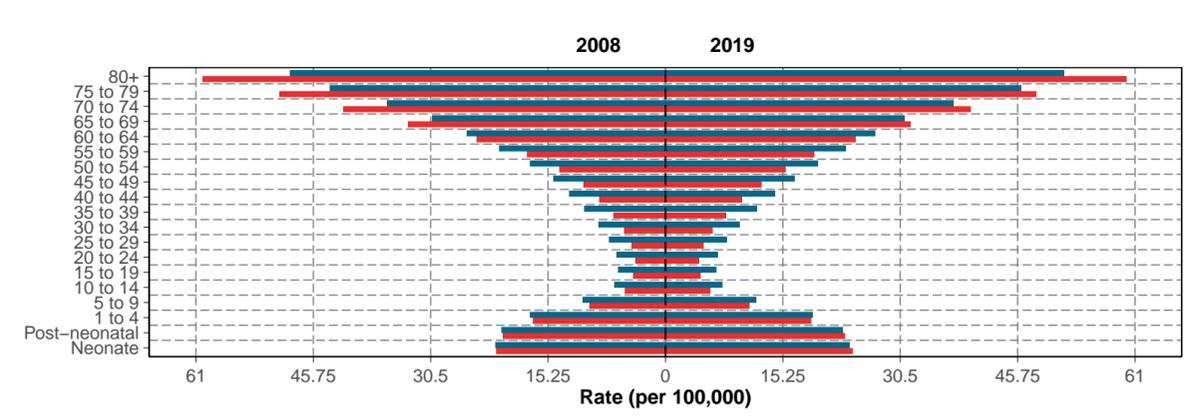
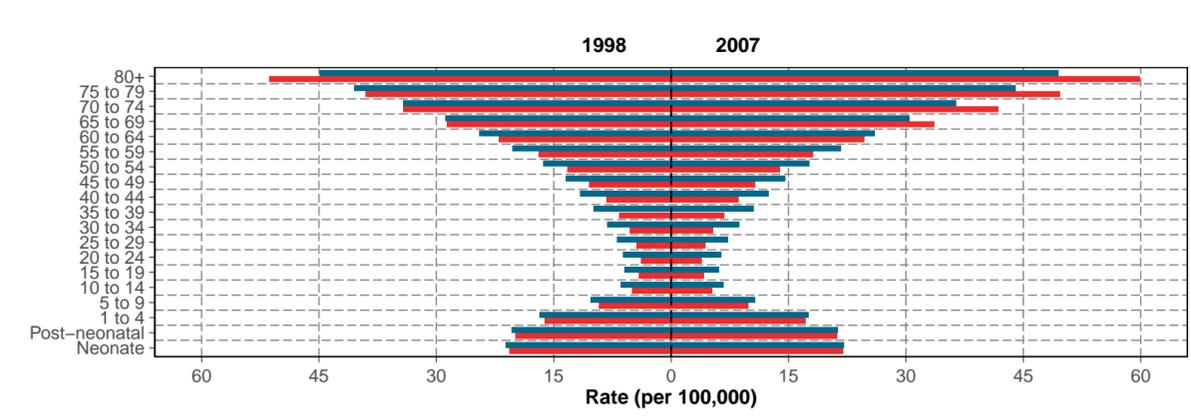
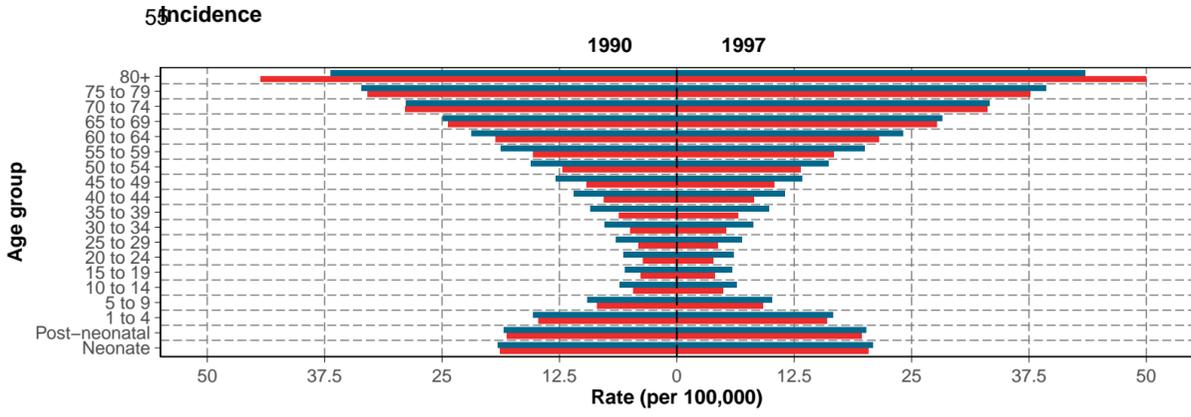
Tunisia



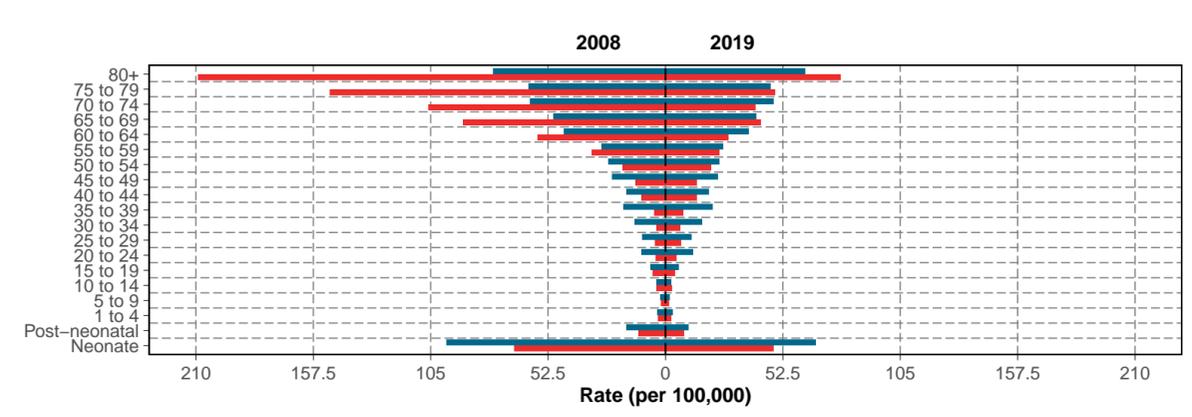
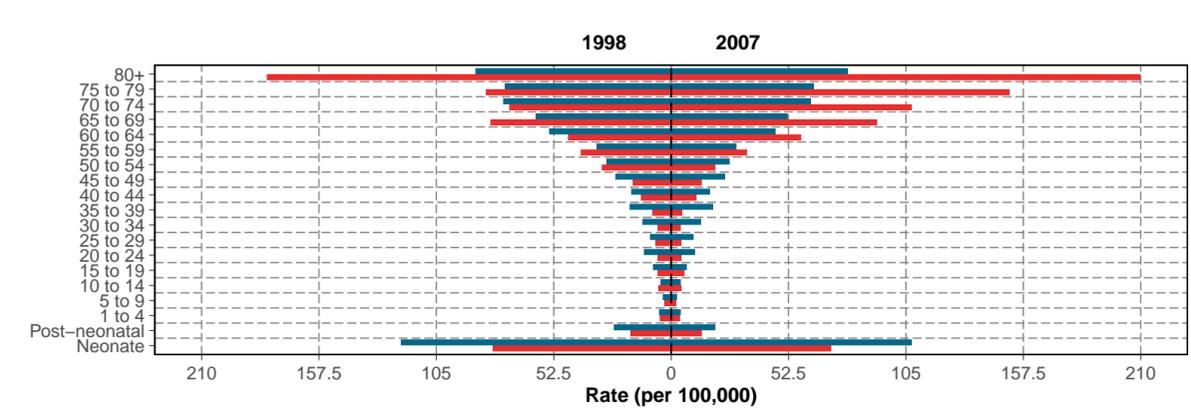
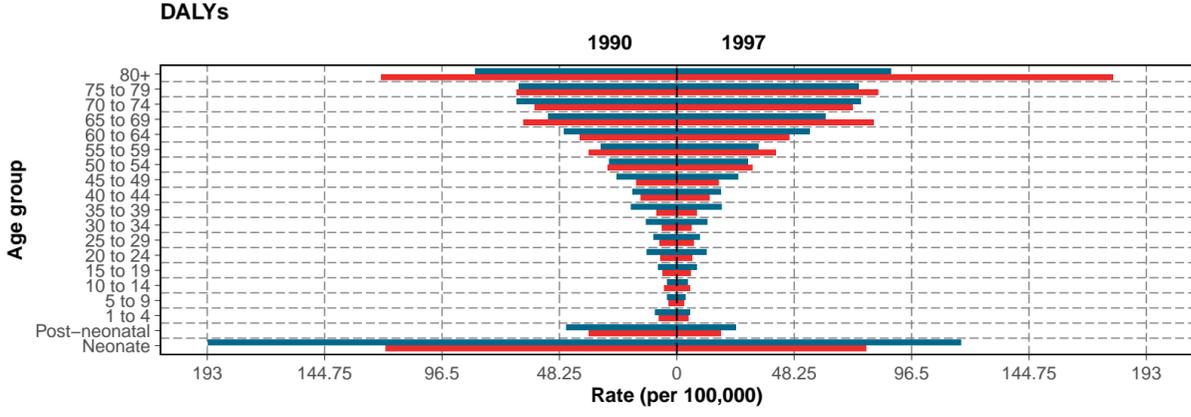
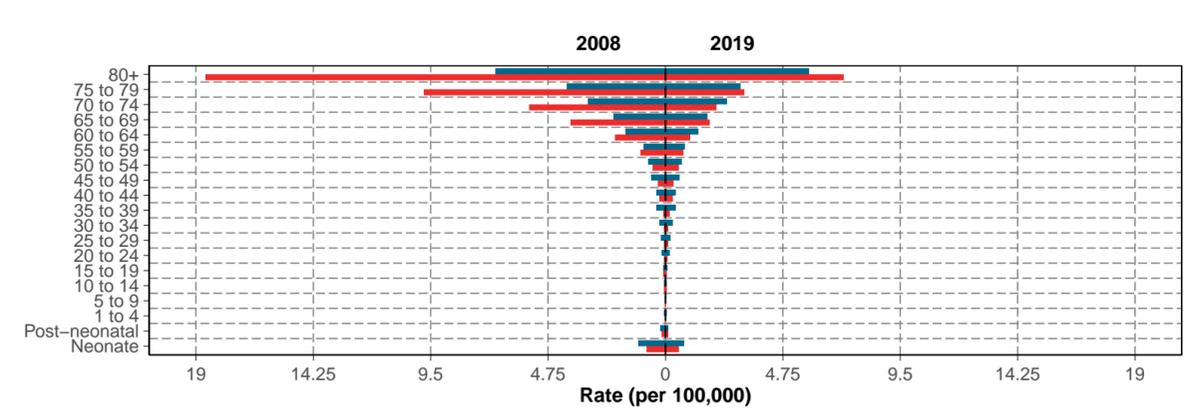
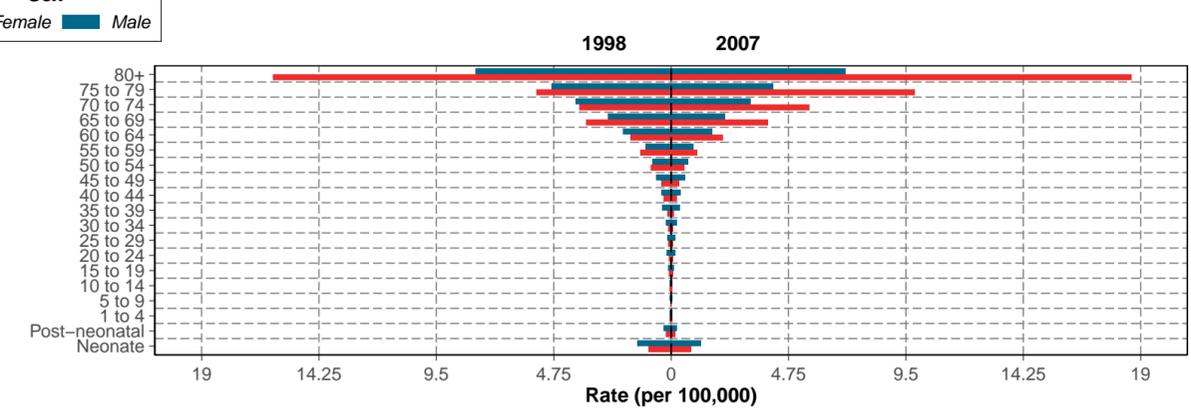
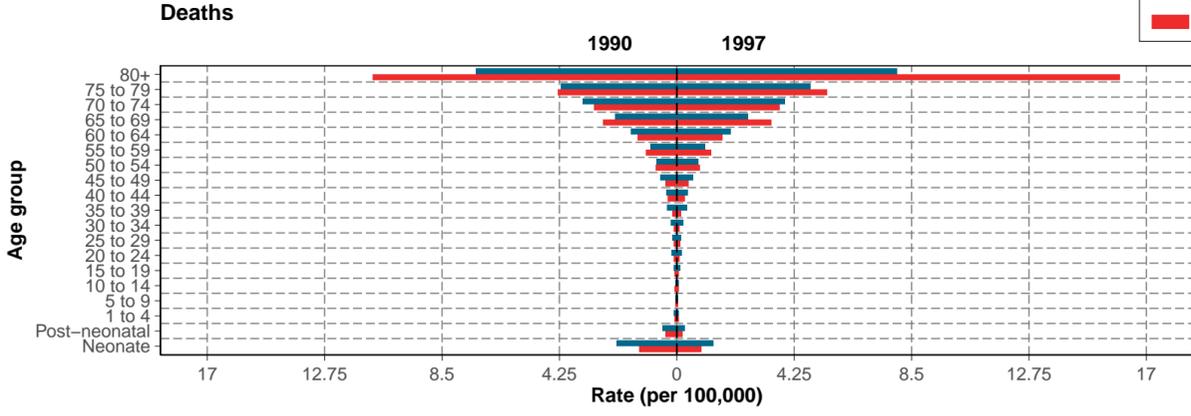
Turkey



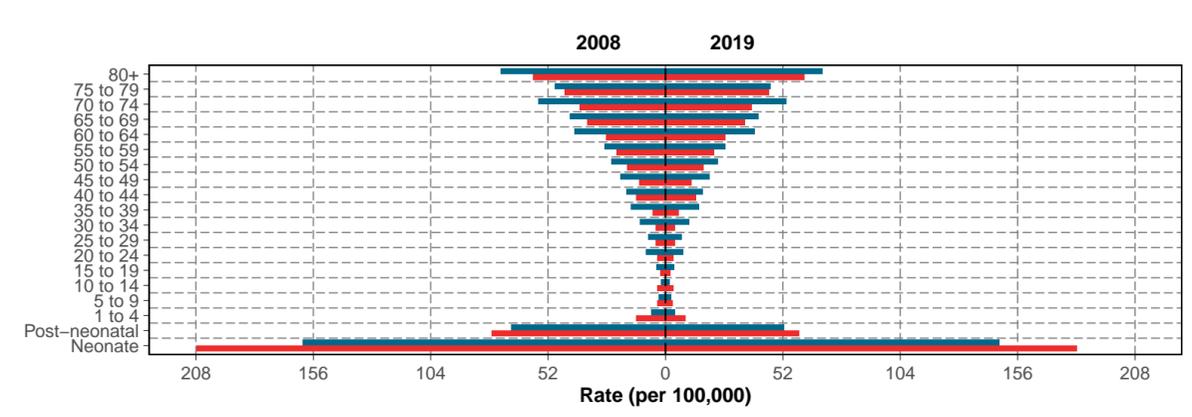
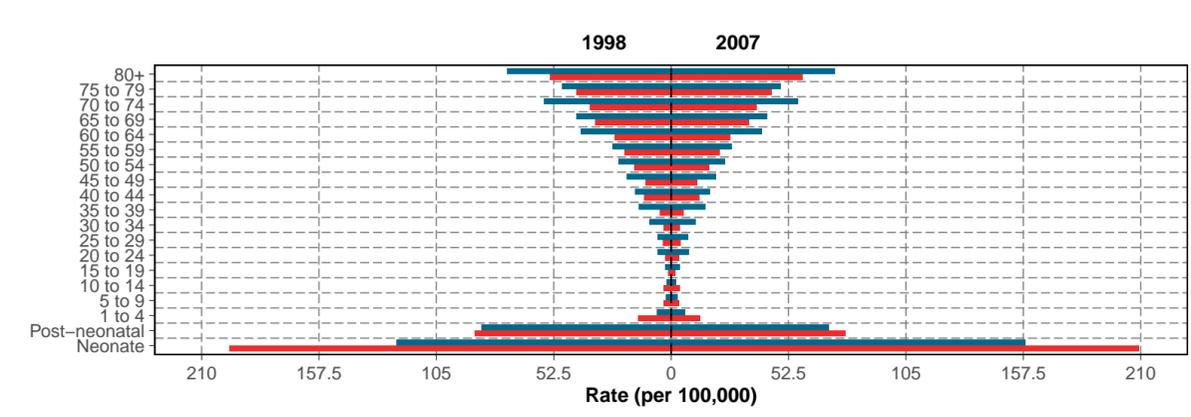
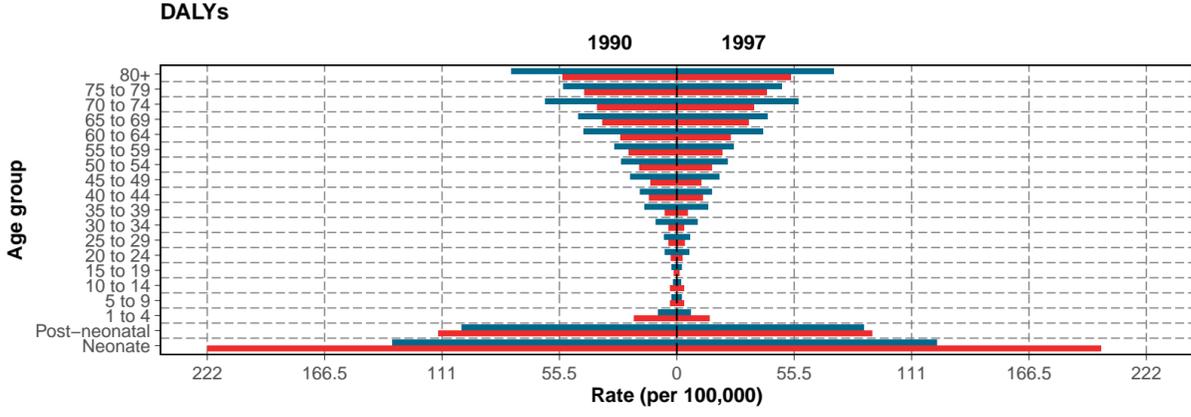
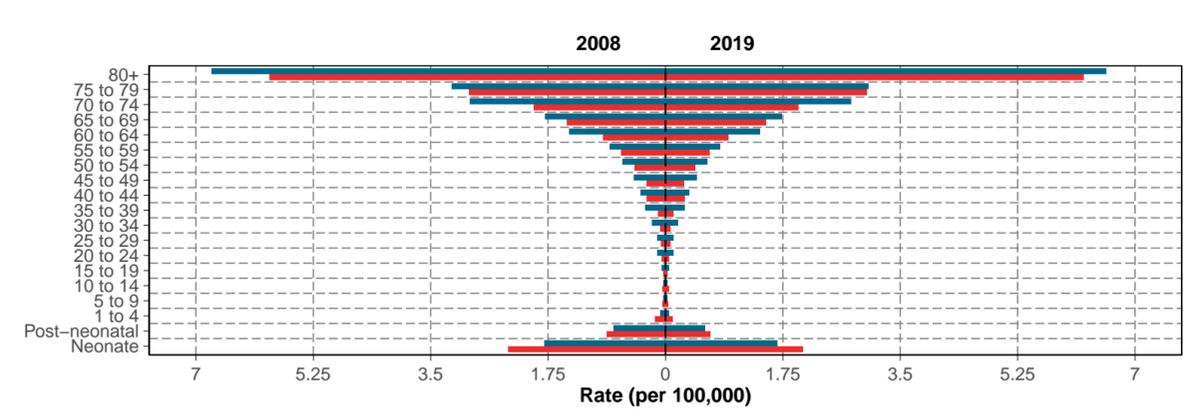
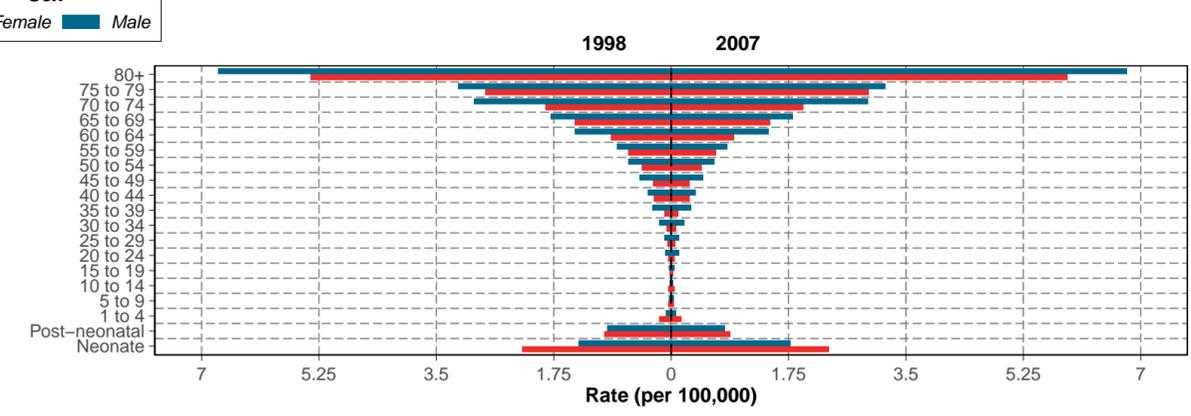
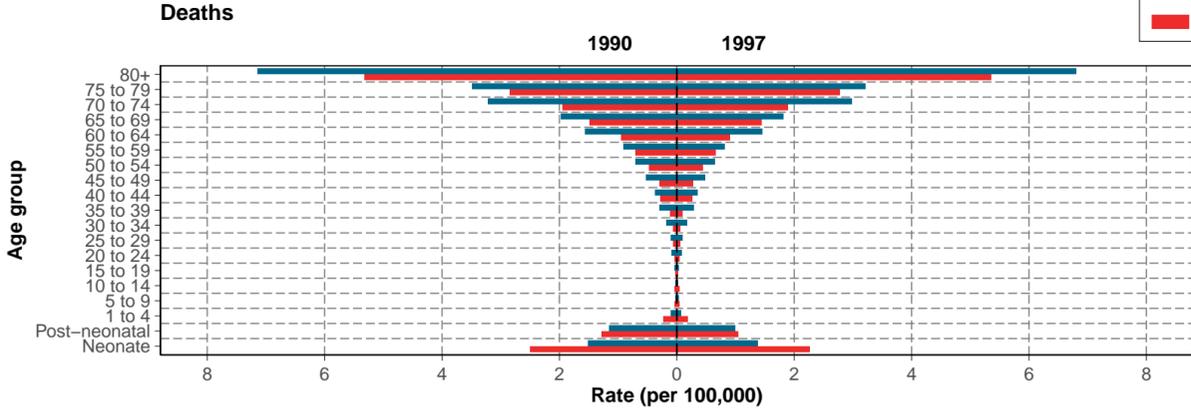
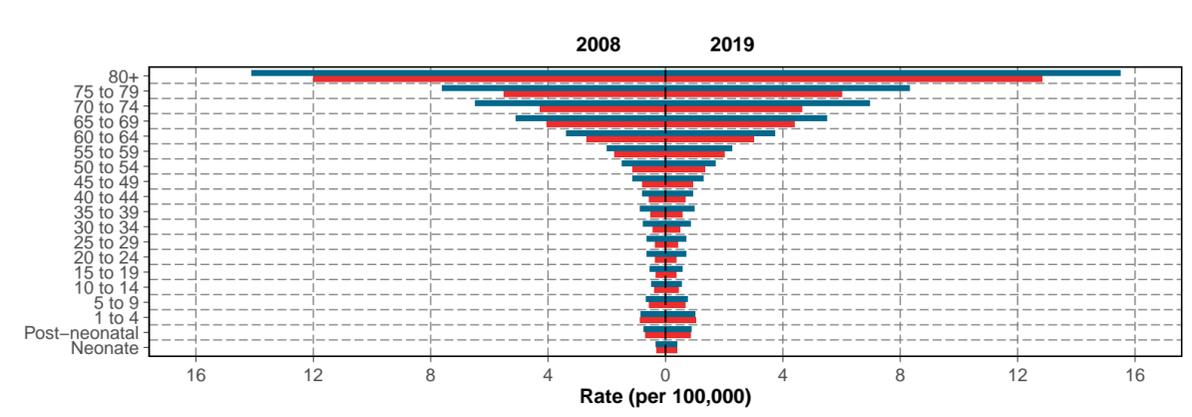
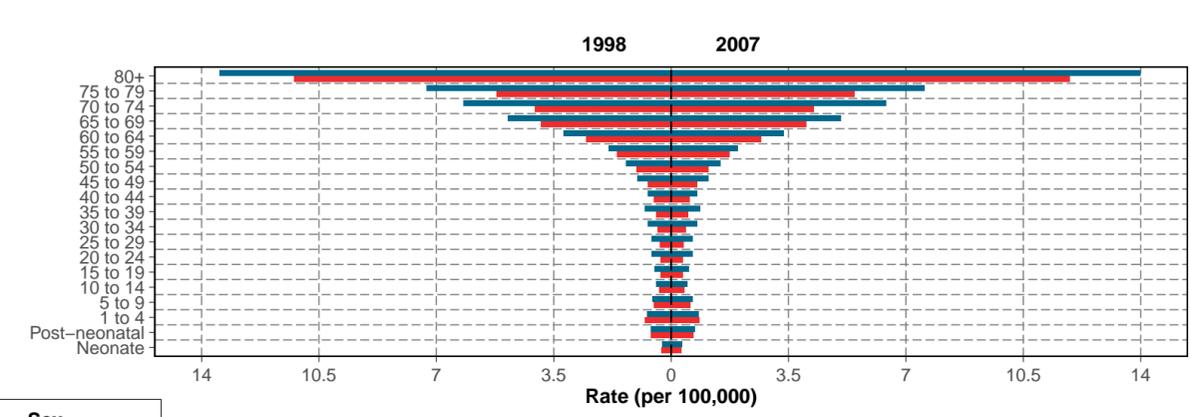
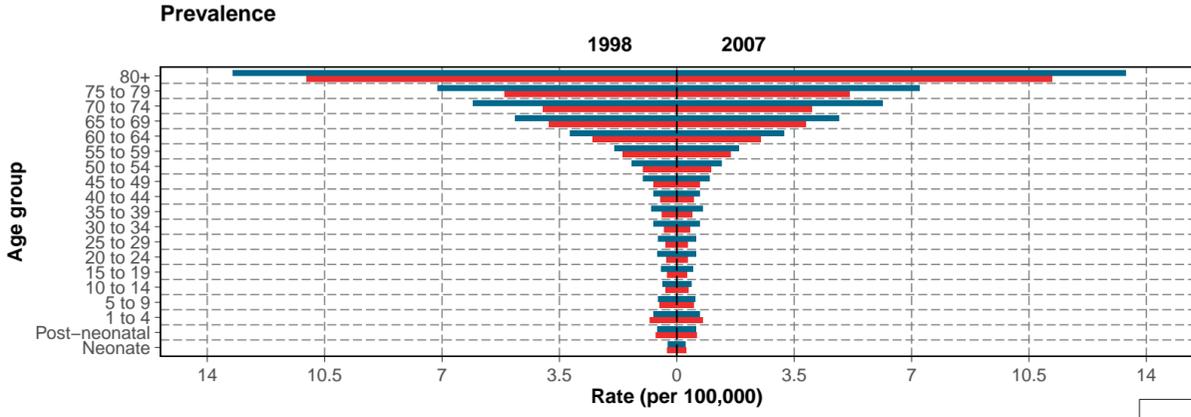
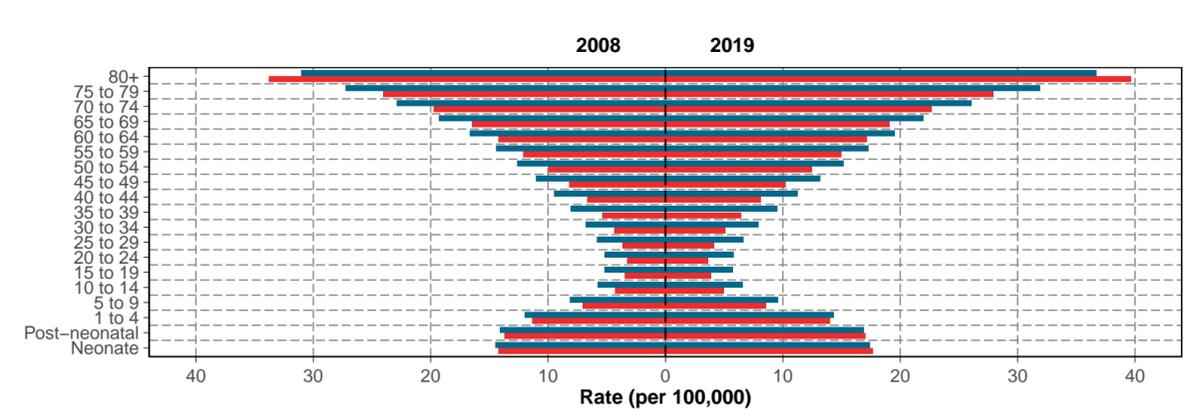
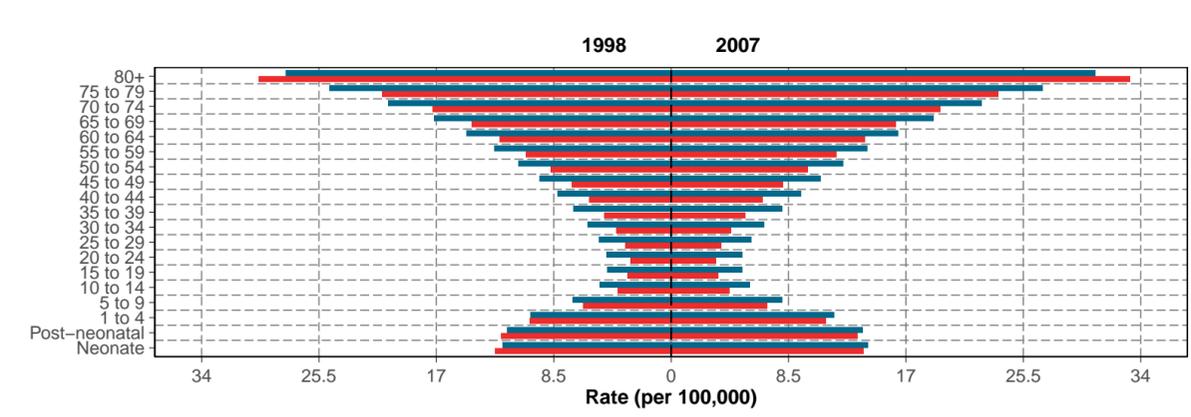
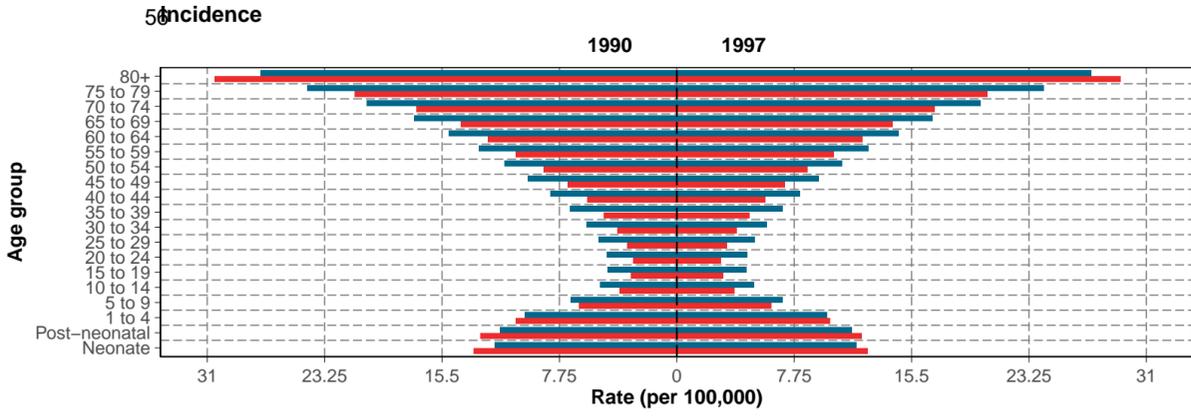
United Arab Emirates



Sex
Female Male



Yemen



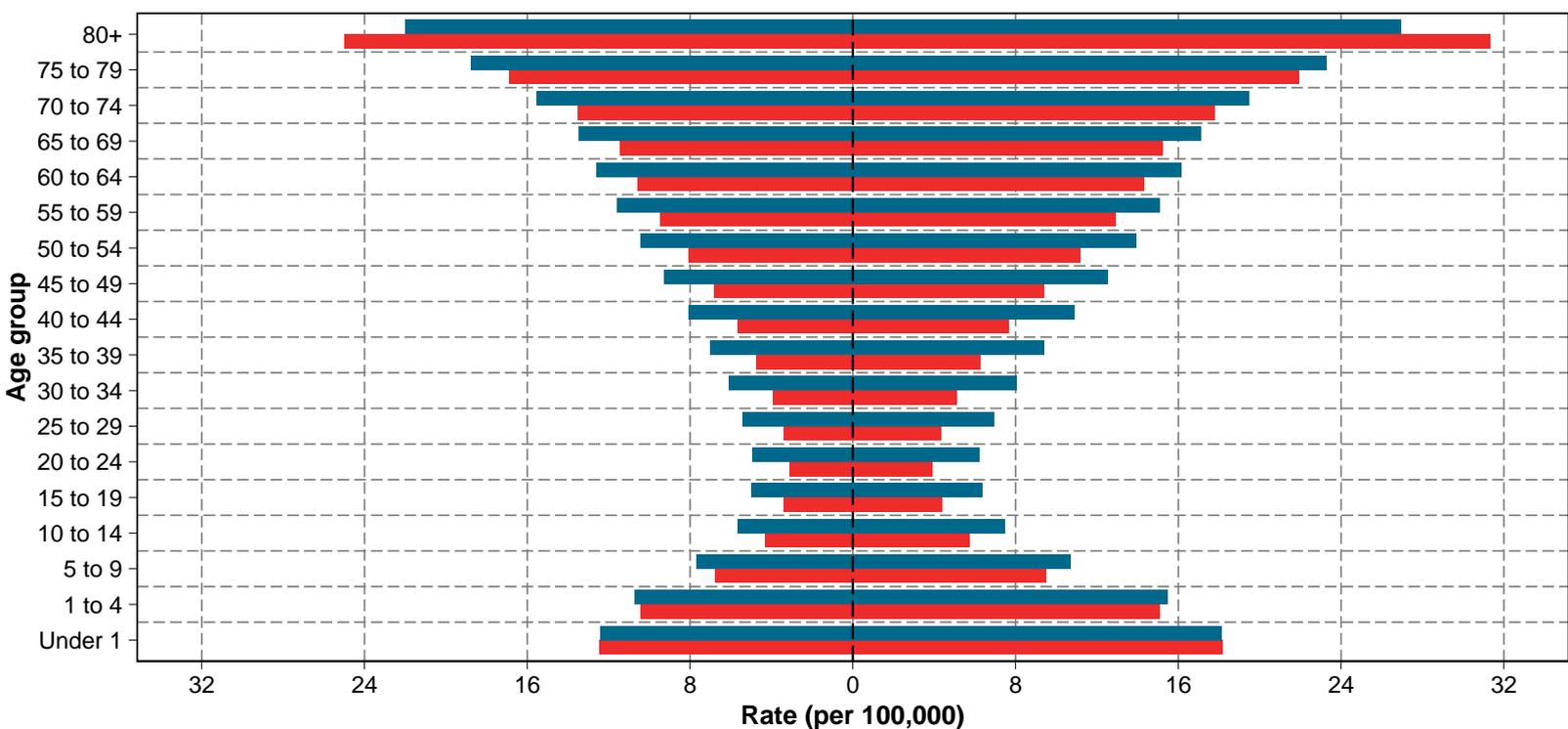
S19Fig.

Rates (per 100,000) of incidence, prevalence, deaths, and DALYs of infective endocarditis in 21 countries of North Africa and the Middle East in 1990 compared with 2019 according to eighteen age groups and sex

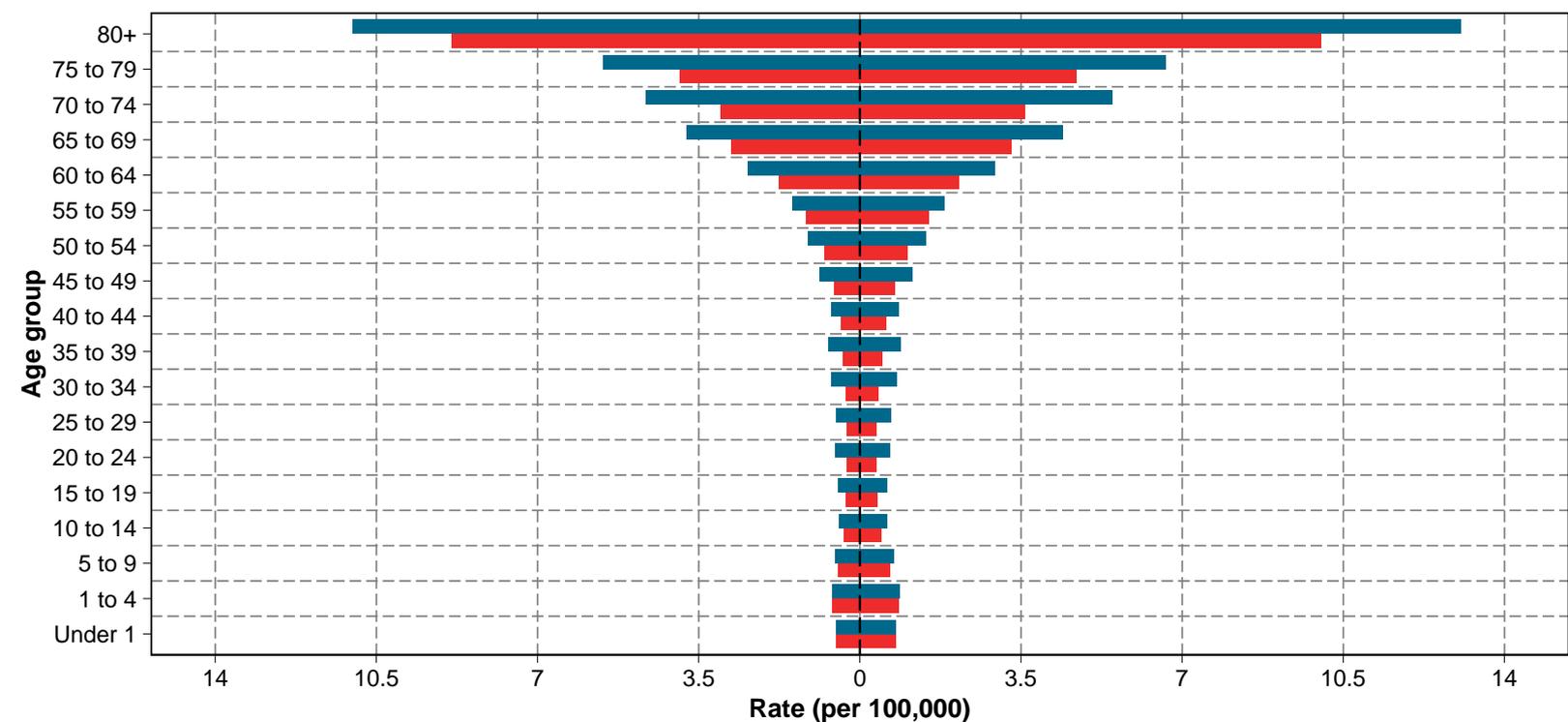
Afghanistan

58

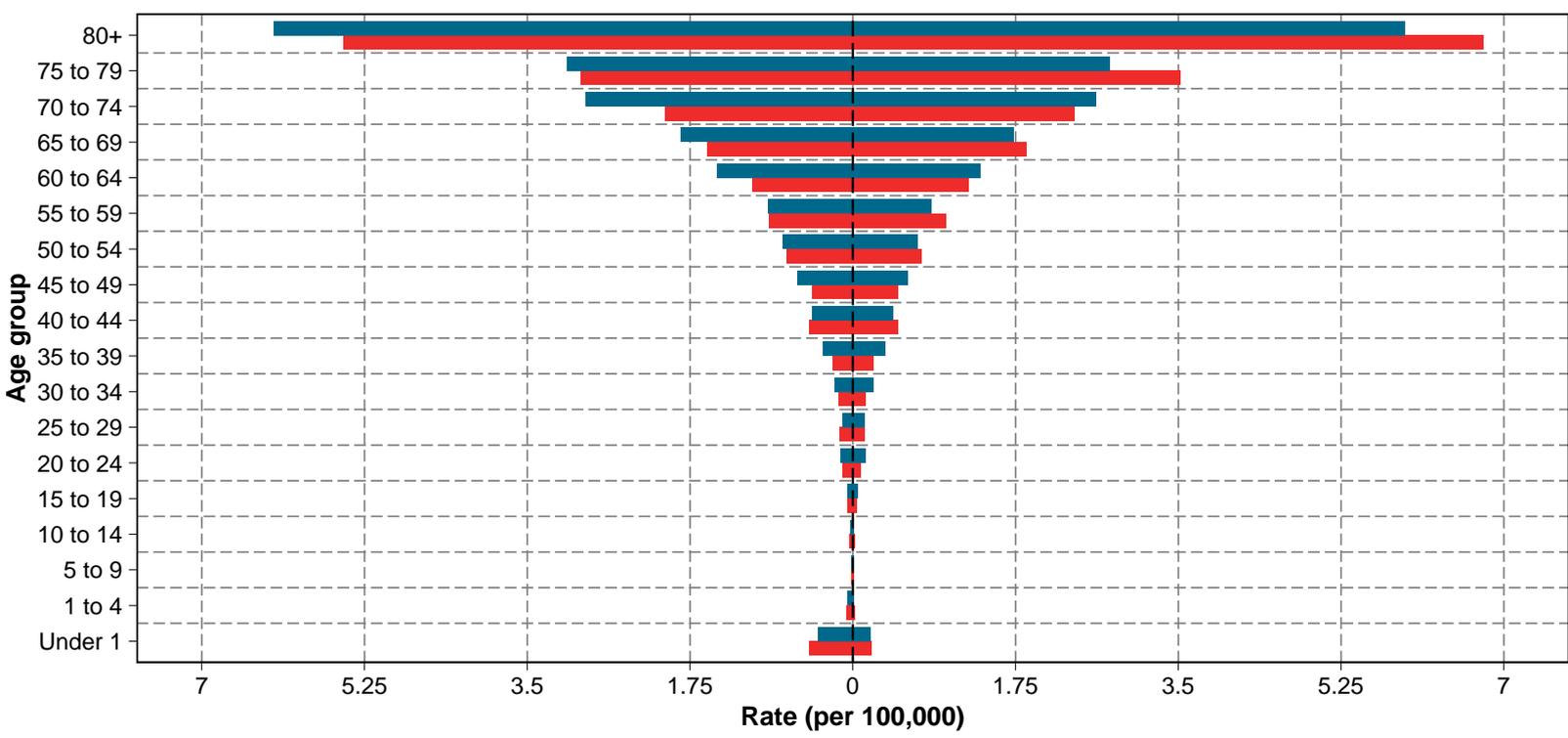
Incidence
1990 2019



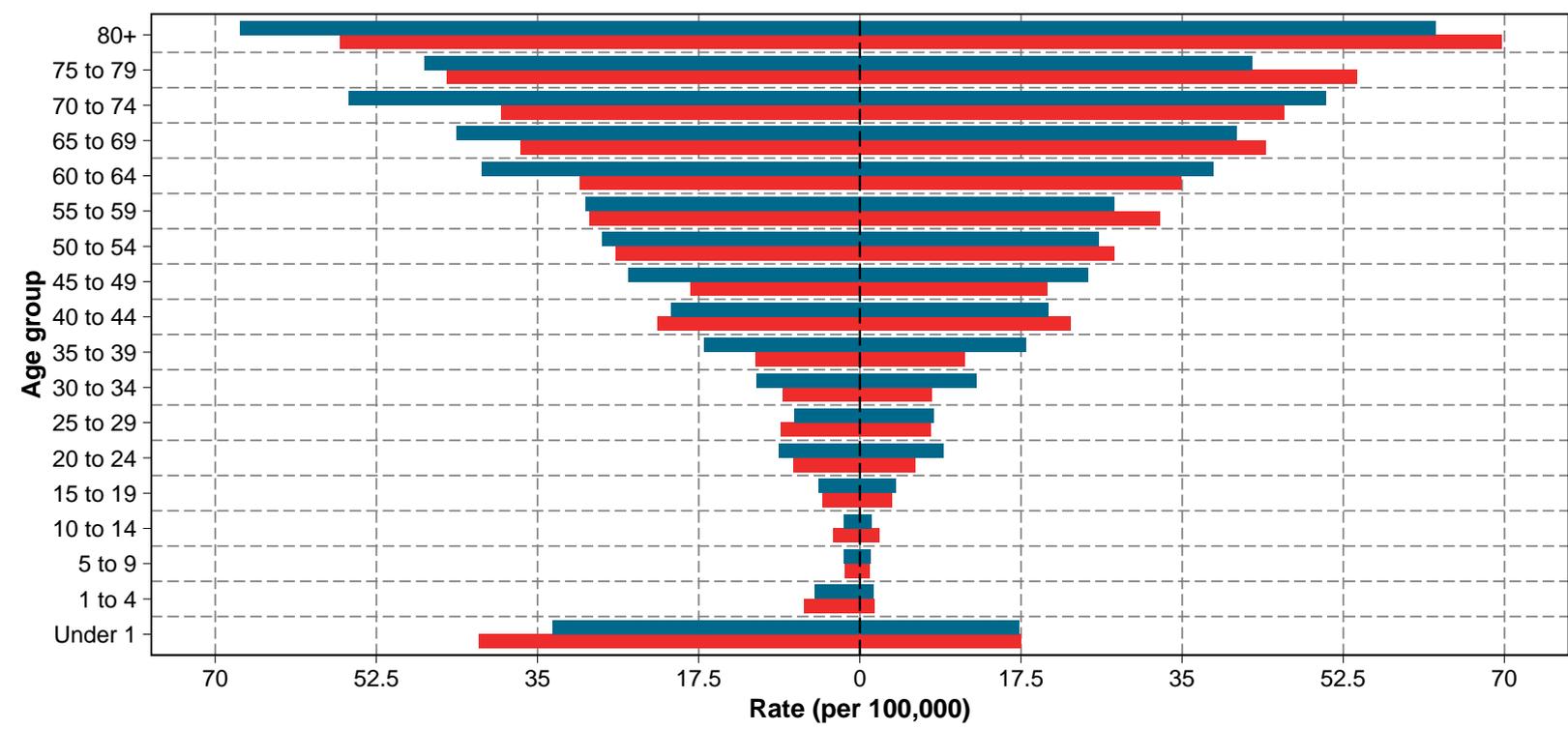
Prevalence
1990 2019



Deaths
1990 2019



DALYs
1990 2019

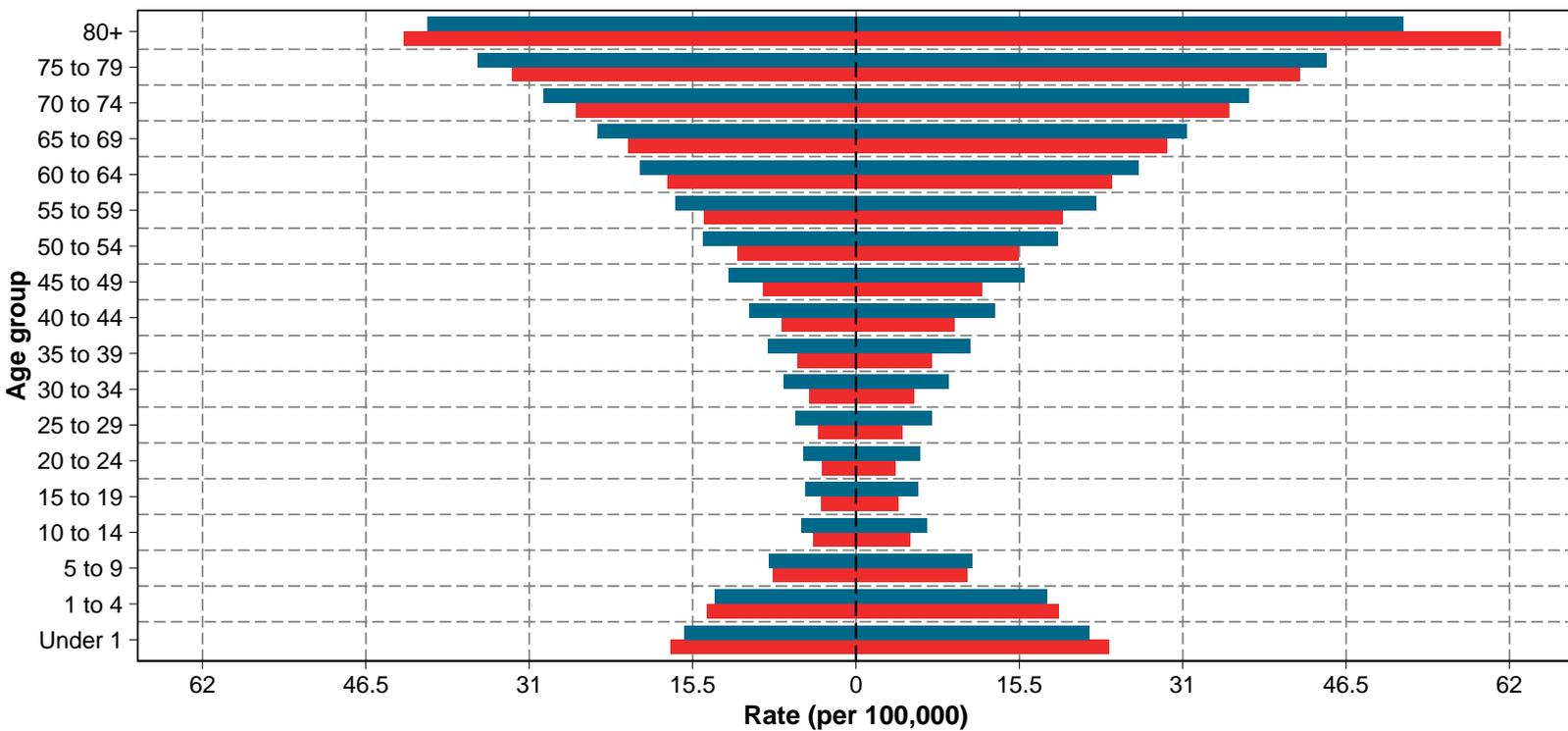


Sex
Female Male

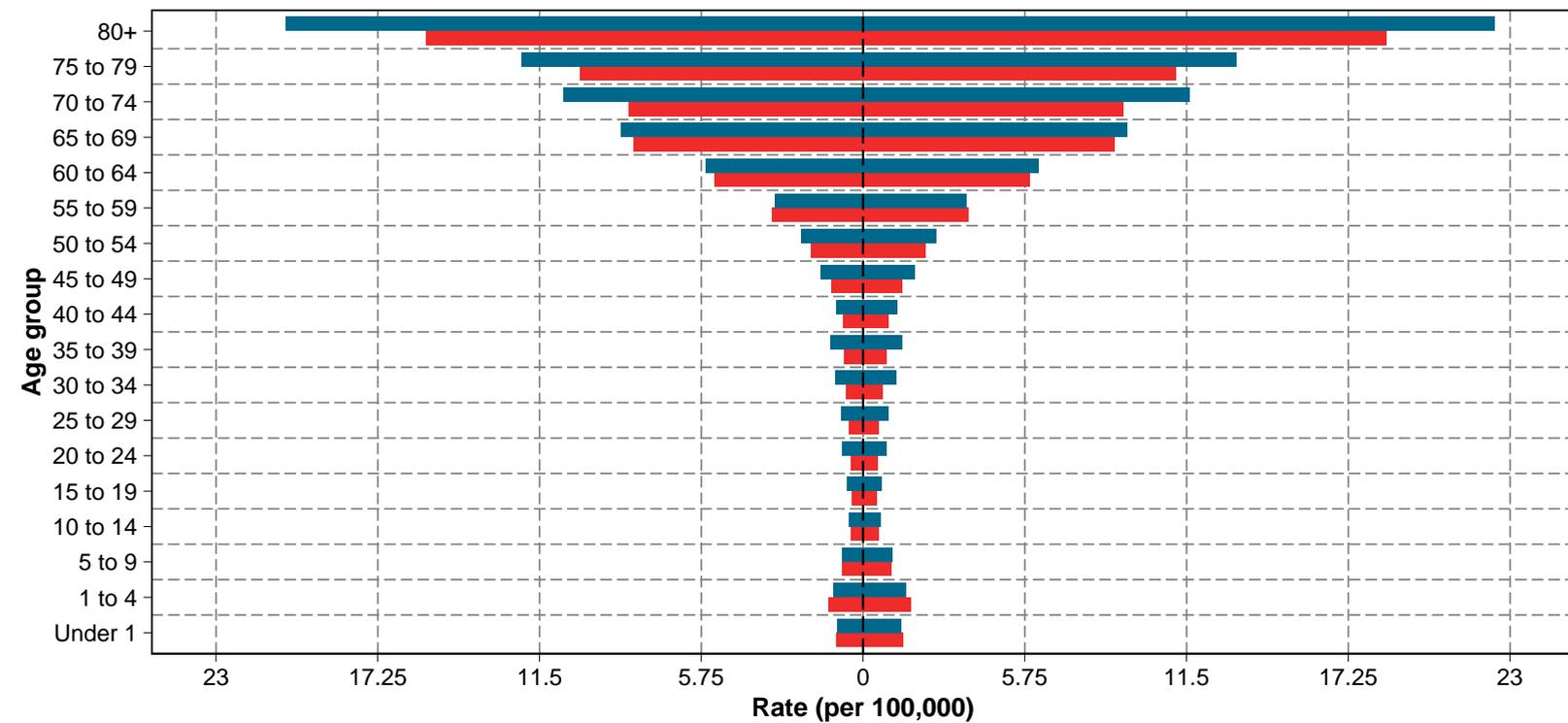
Algeria

59

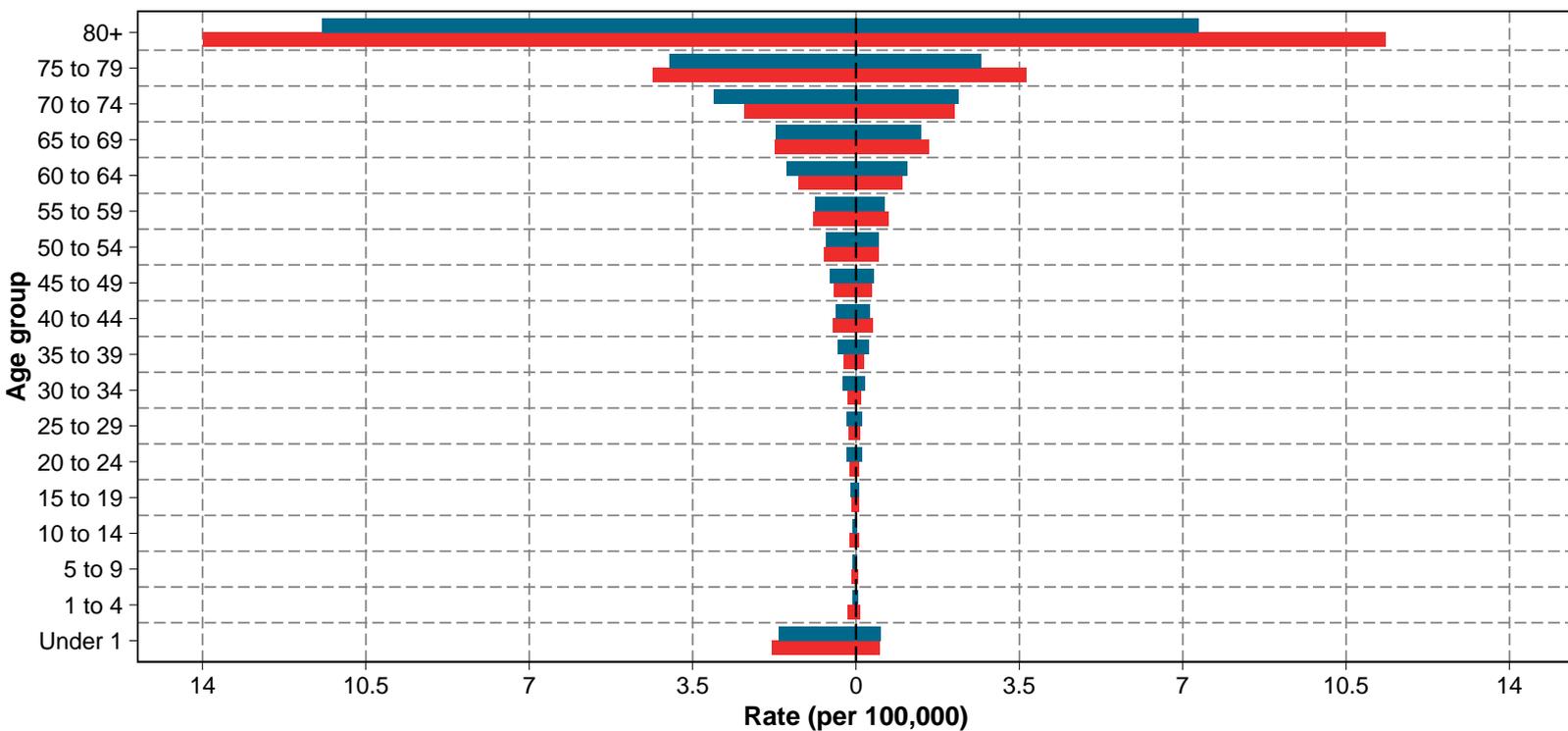
Incidence
1990 2019



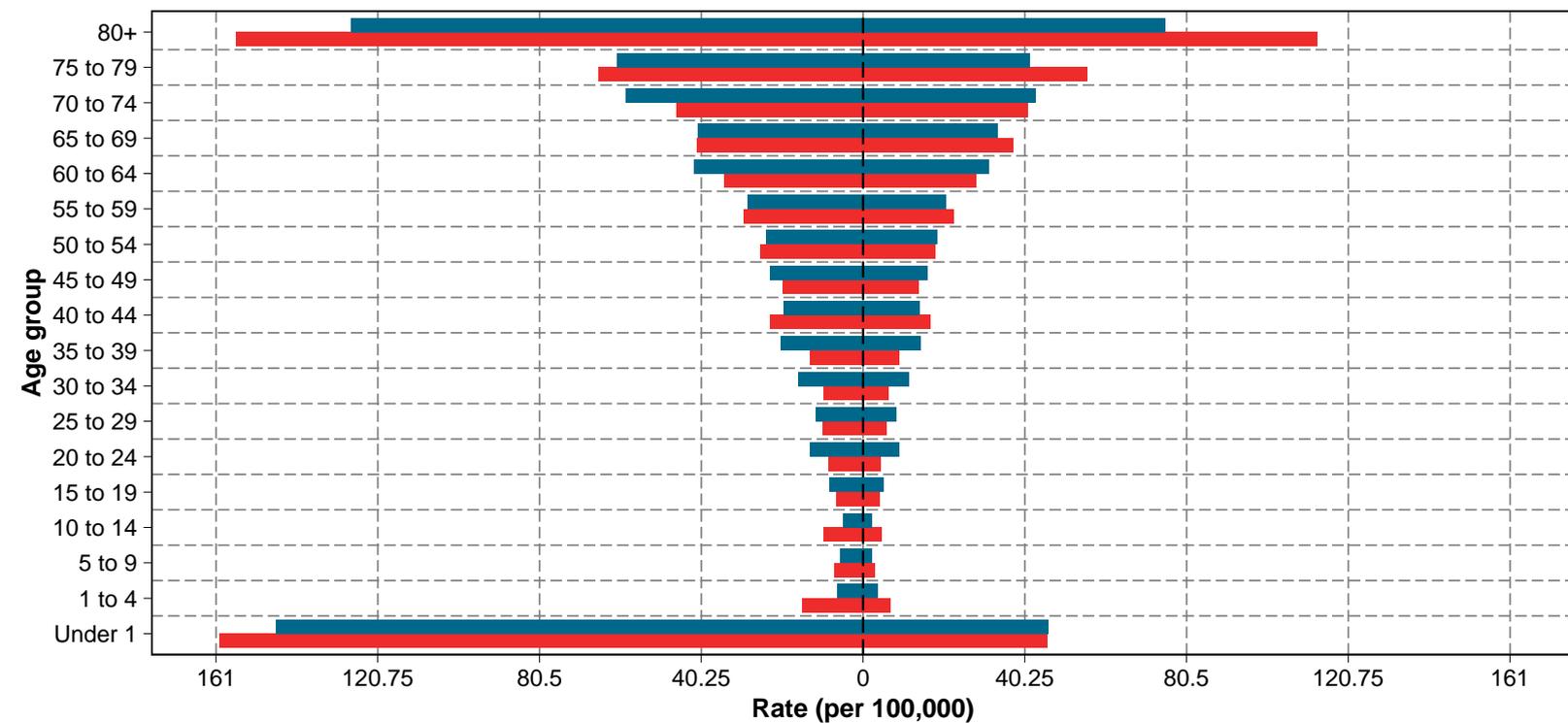
Prevalence
1990 2019



Deaths
1990 2019



DALYs
1990 2019

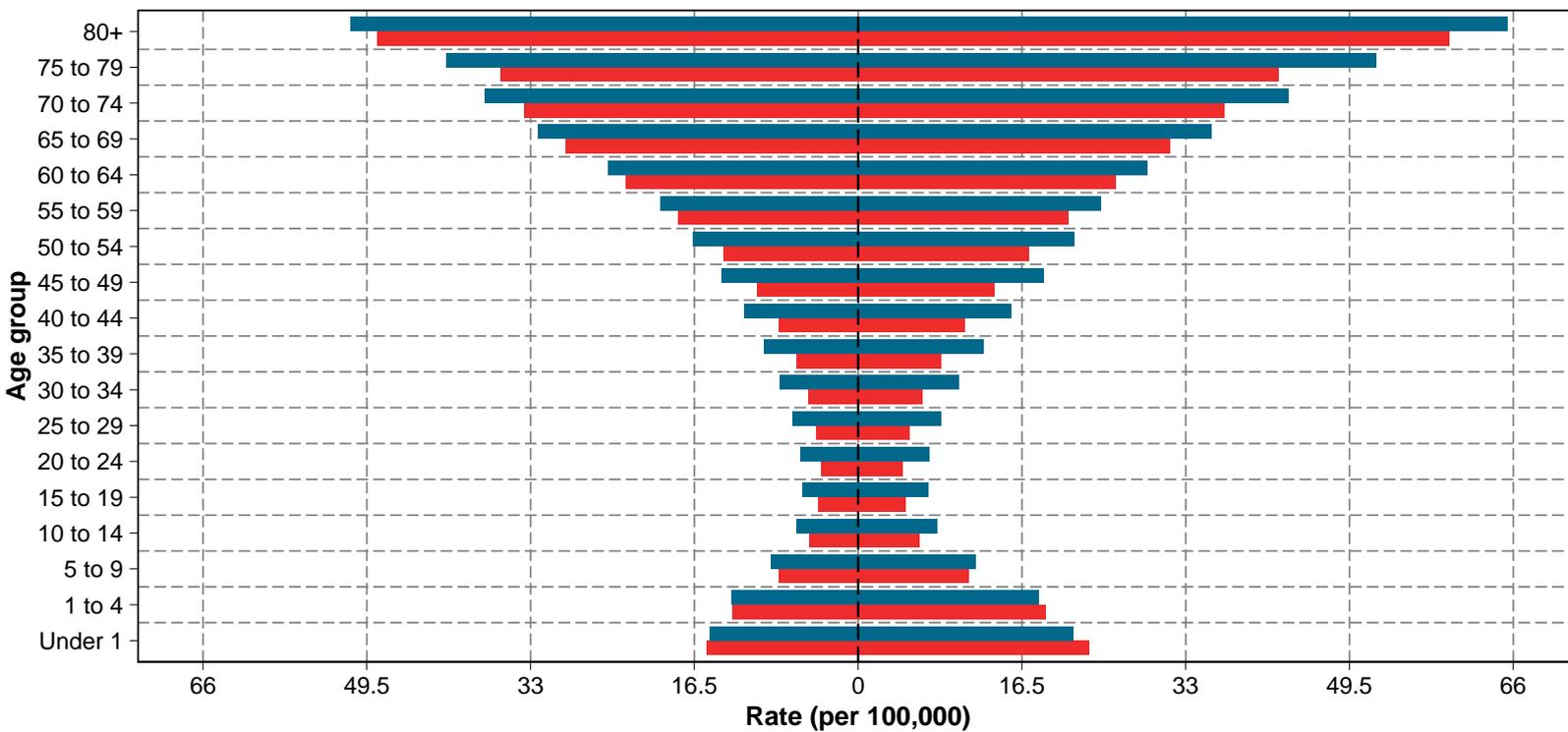


Sex
Female Male

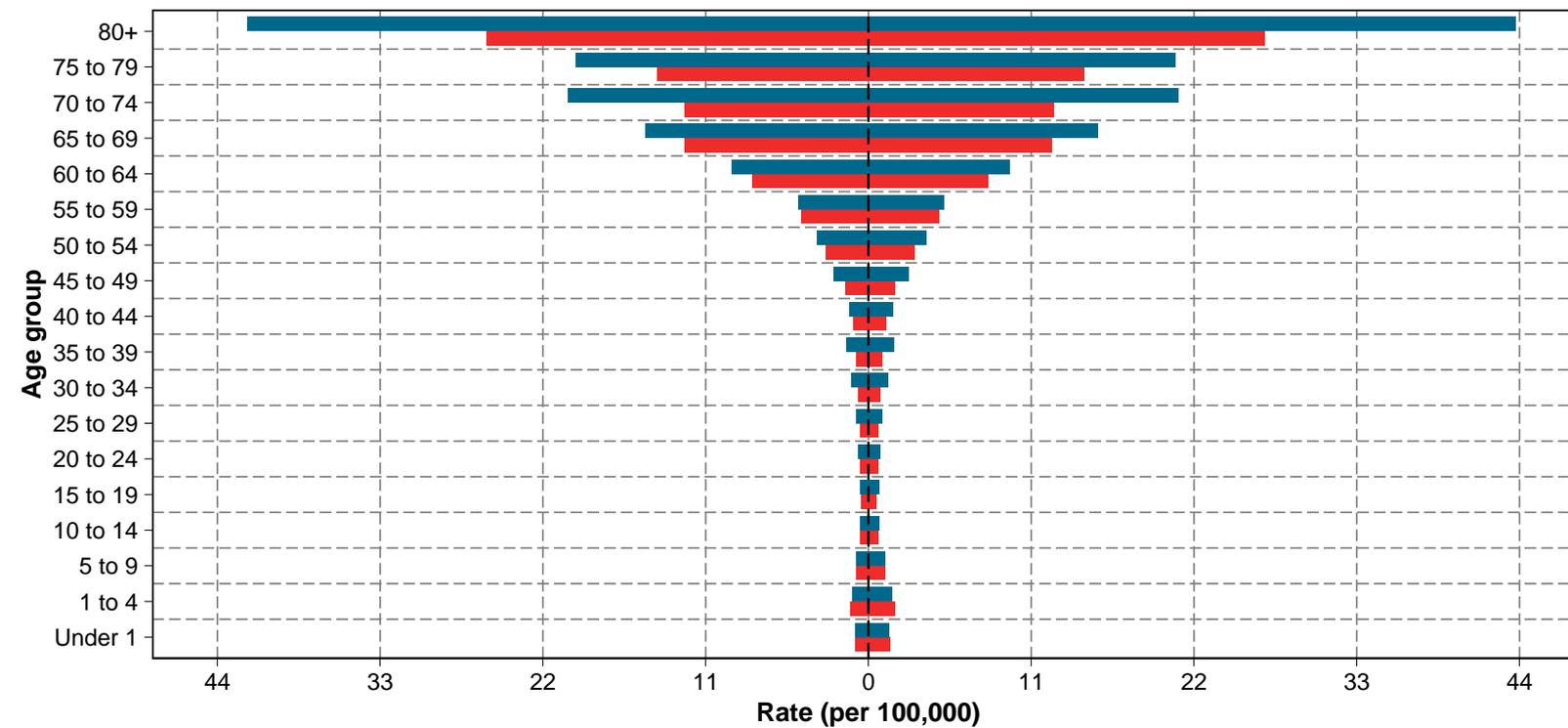
Bahrain

60

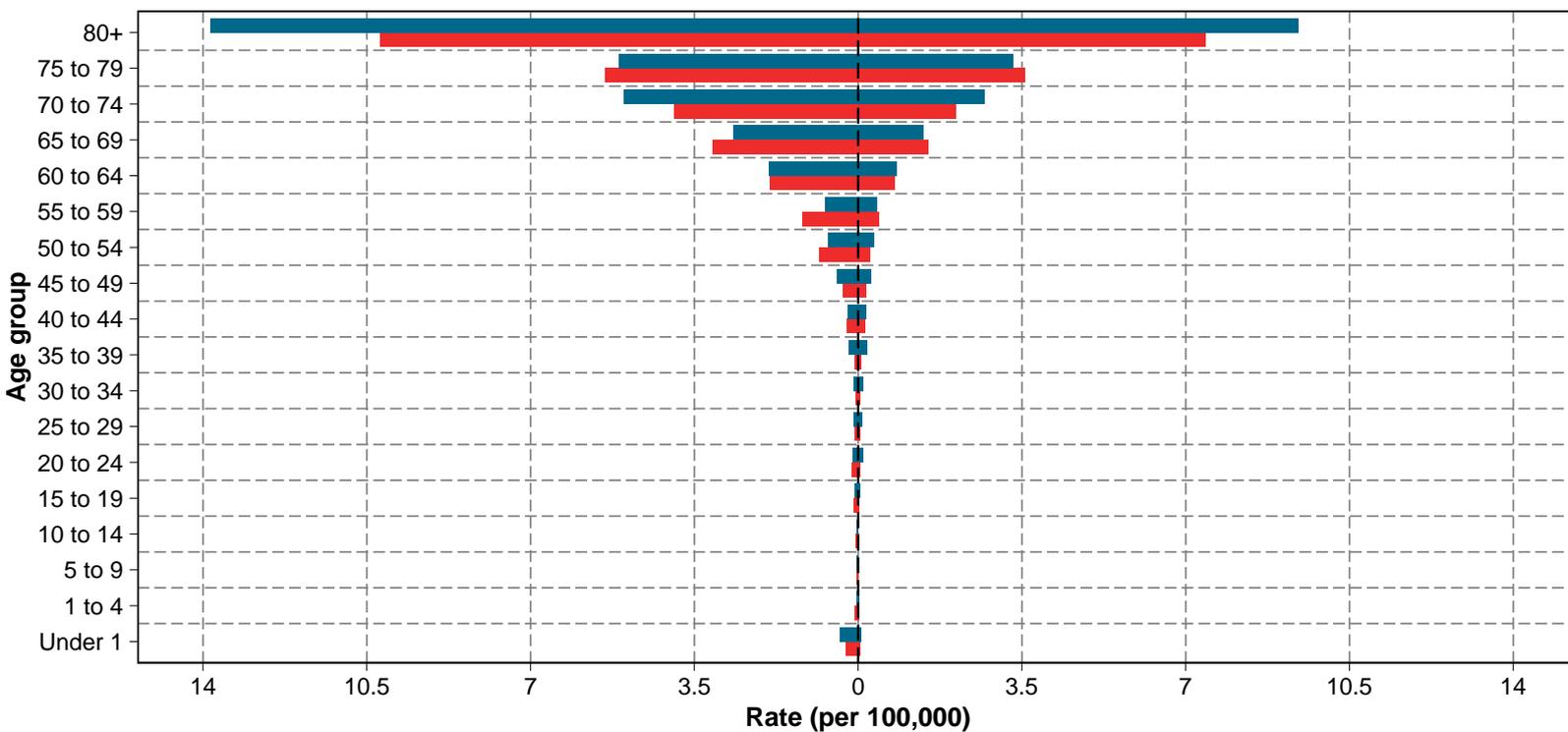
Incidence
1990 2019



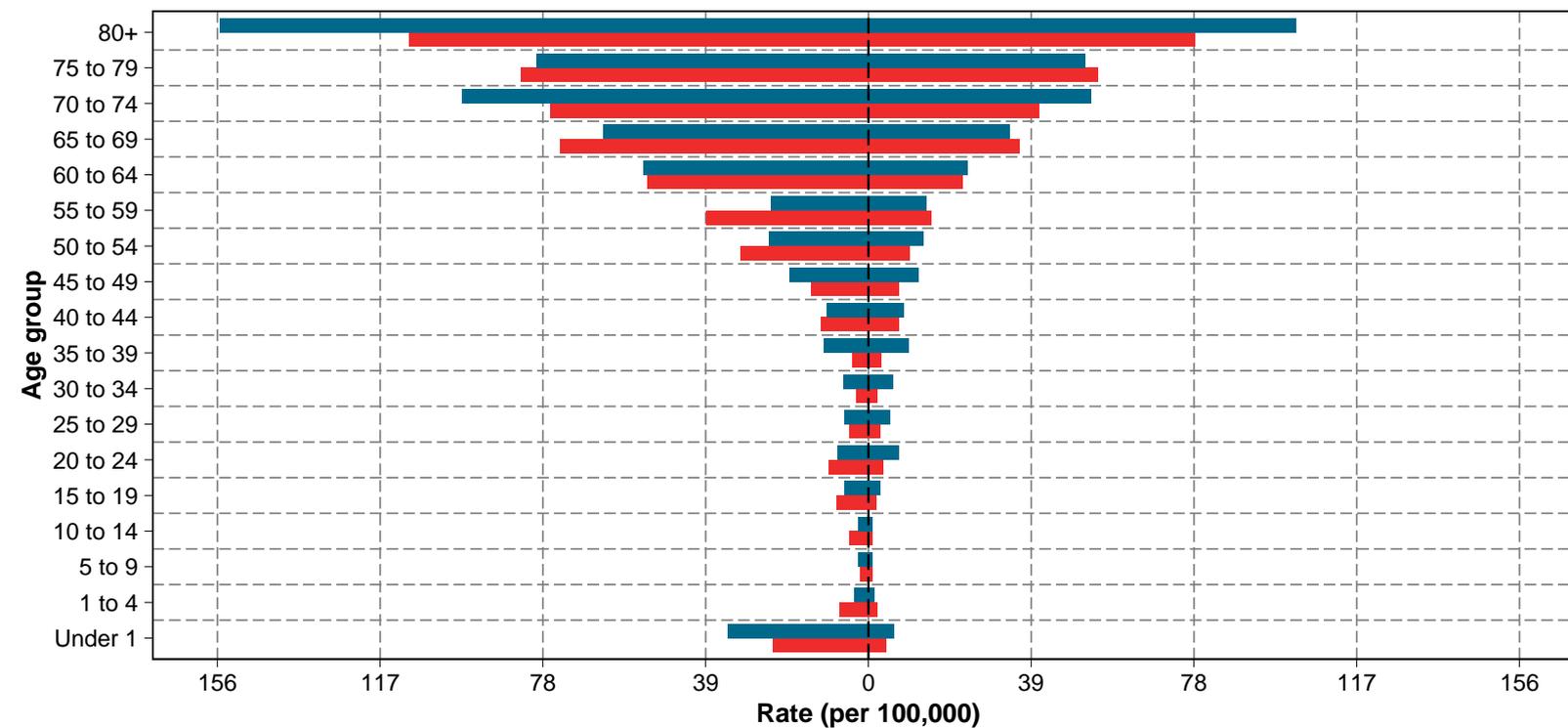
Prevalence
1990 2019



Deaths
1990 2019



DALYs
1990 2019

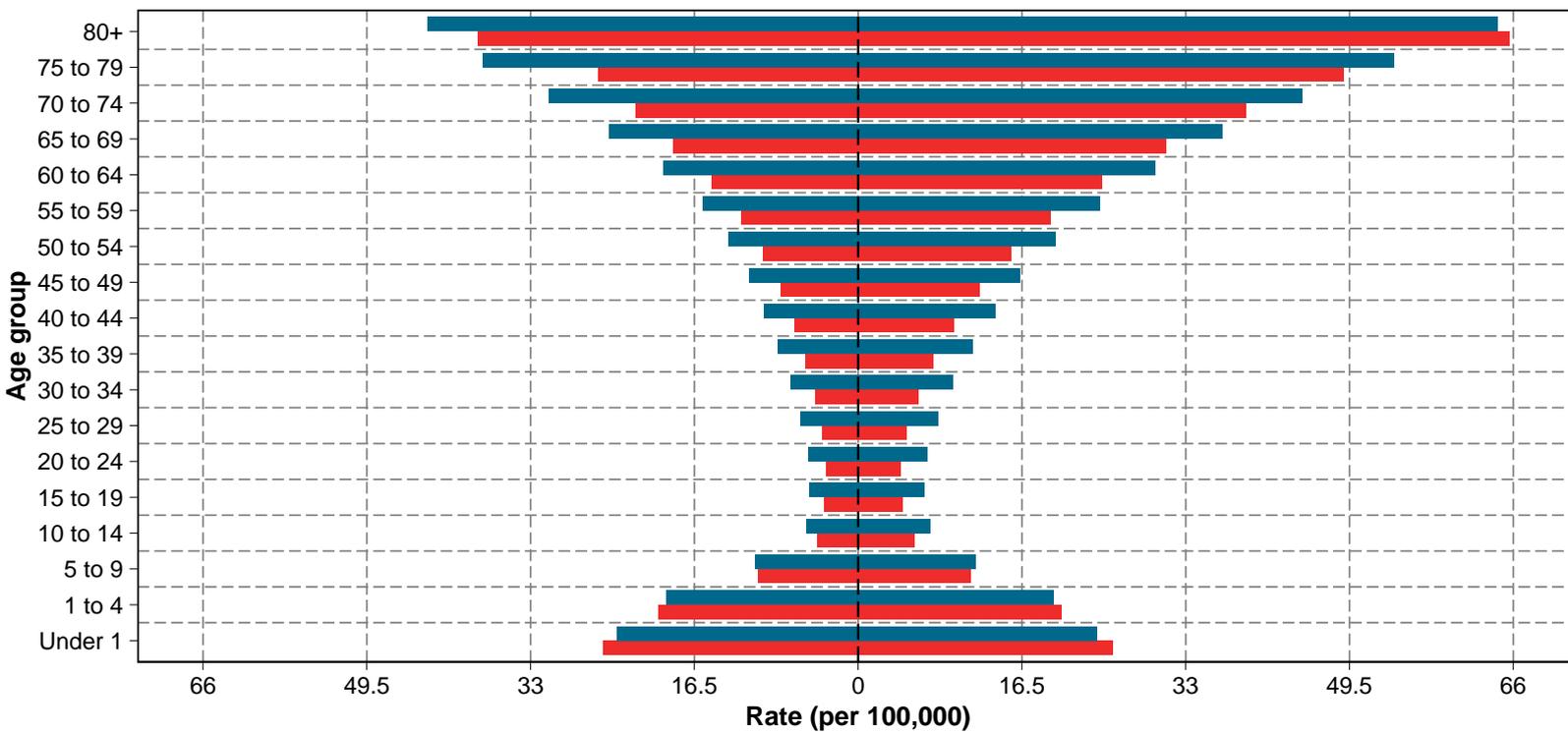


Sex
Female Male

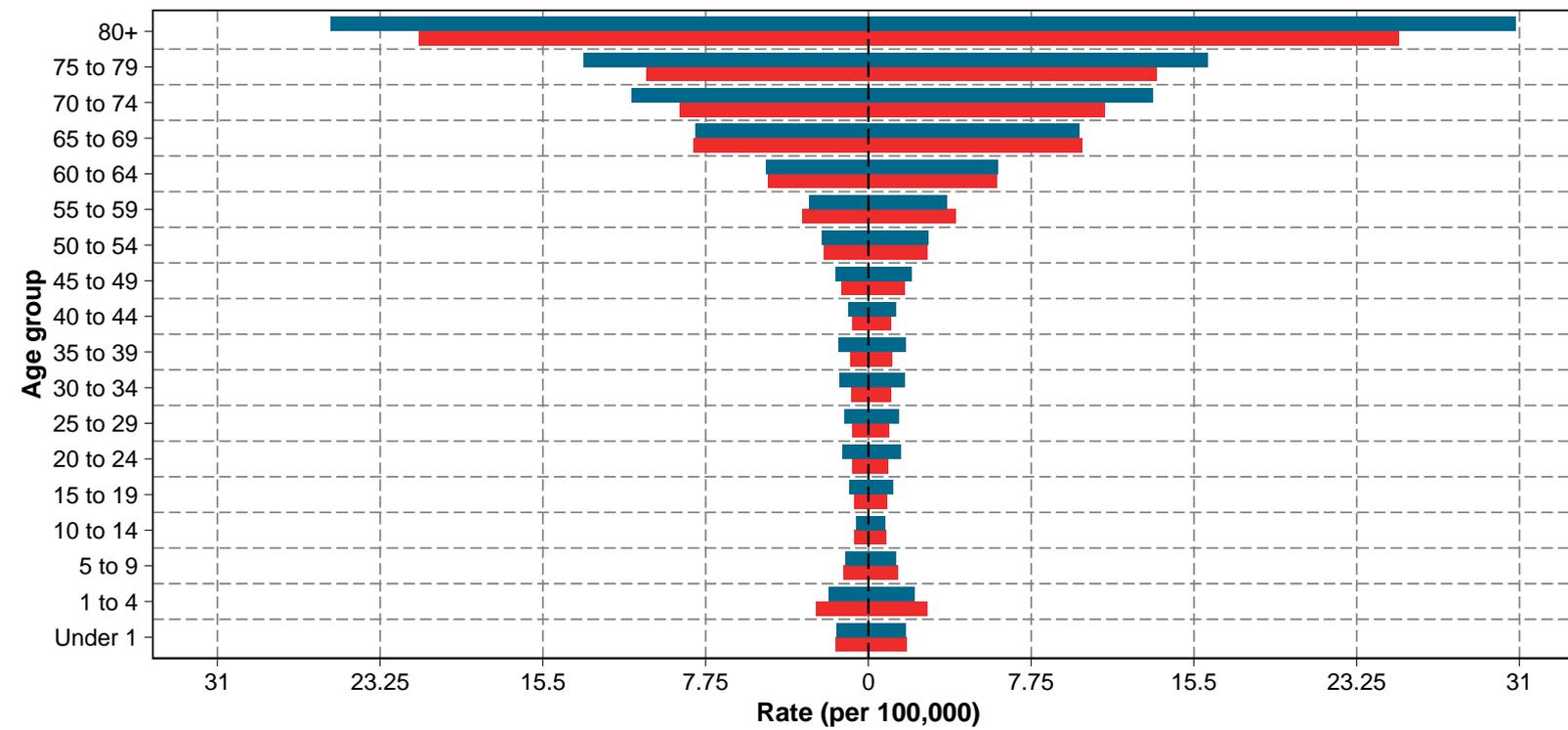
Egypt

61

Incidence
1990 2019

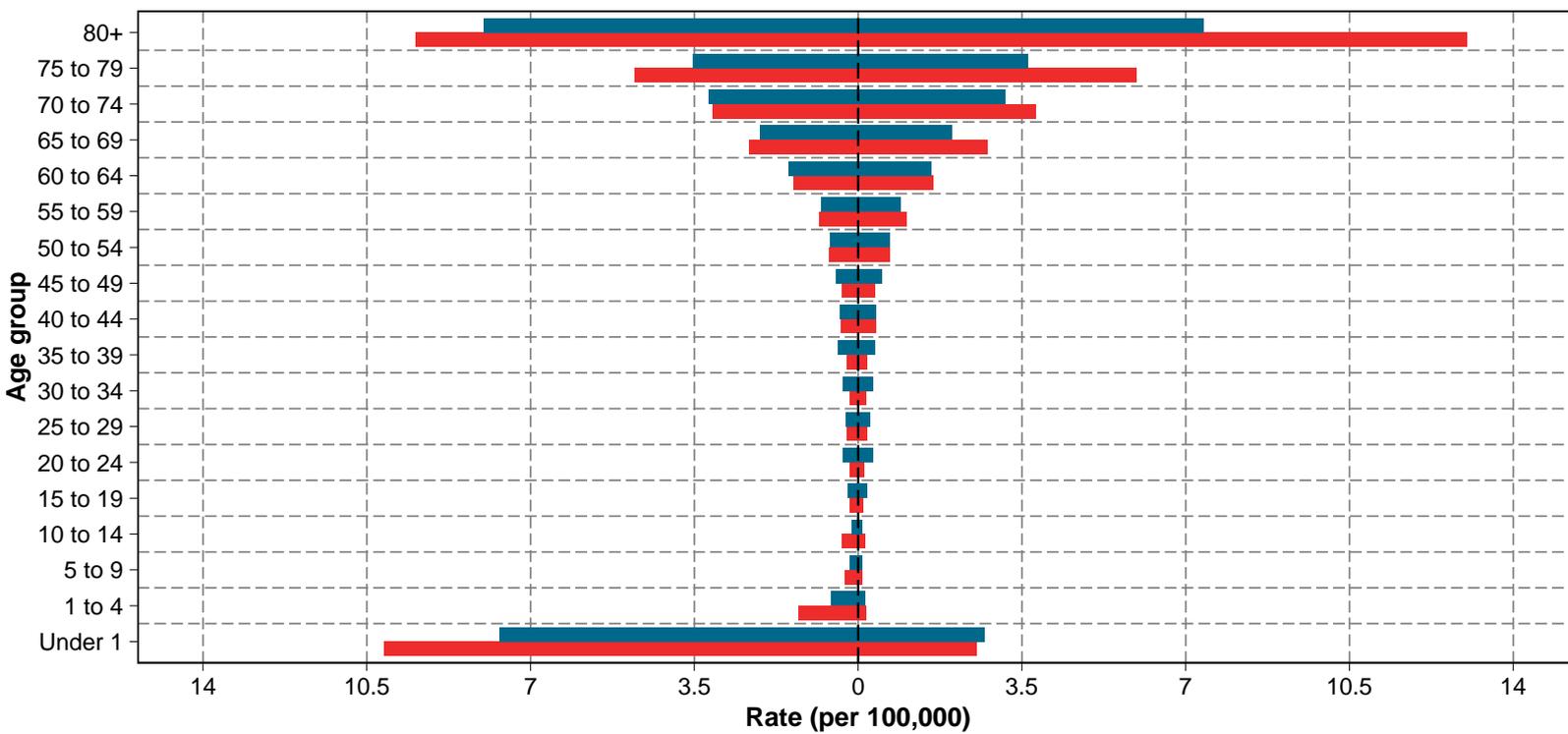


Prevalence
1990 2019

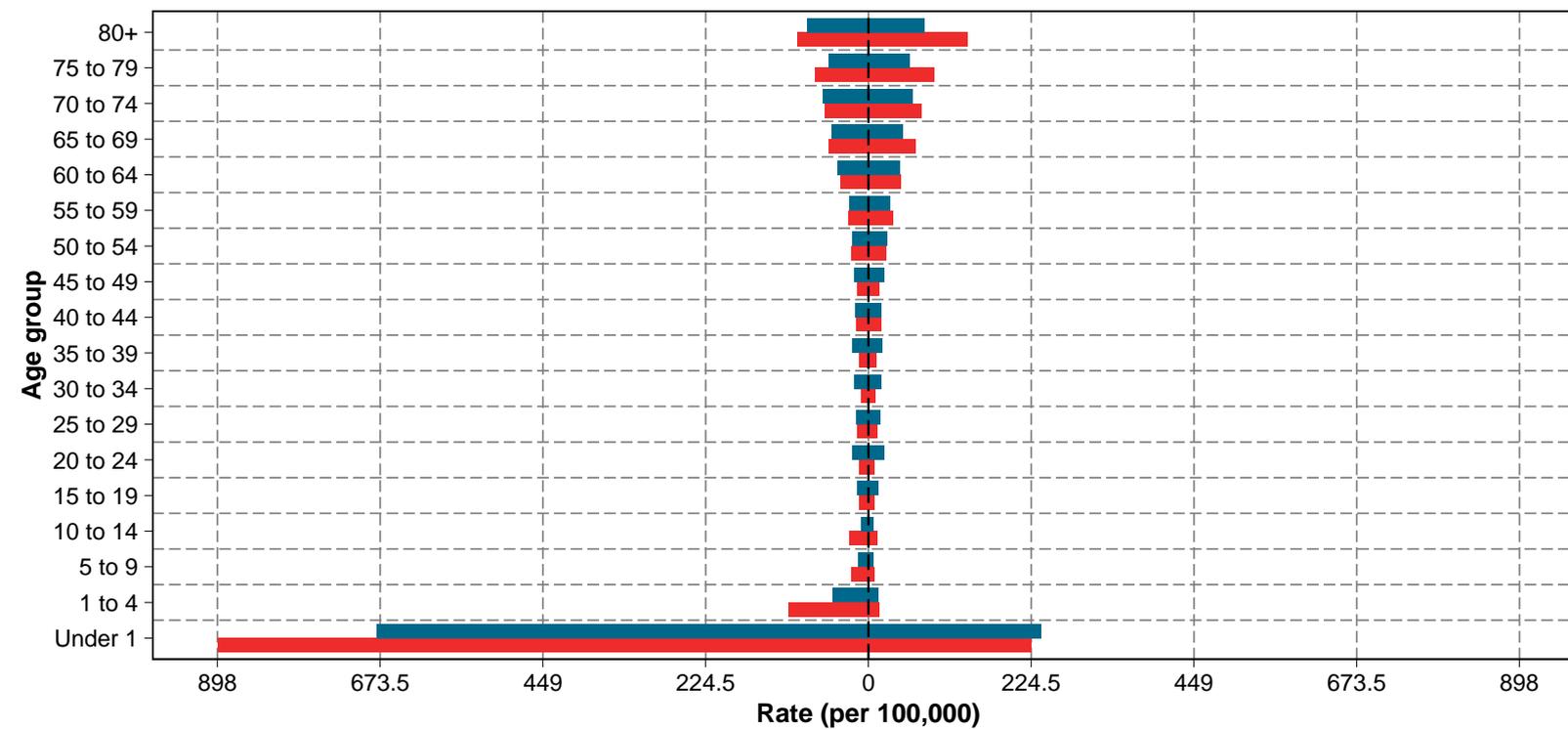


Sex
Female Male

Deaths
1990 2019



DALYs
1990 2019

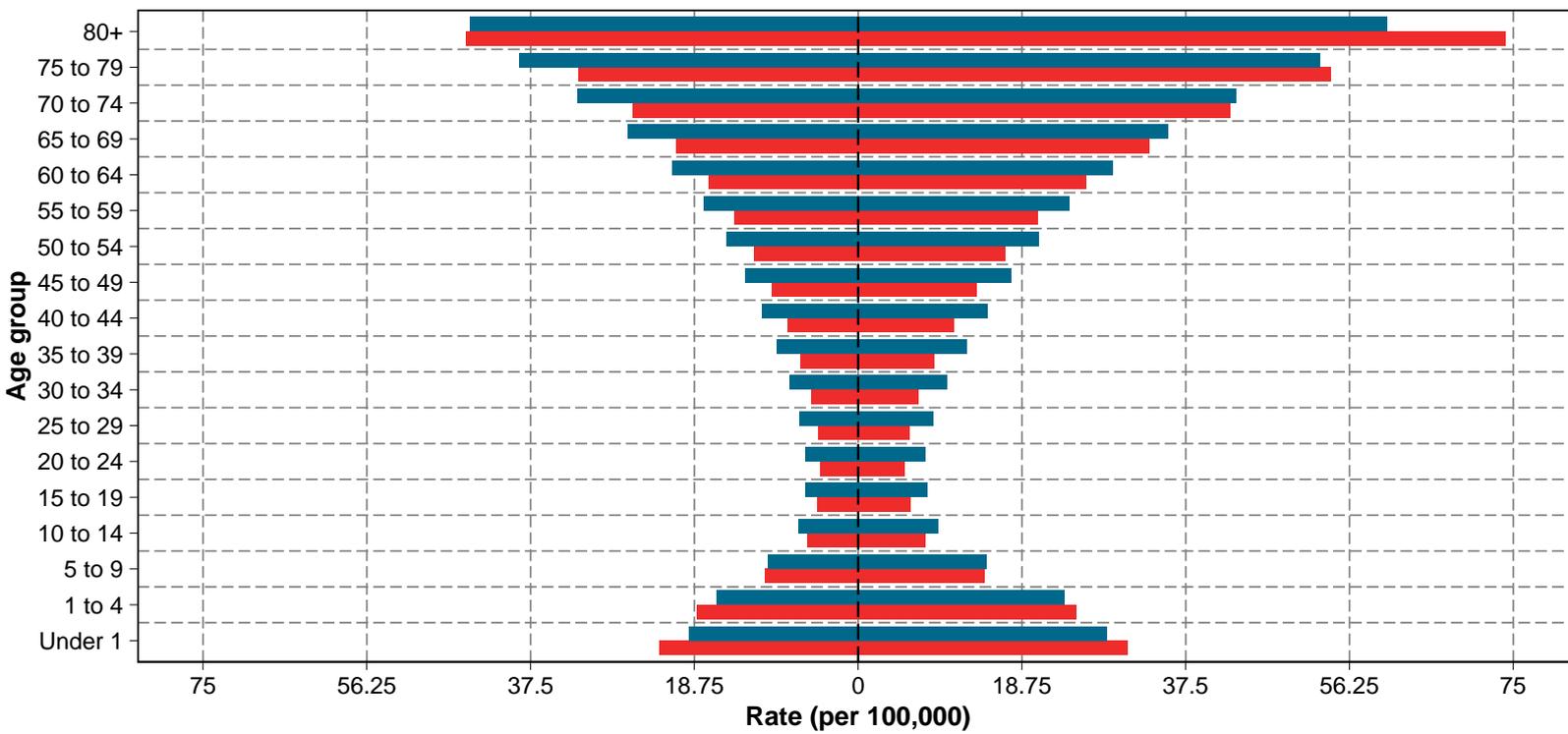


Iran (Islamic Republic of)

62

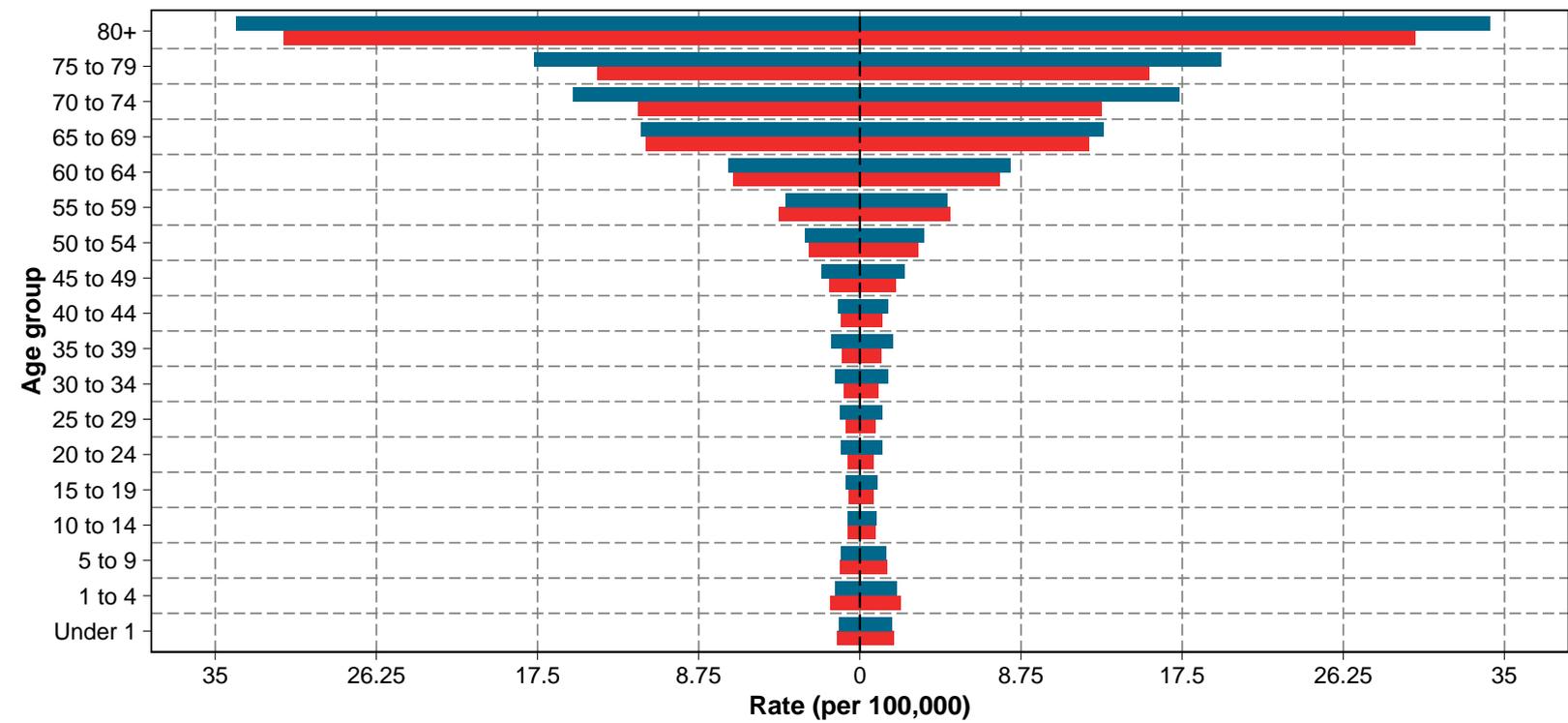
Incidence

1990 2019



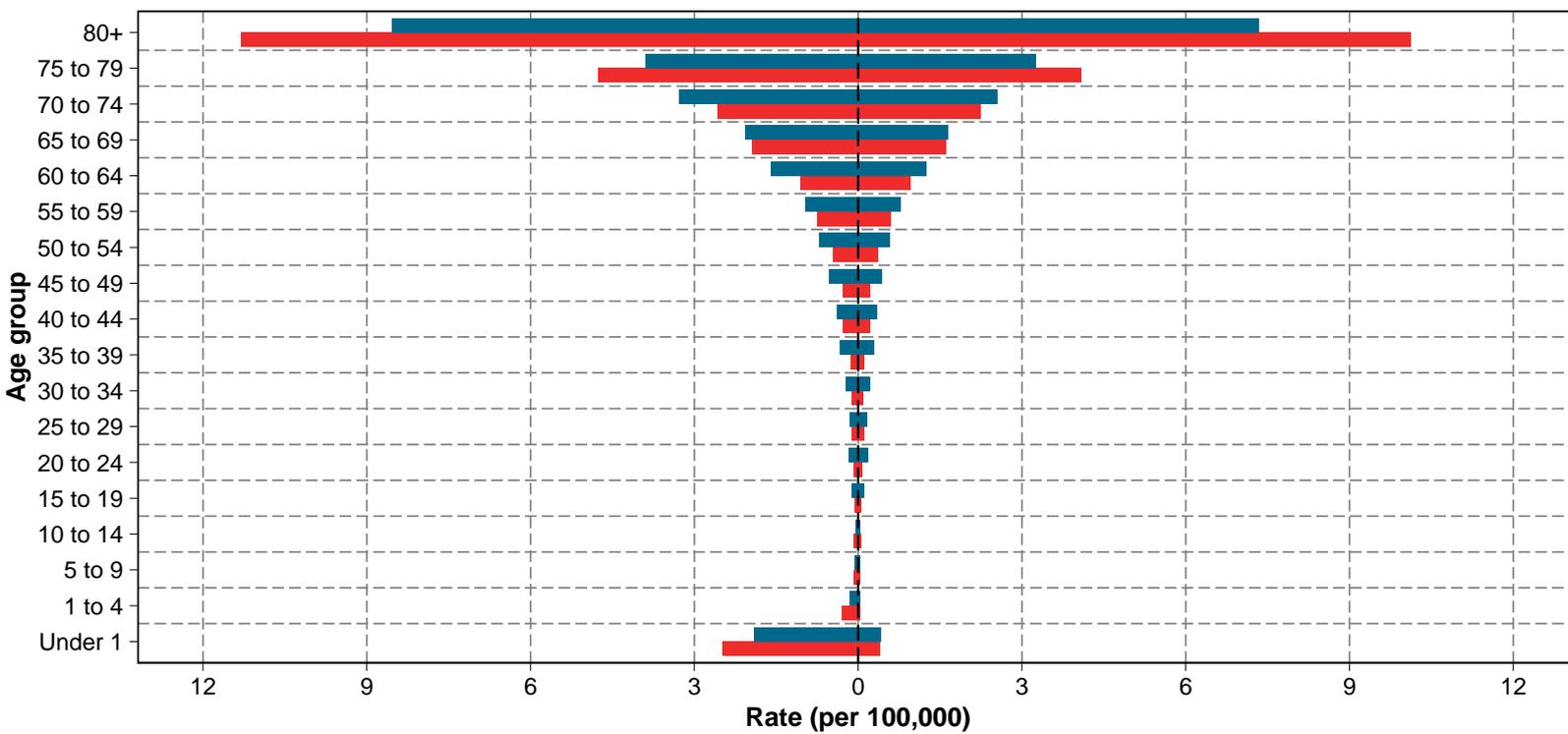
Prevalence

1990 2019



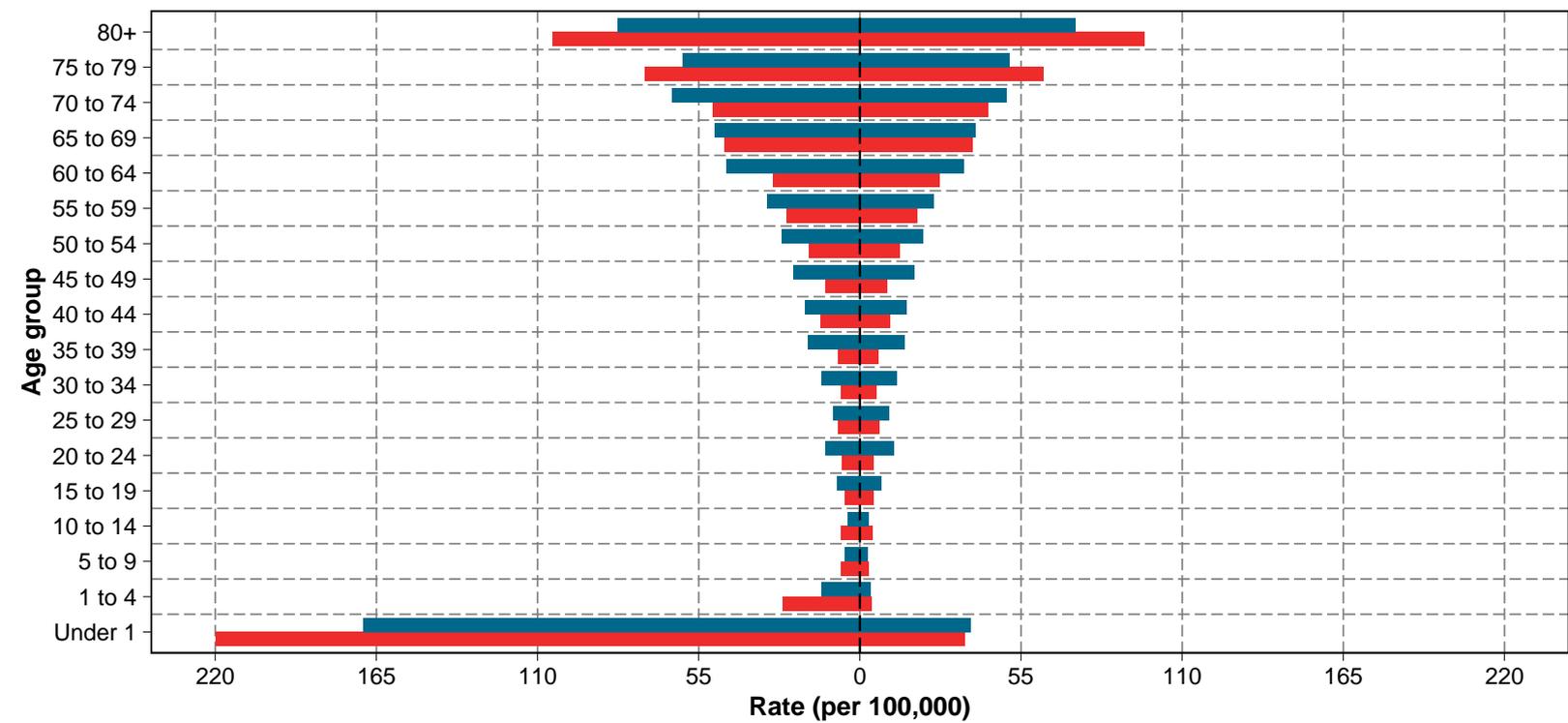
Deaths

1990 2019



DALYs

1990 2019

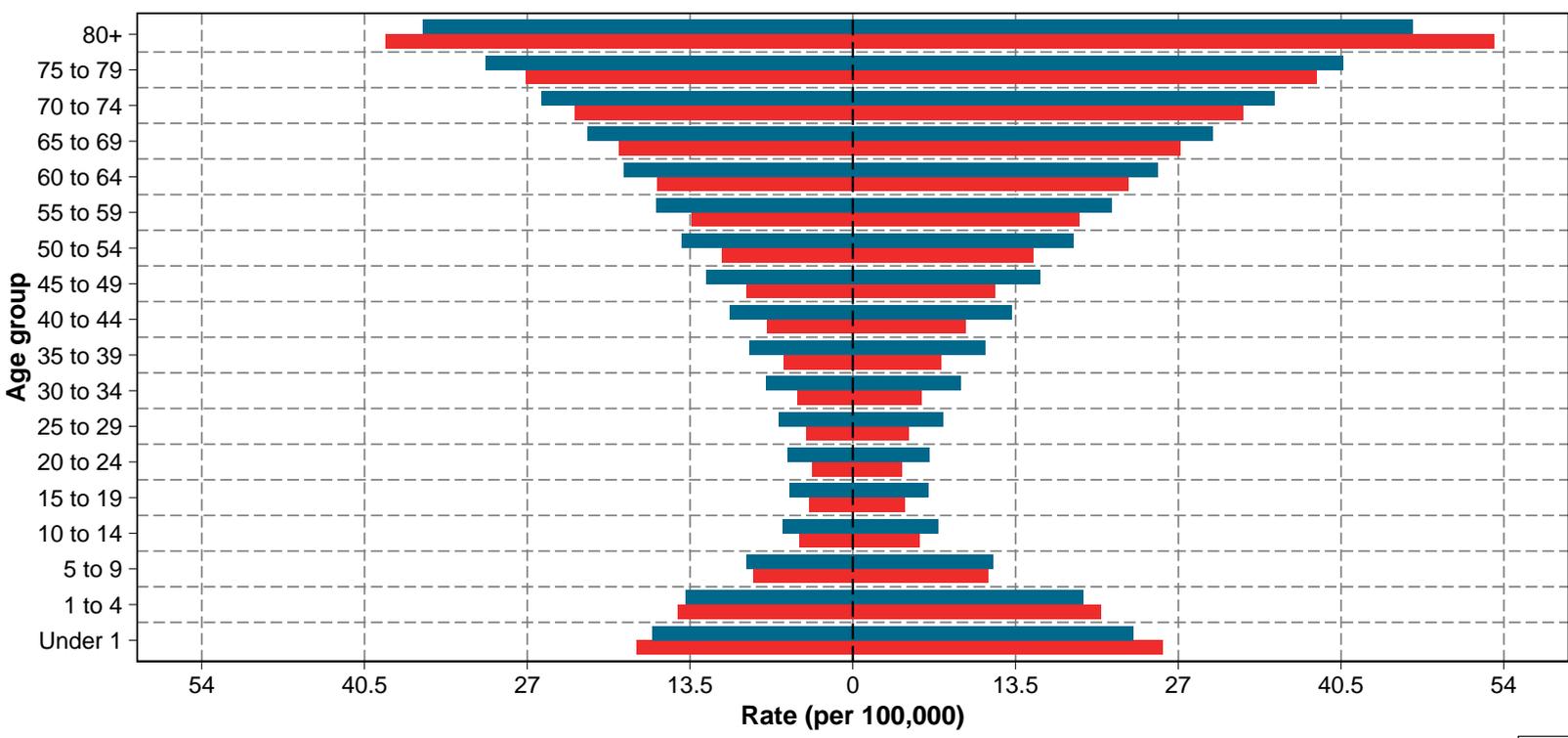


Sex
█ Female █ Male

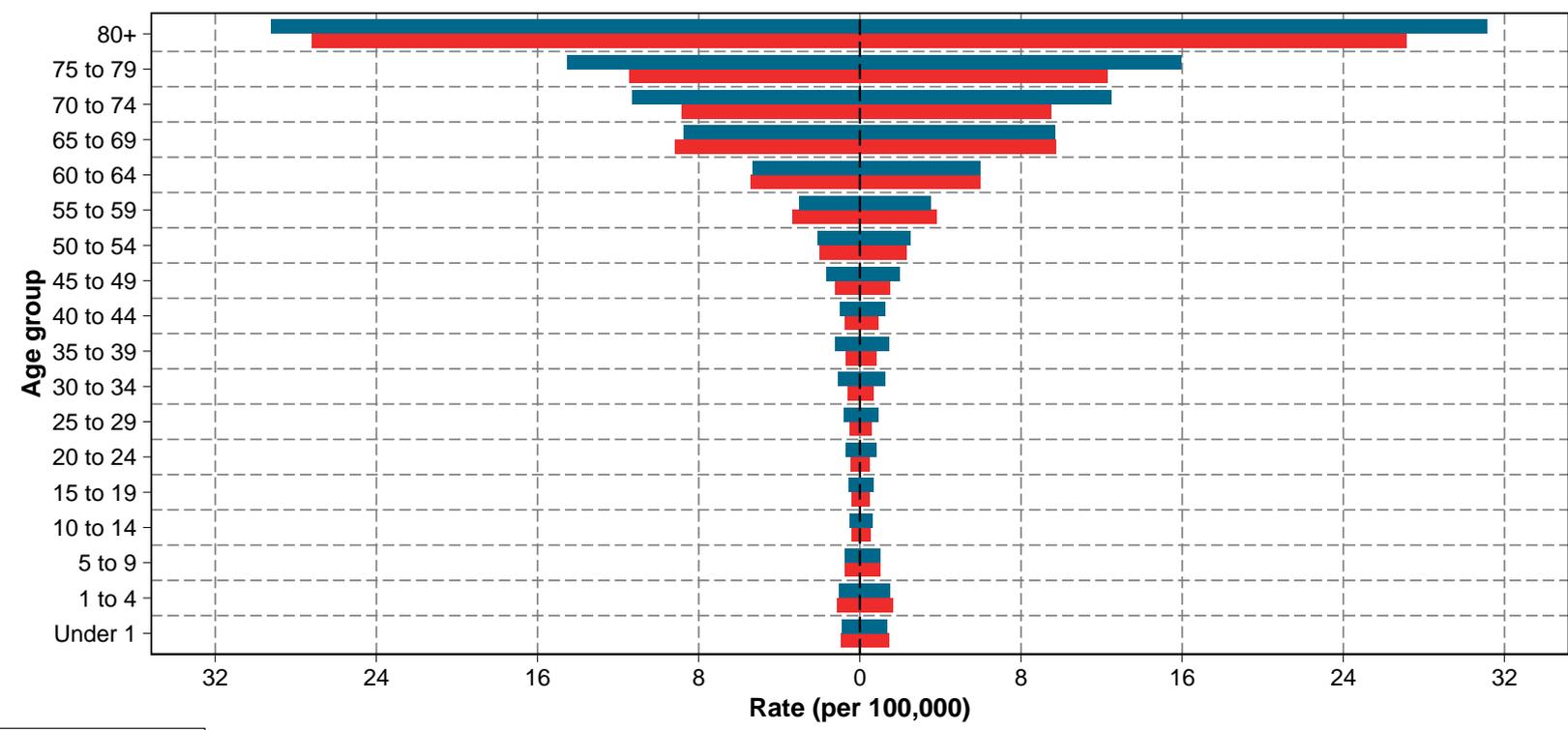
Iraq

63

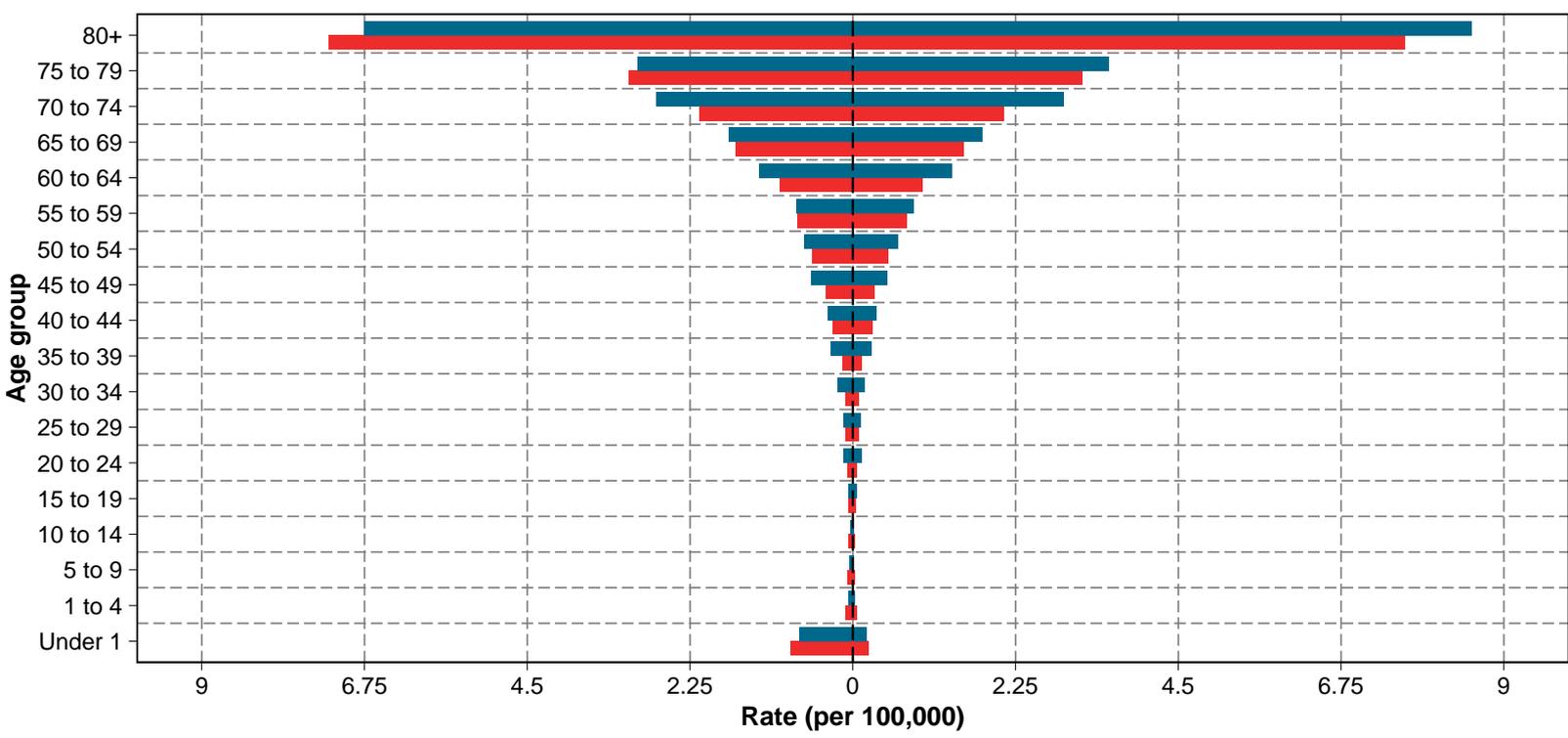
Incidence 1990 2019



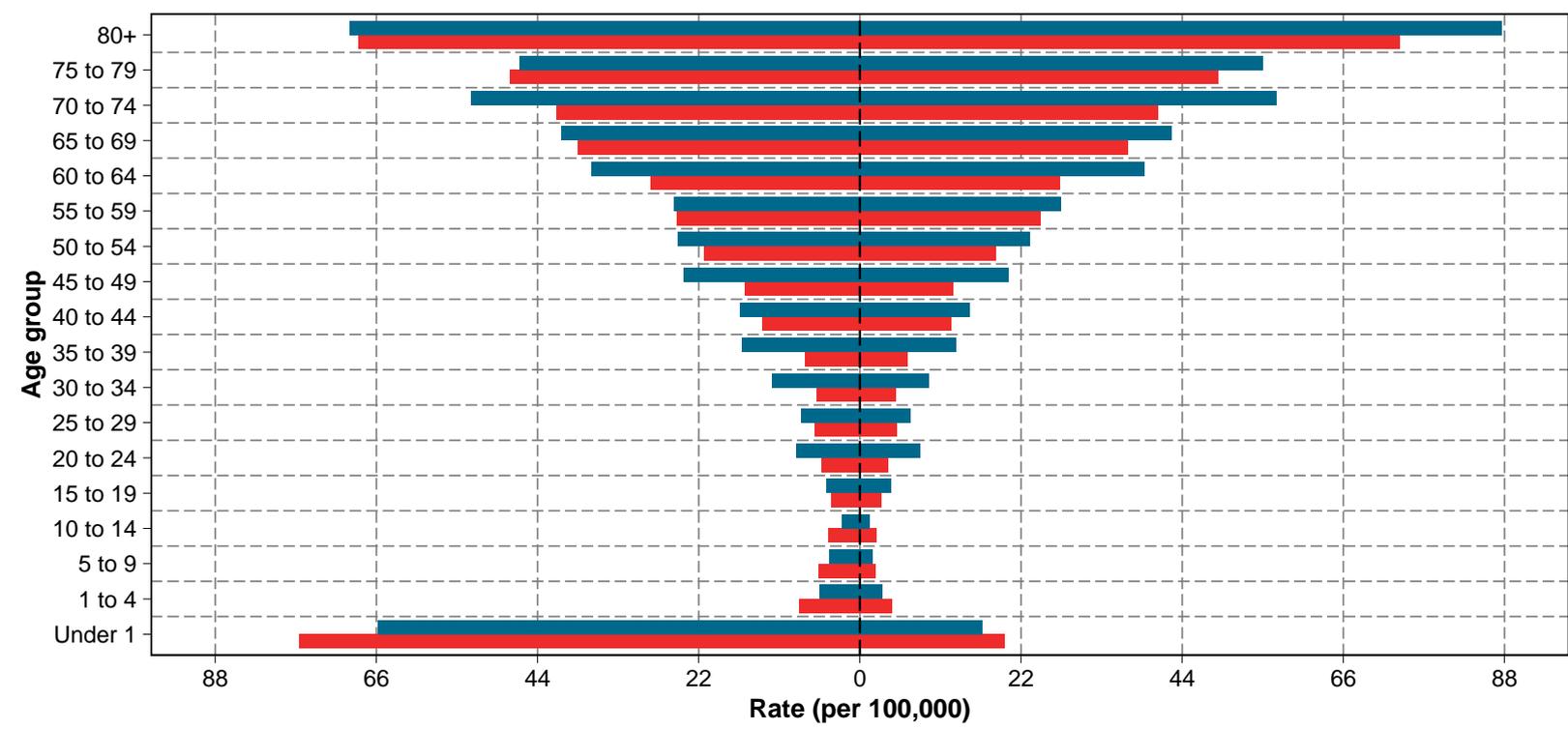
Prevalence 1990 2019



Deaths 1990 2019



DALYs 1990 2019

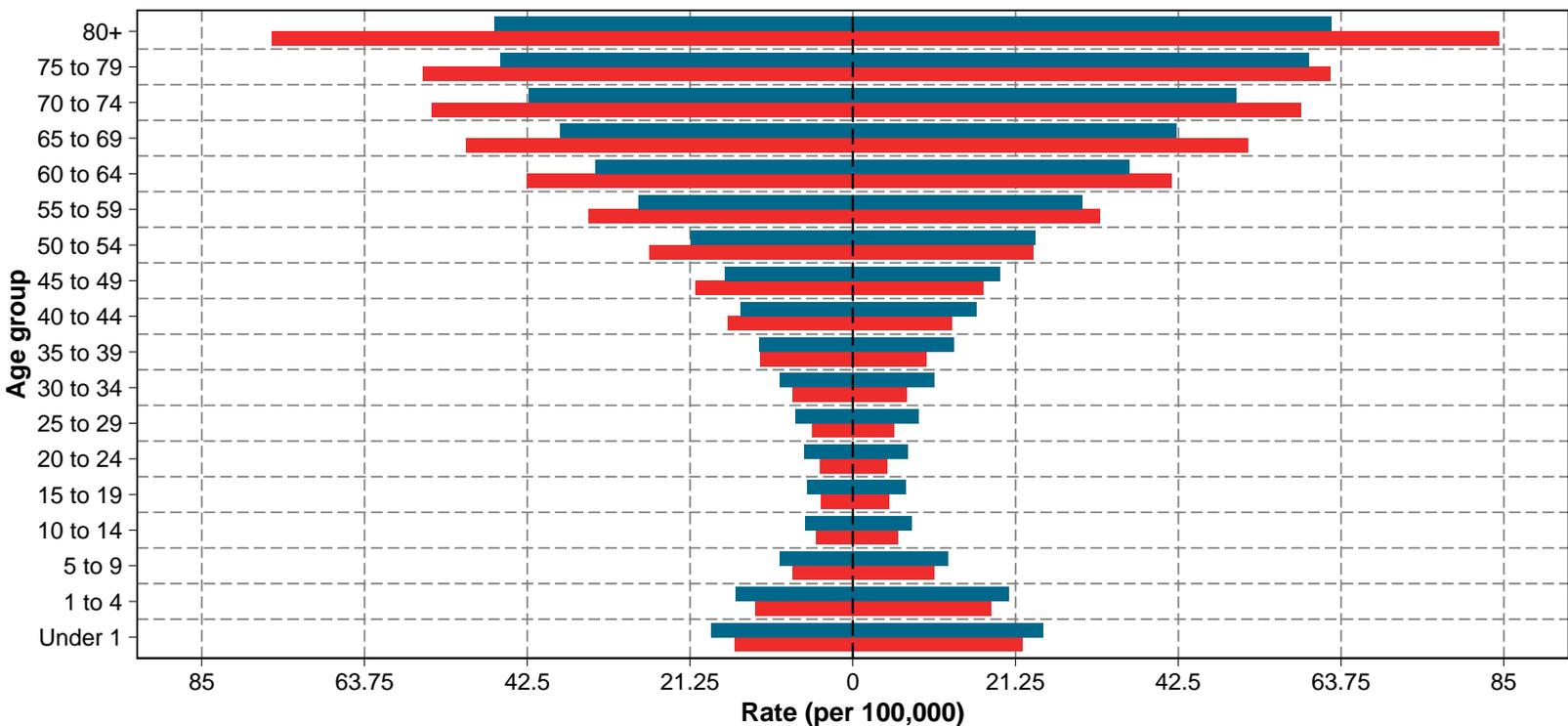


Sex
Female Male

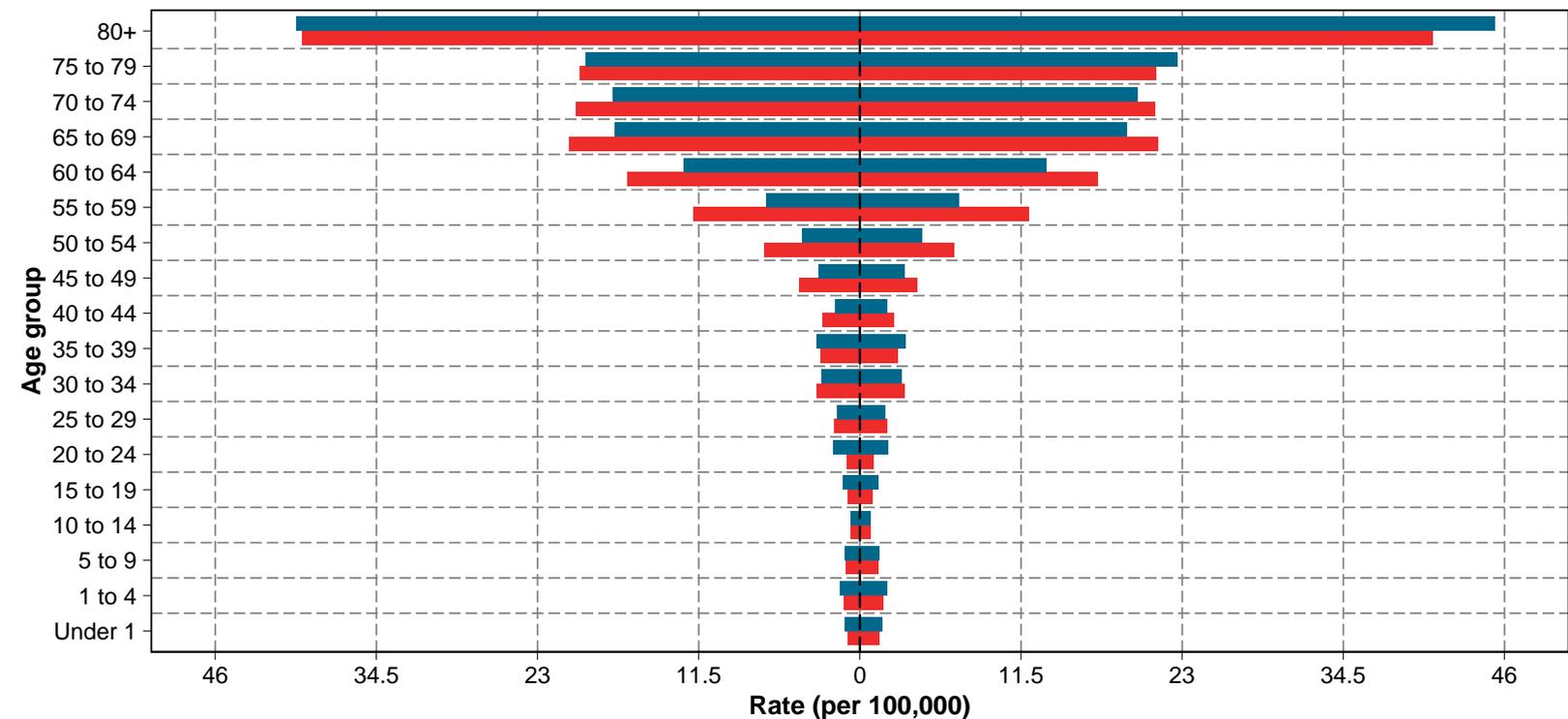
Jordan

64

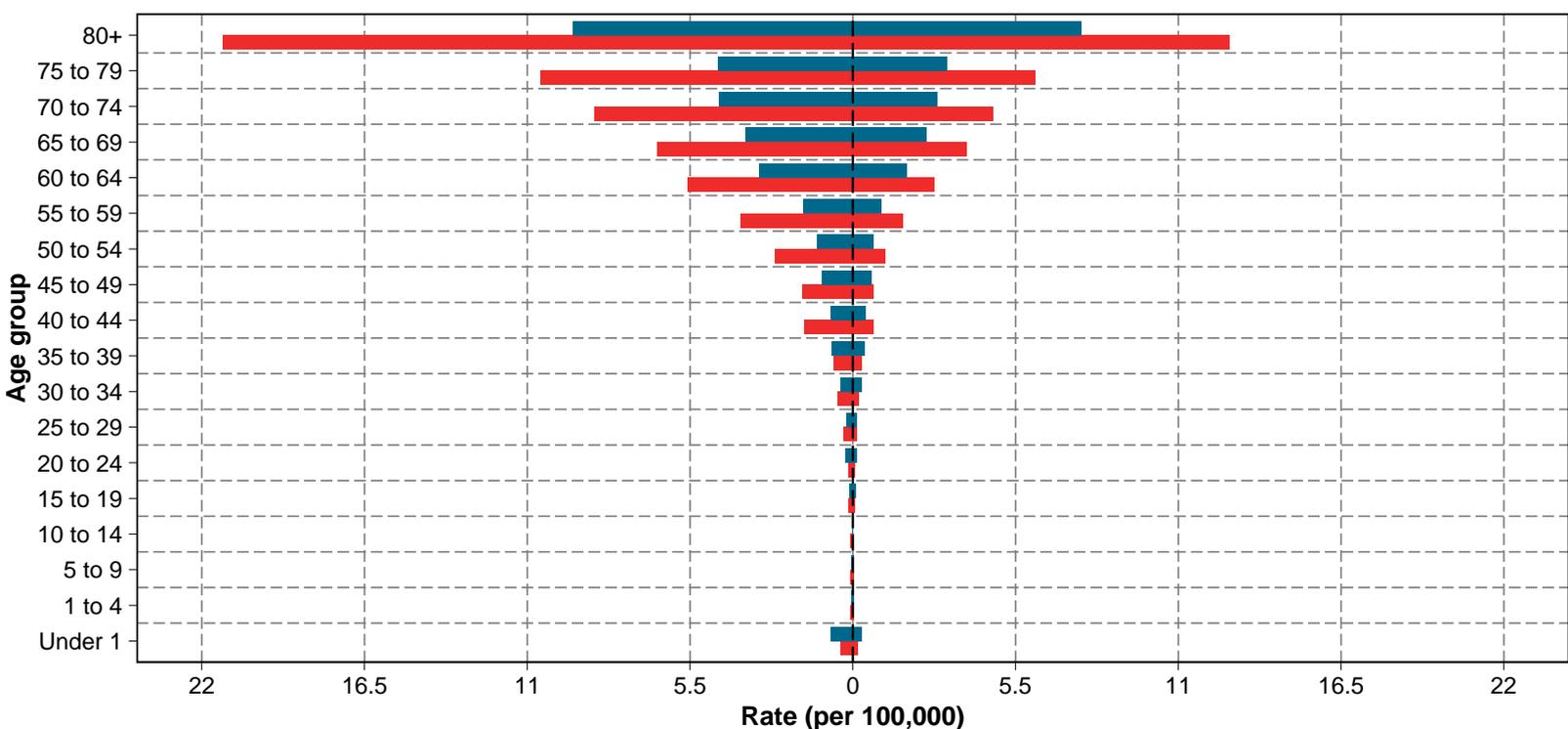
Incidence
1990 2019



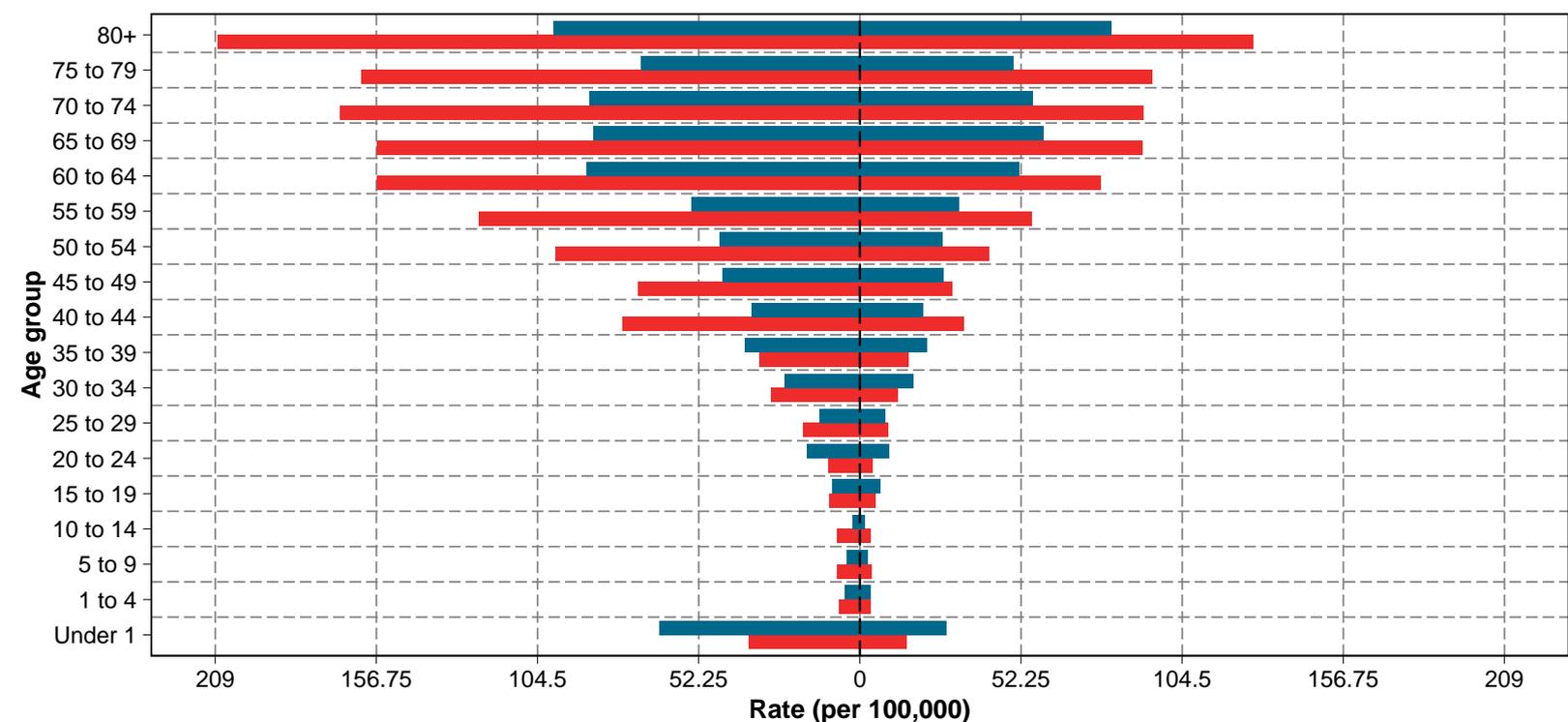
Prevalence
1990 2019



Deaths
1990 2019



DALYs
1990 2019

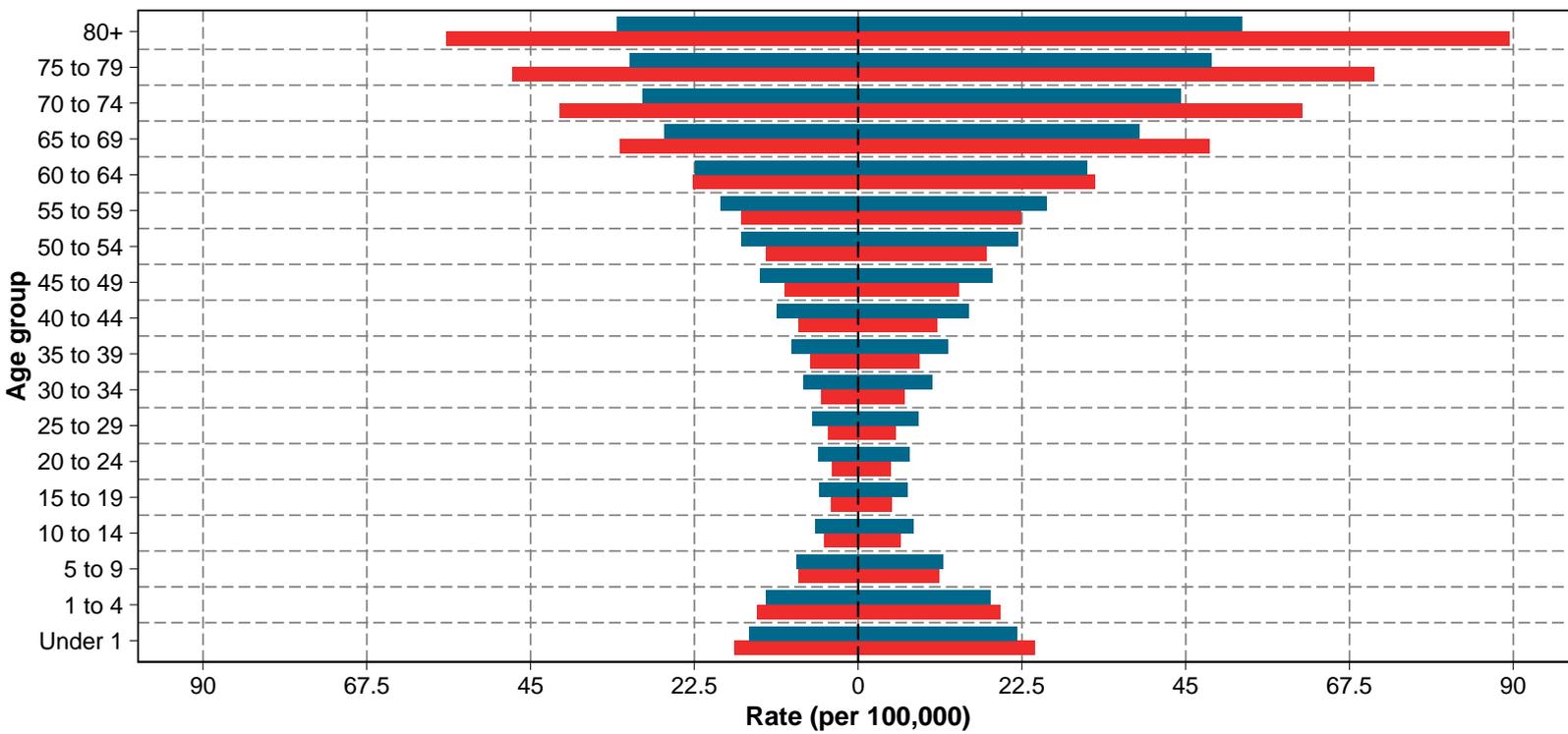


Sex
Female Male

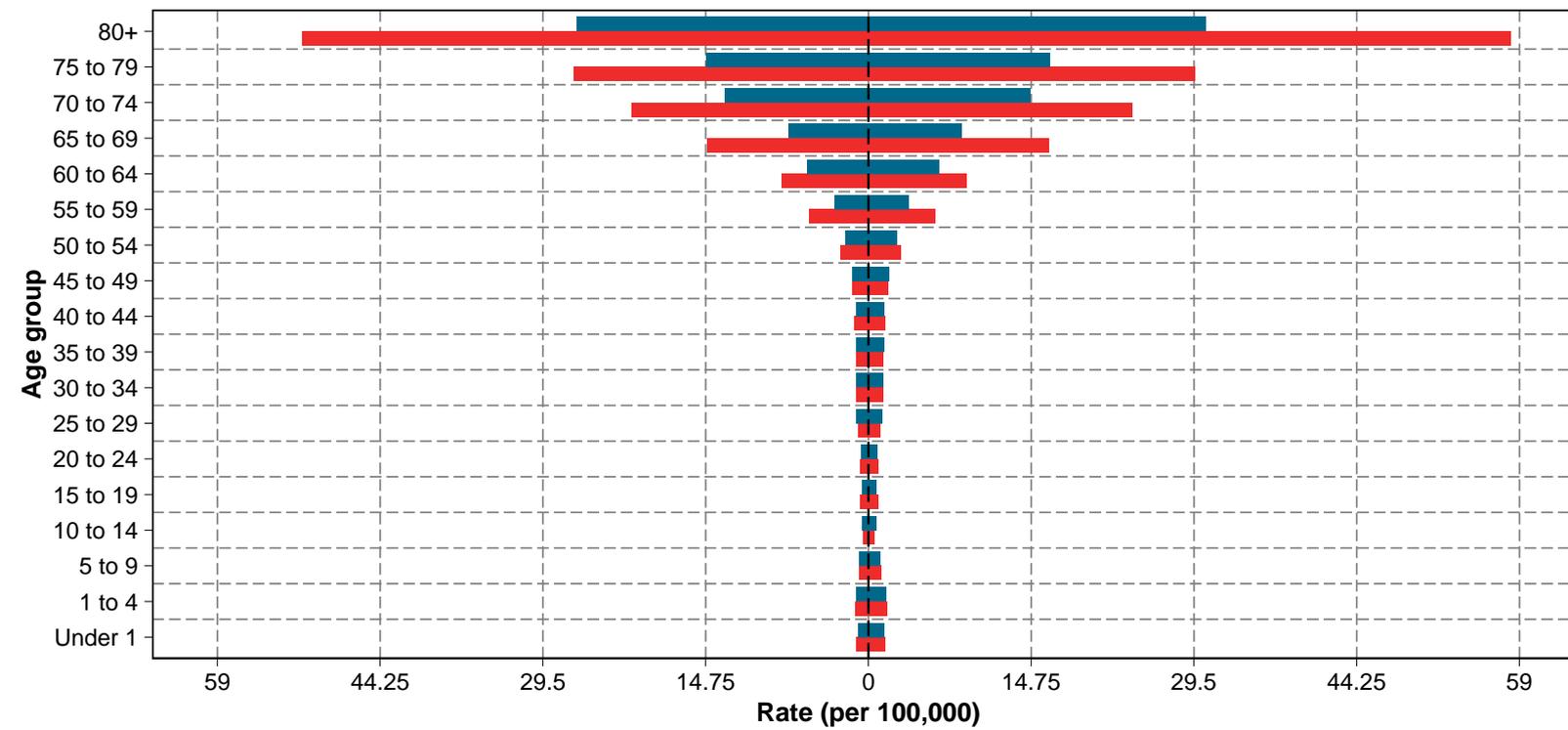
Kuwait

65

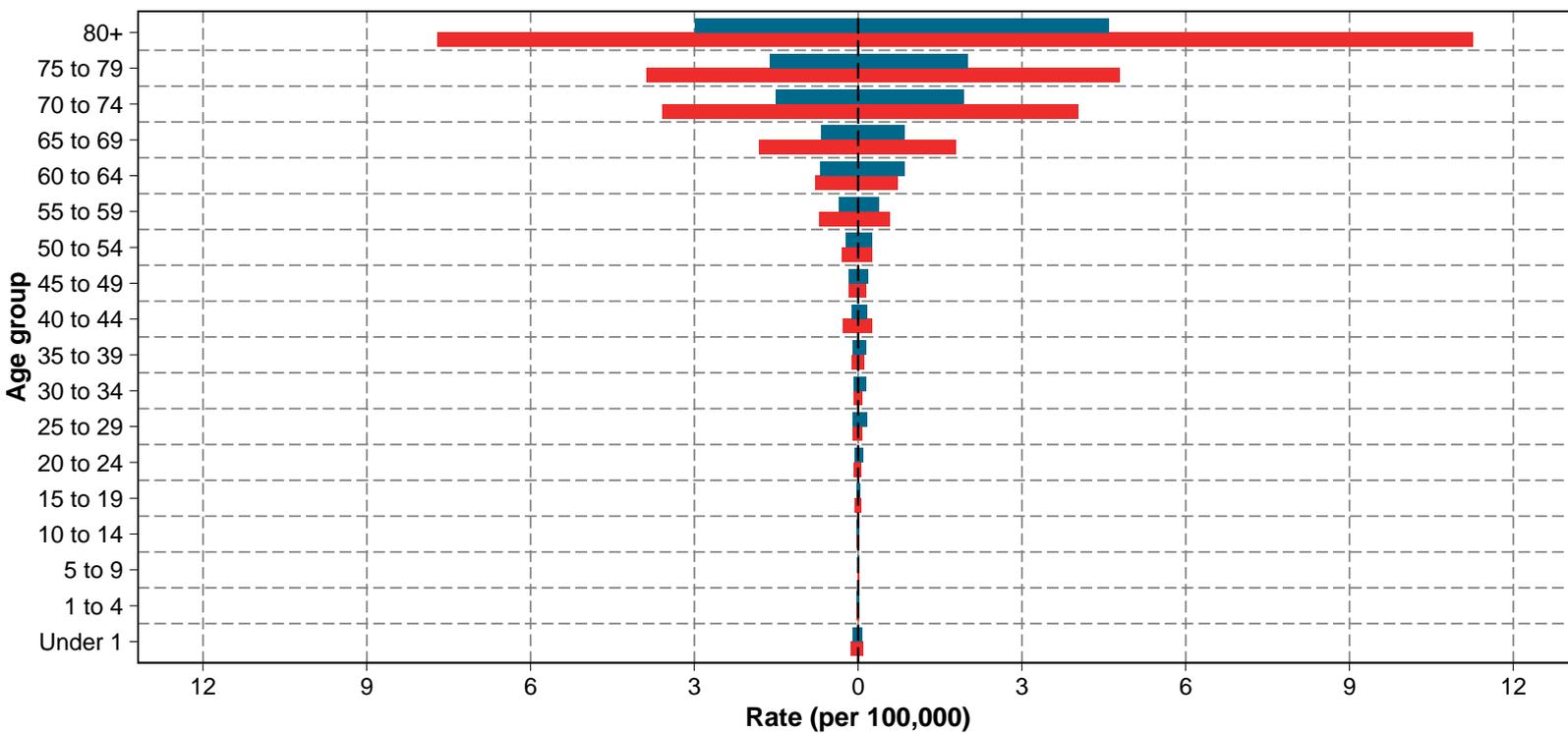
Incidence
1990 2019



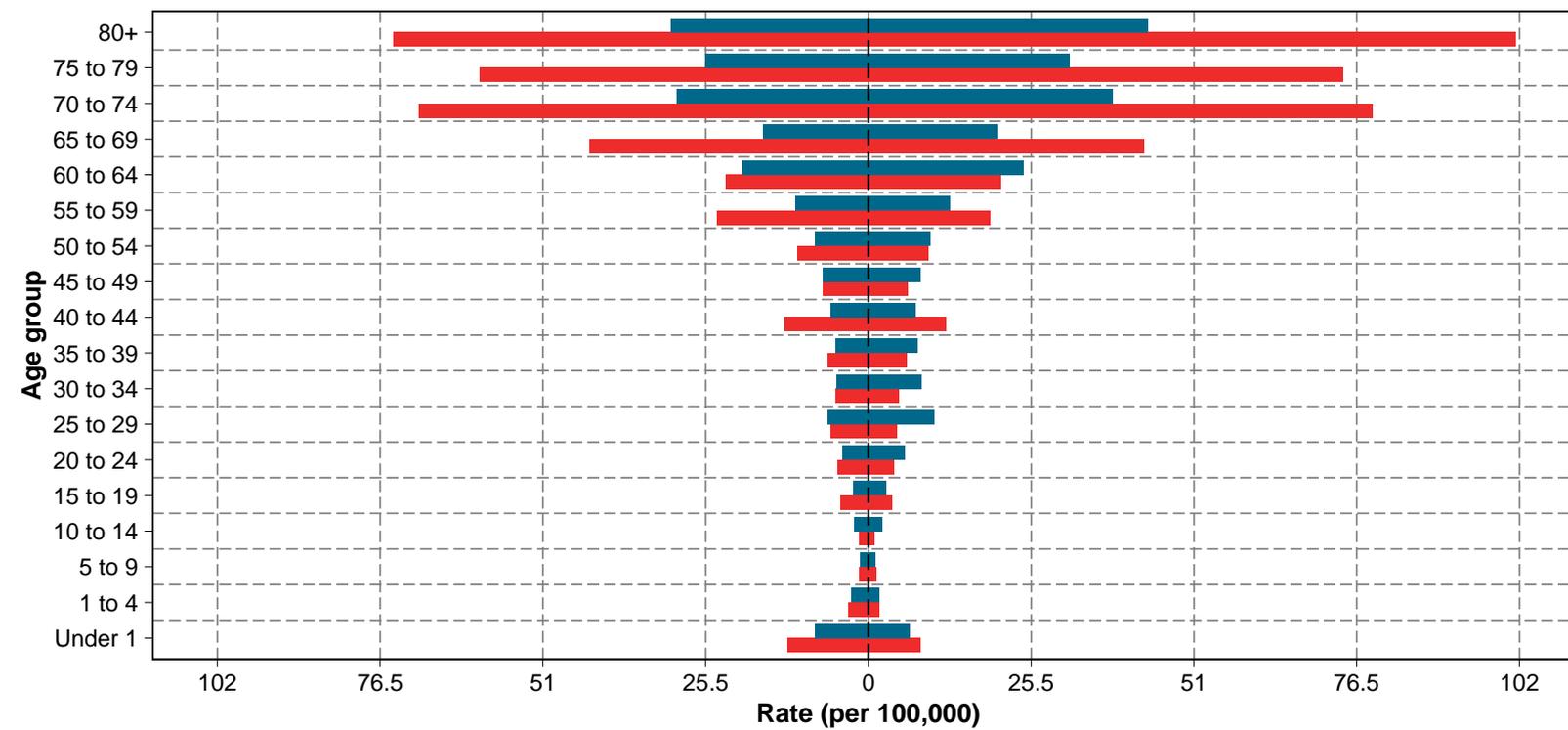
Prevalence
1990 2019



Deaths
1990 2019



DALYs
1990 2019

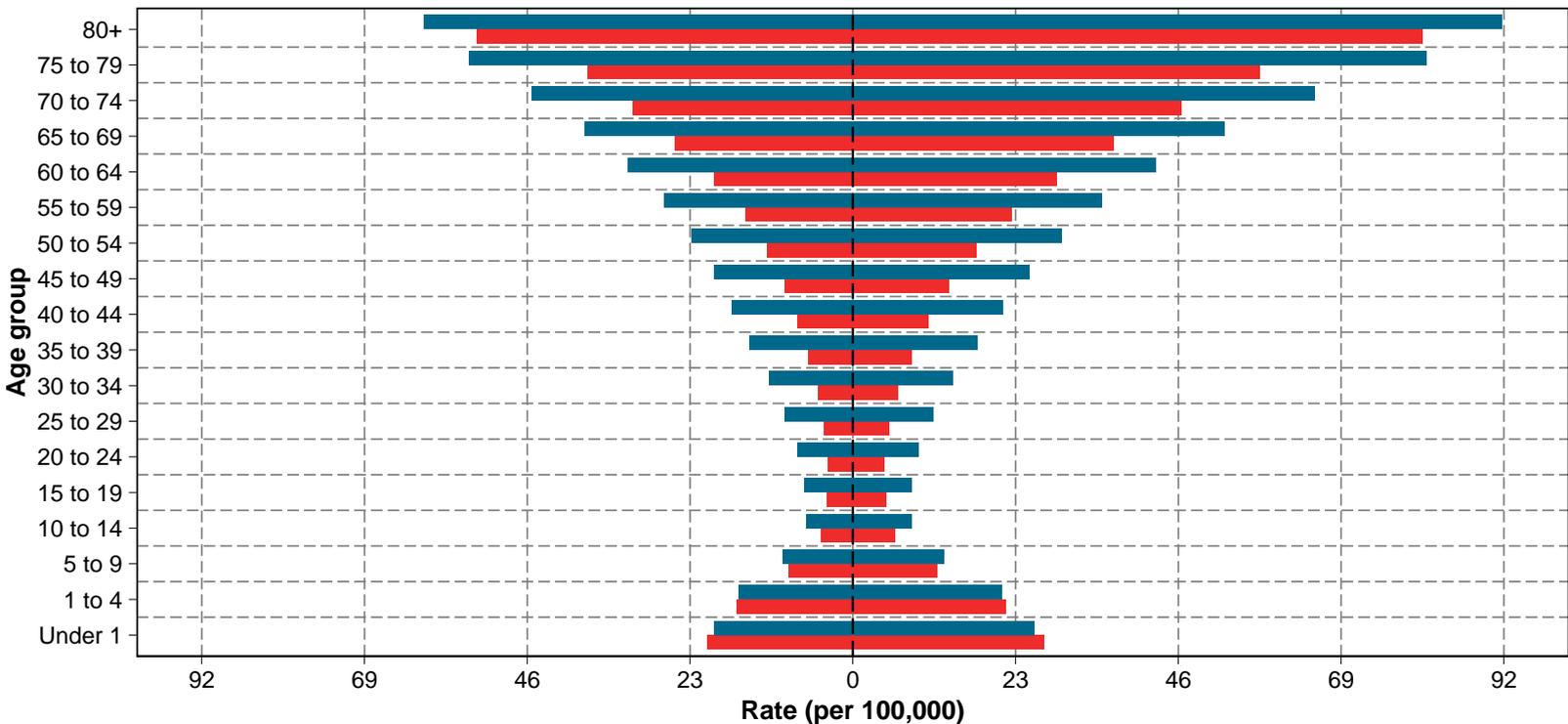


Sex
Female Male

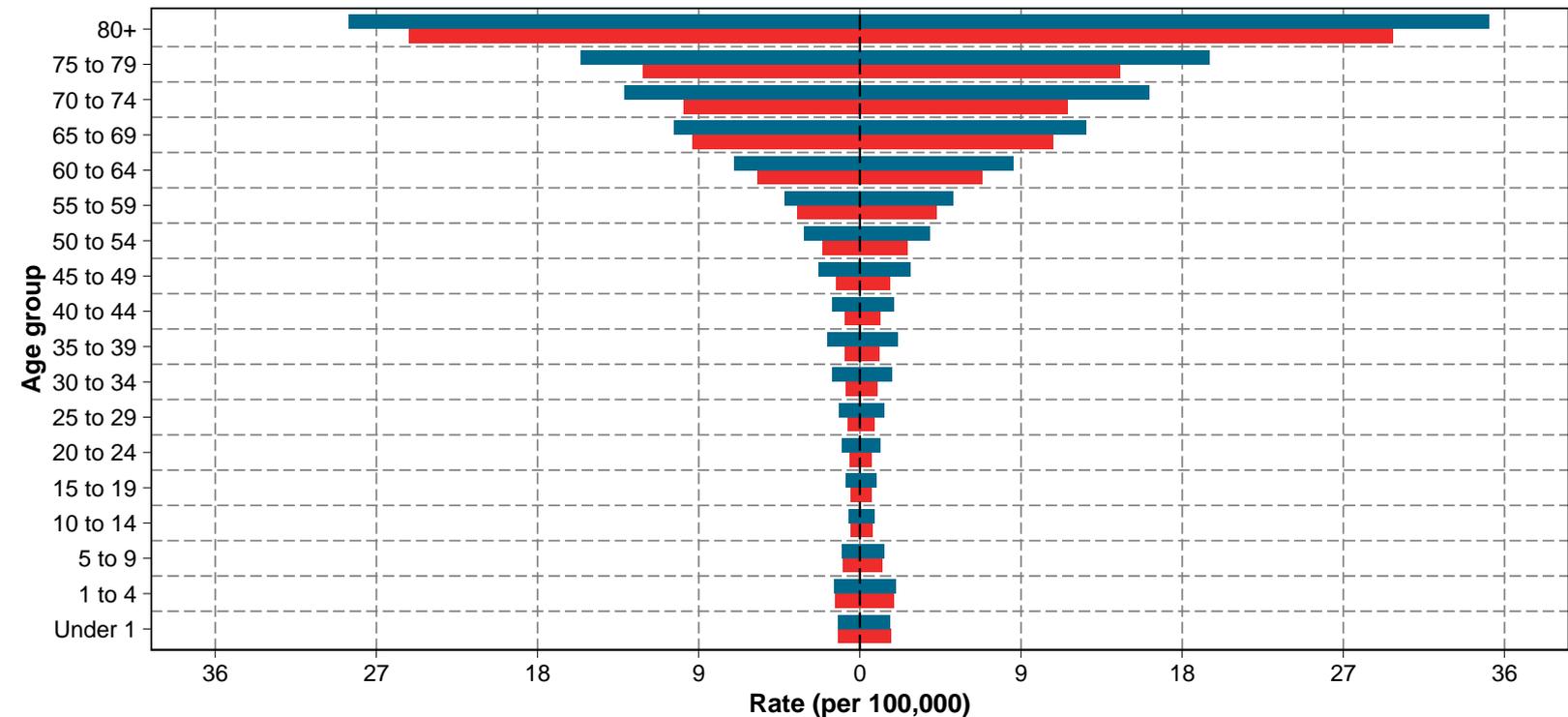
Lebanon

66

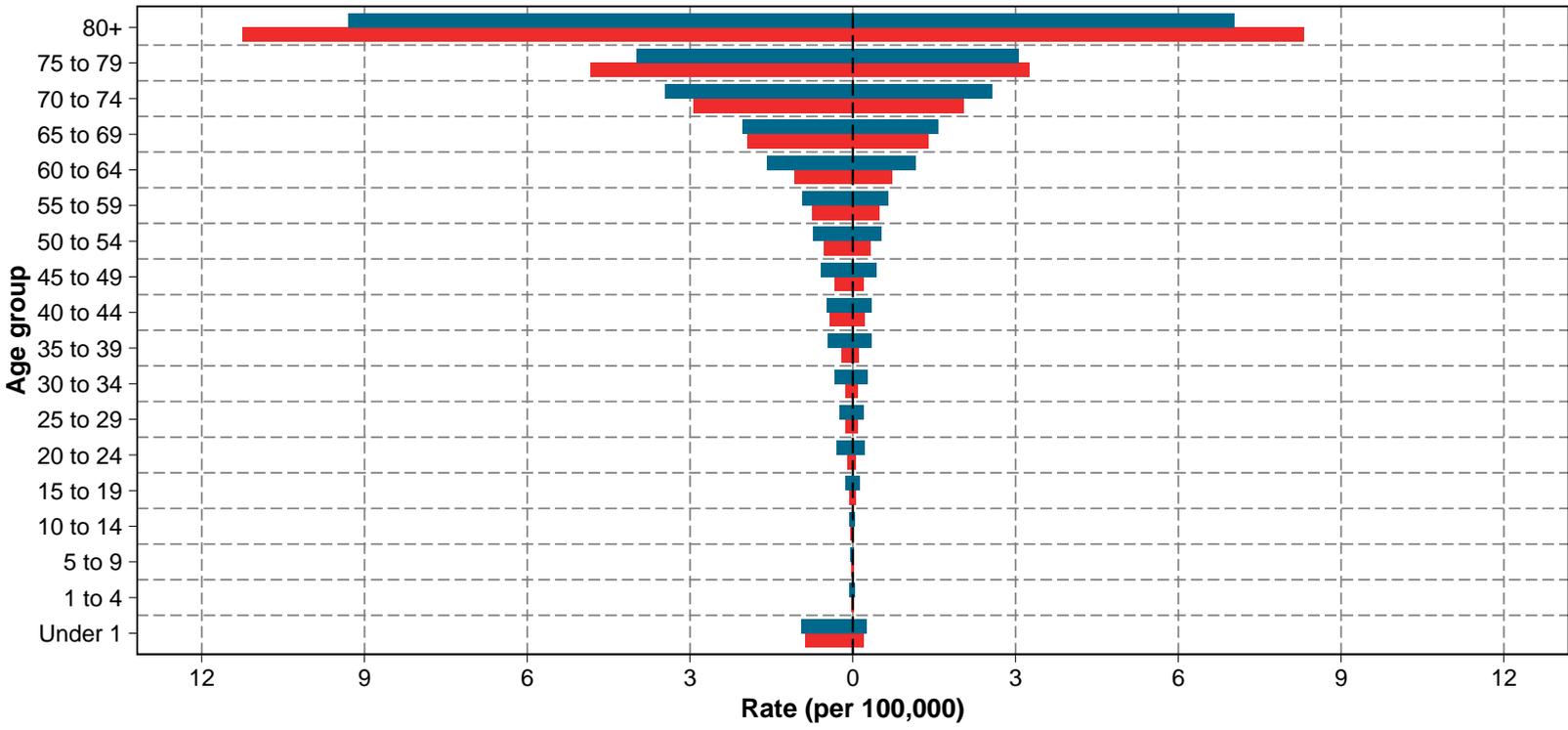
Incidence
1990 2019



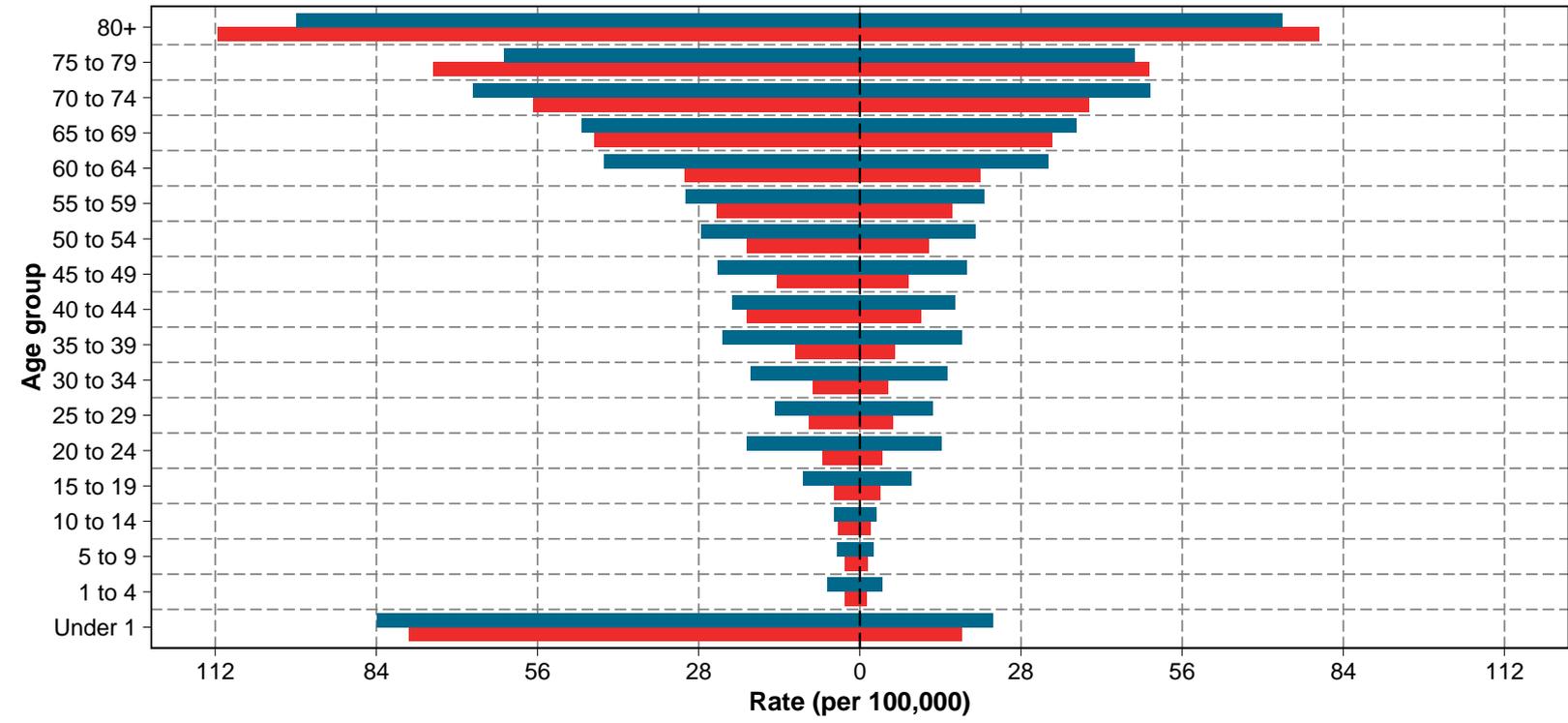
Prevalence
1990 2019



Deaths
1990 2019



DALYs
1990 2019

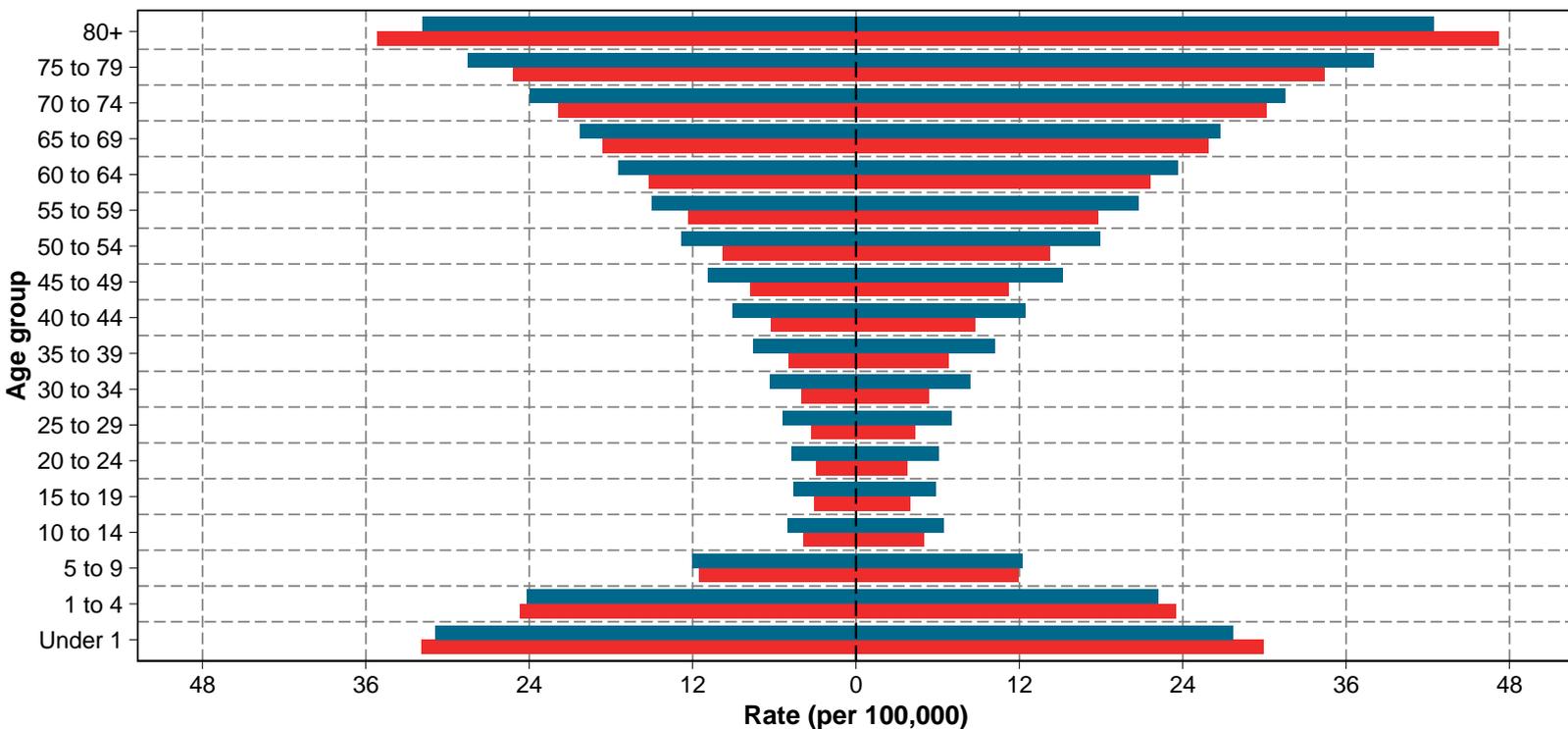


Sex
Female Male

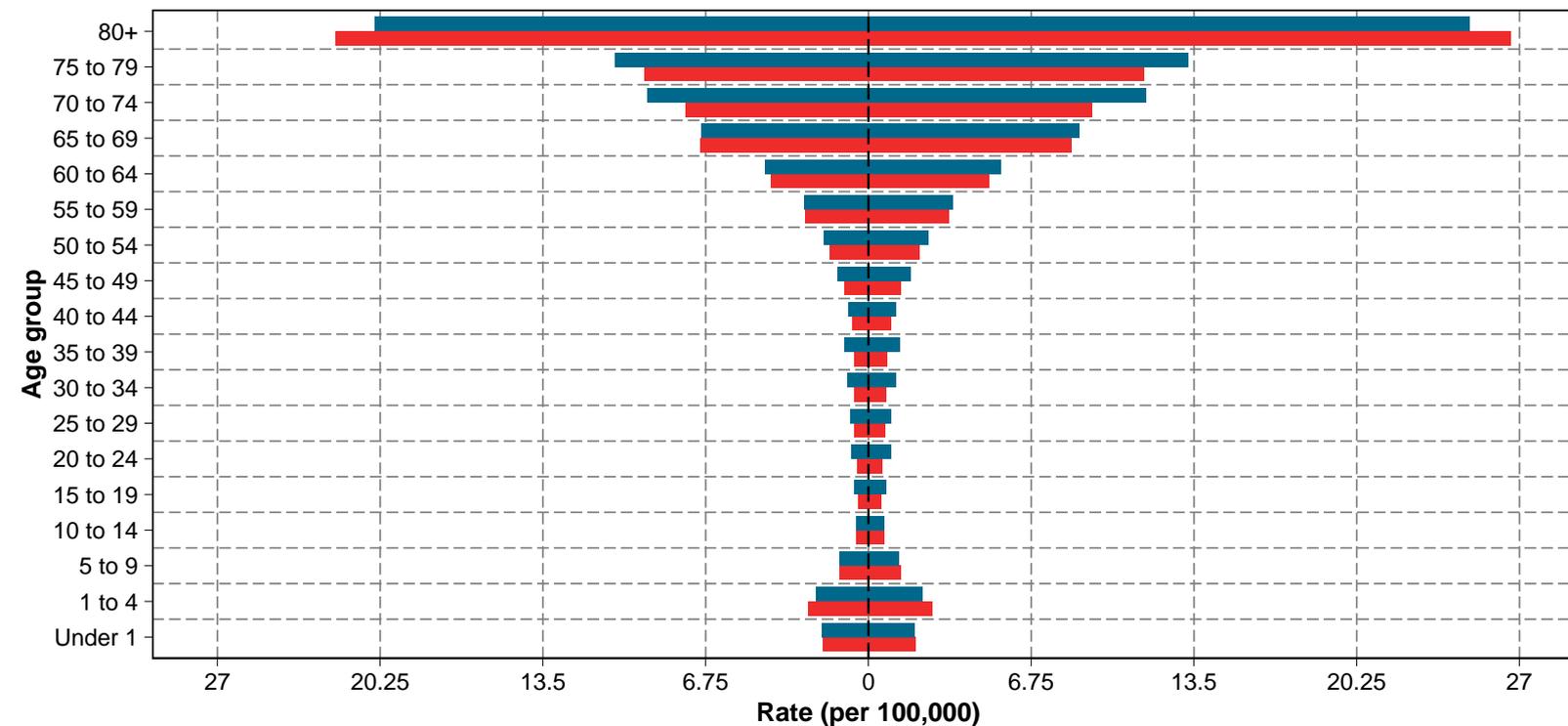
Libya

67

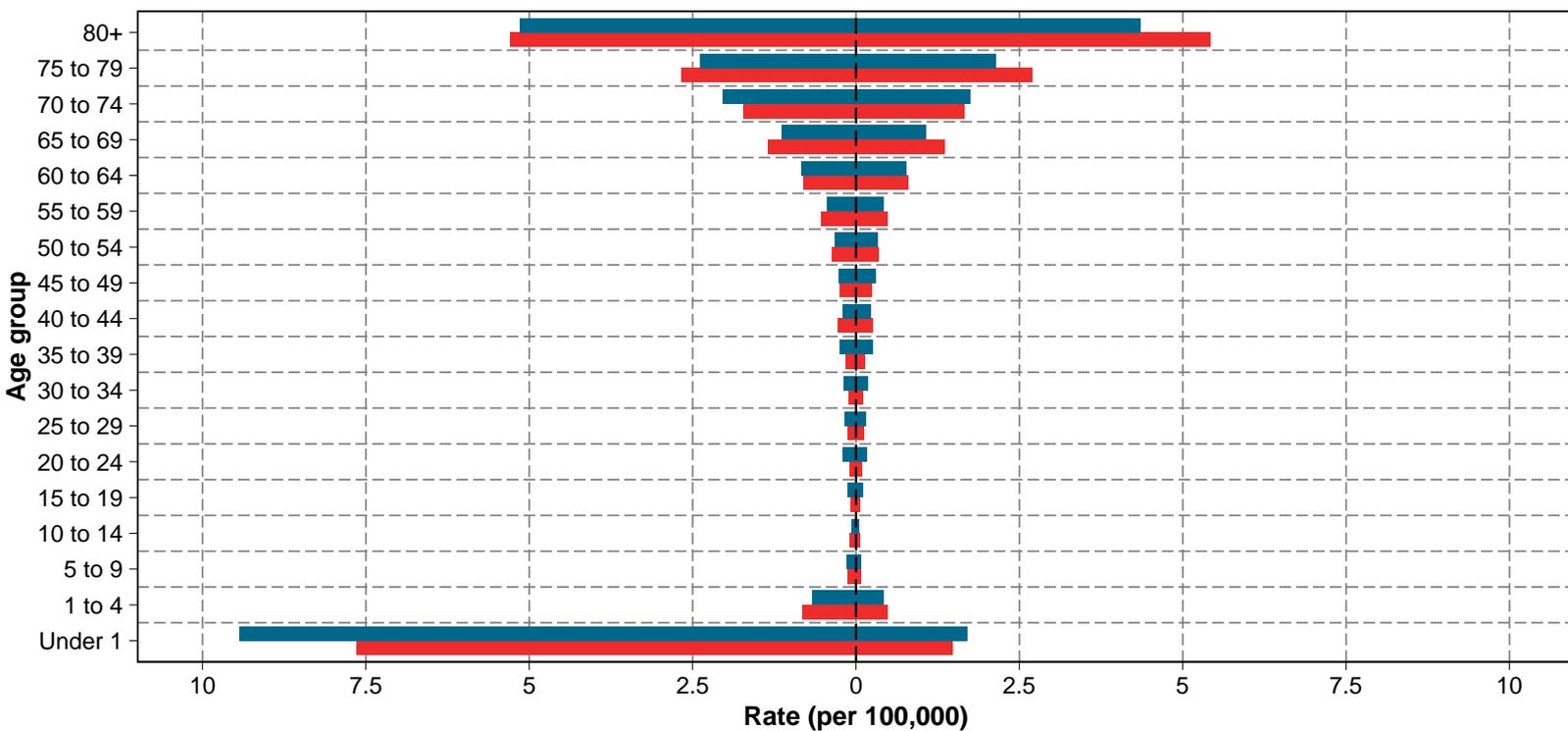
Incidence
1990 2019



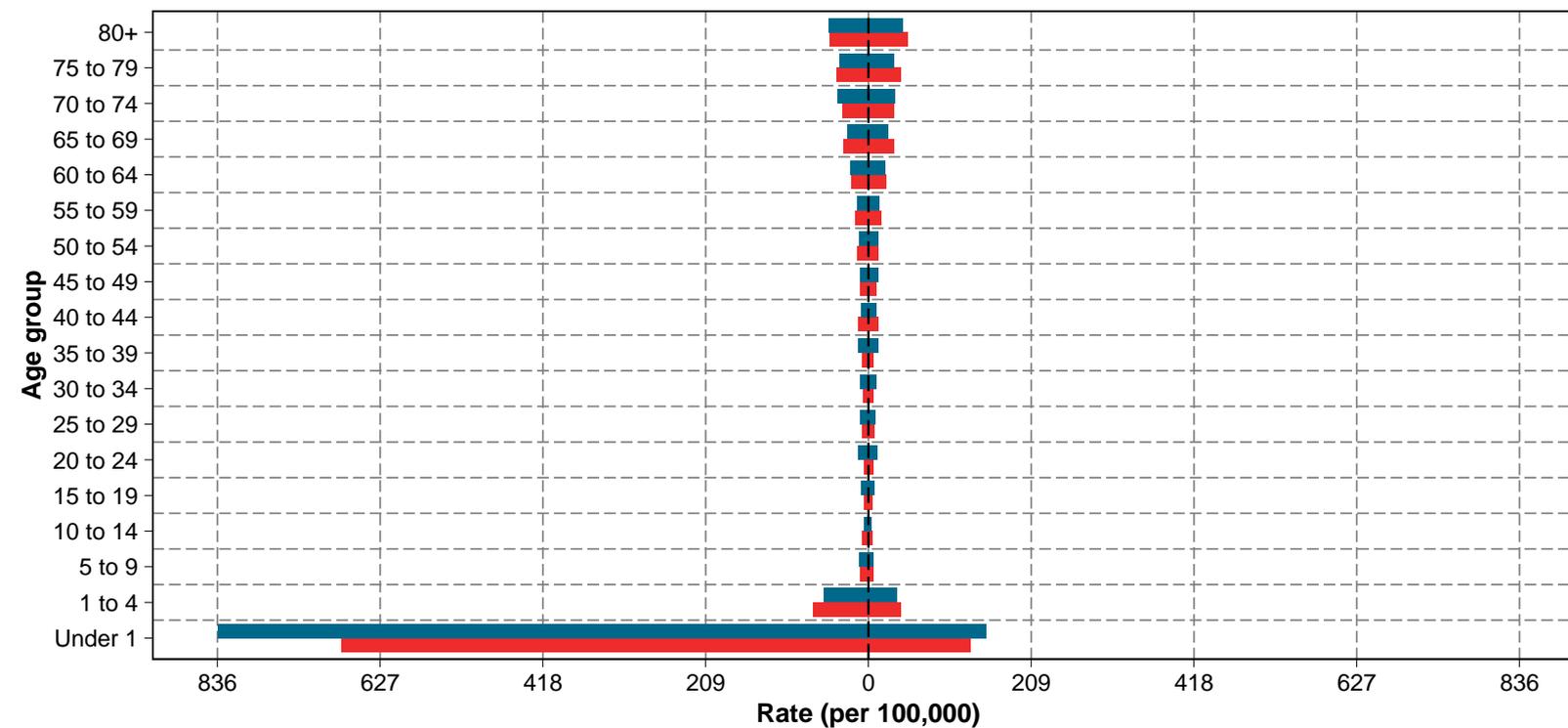
Prevalence
1990 2019



Deaths
1990 2019



DALYs
1990 2019

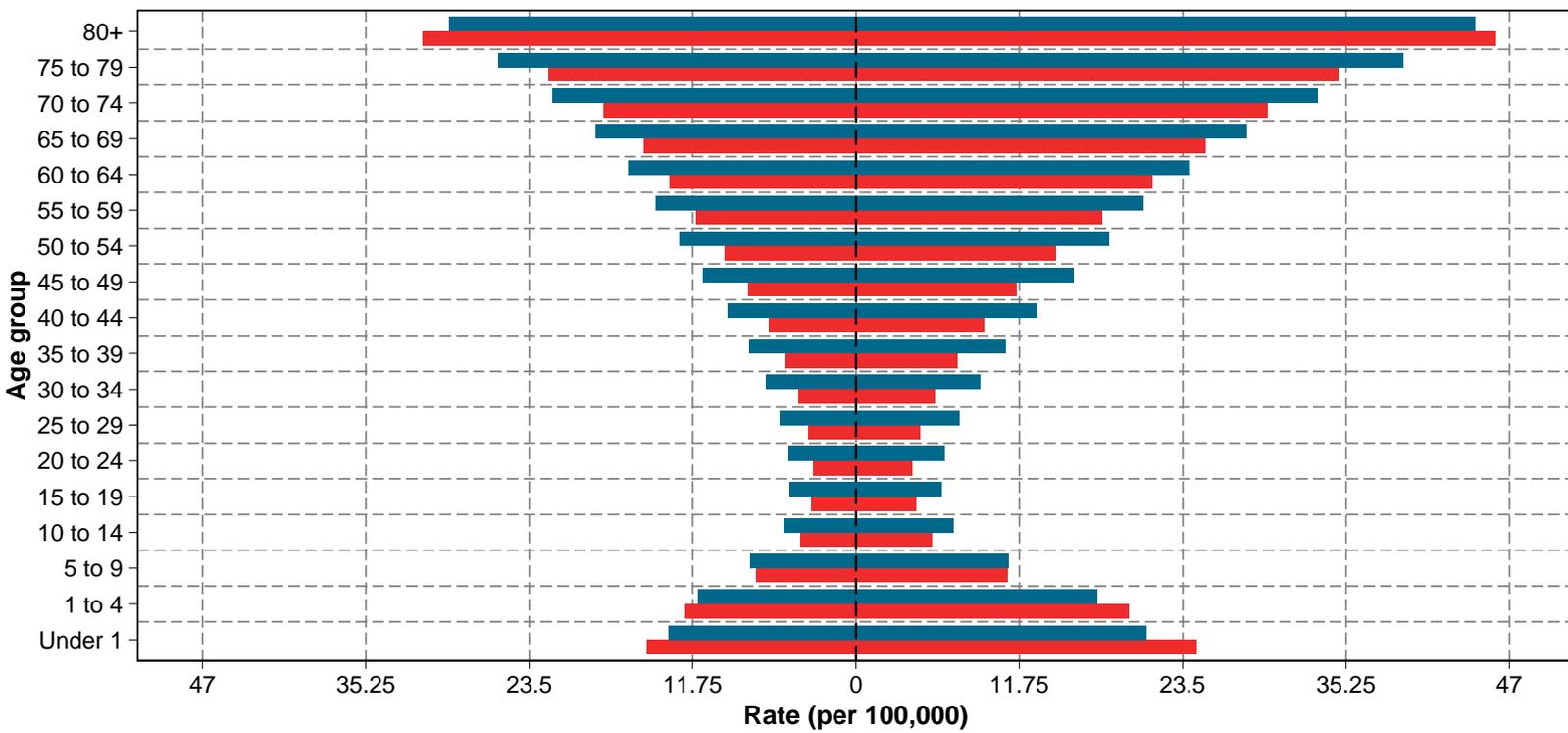


Sex
Female Male

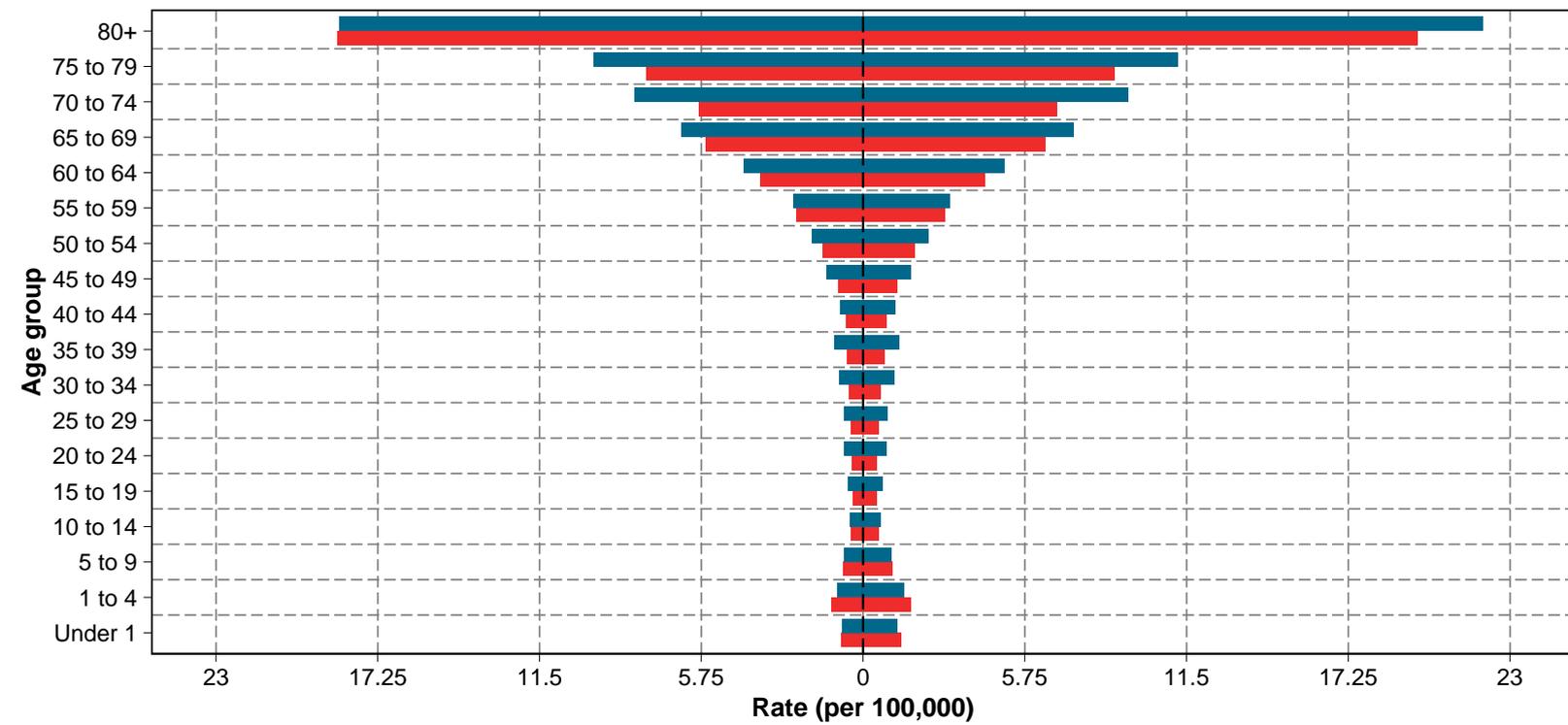
Morocco

68

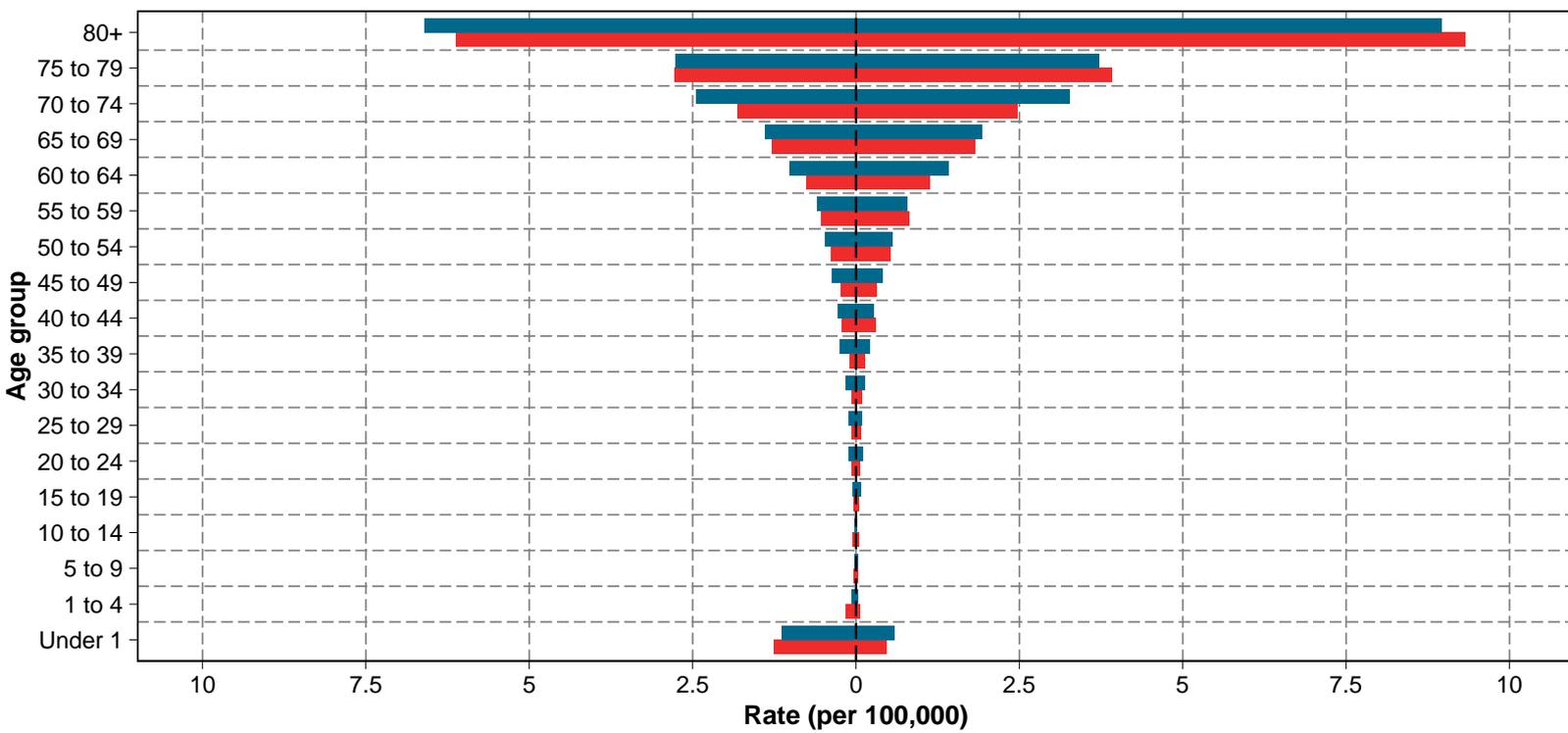
Incidence
1990 2019



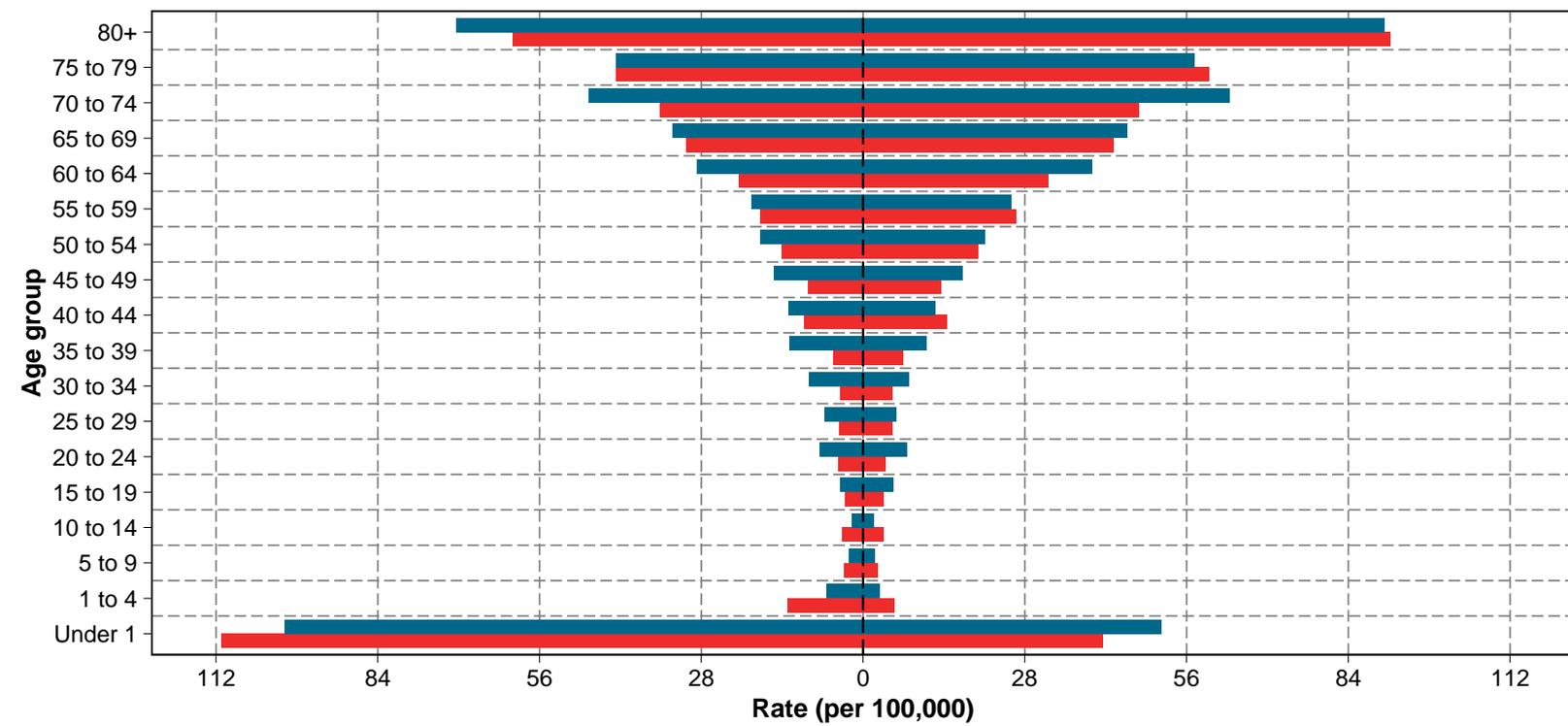
Prevalence
1990 2019



Deaths
1990 2019



DALYs
1990 2019

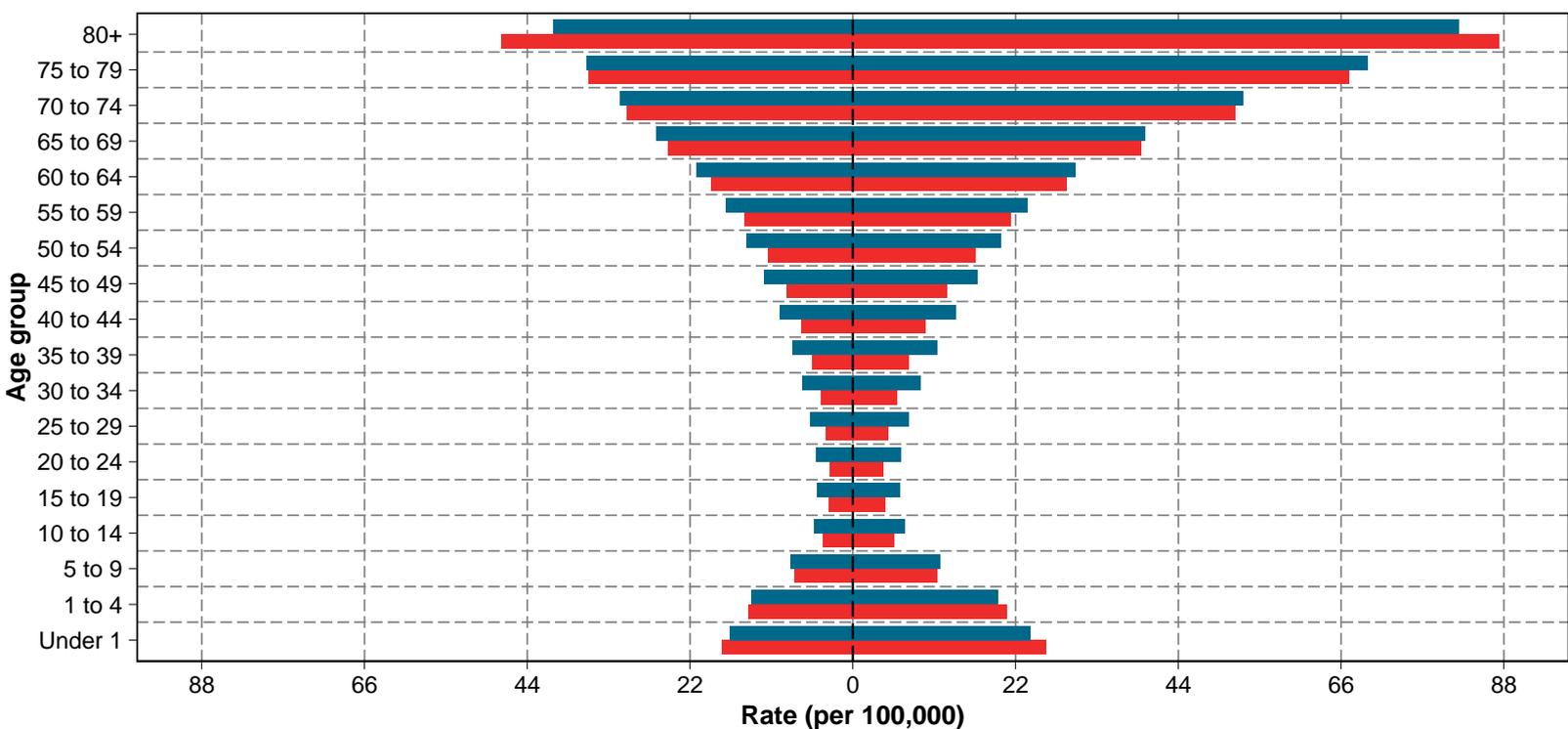


Sex
Female Male

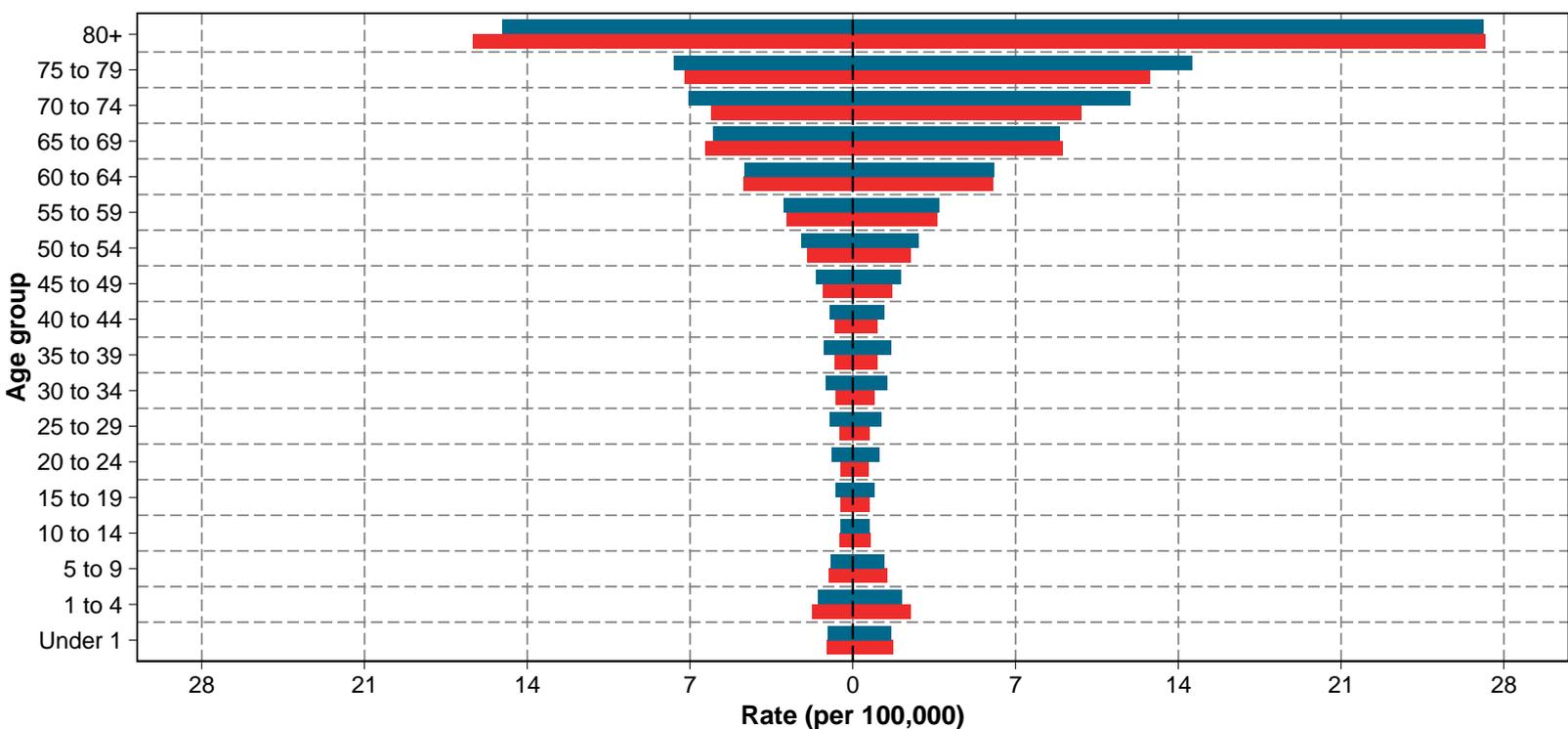
Oman

69

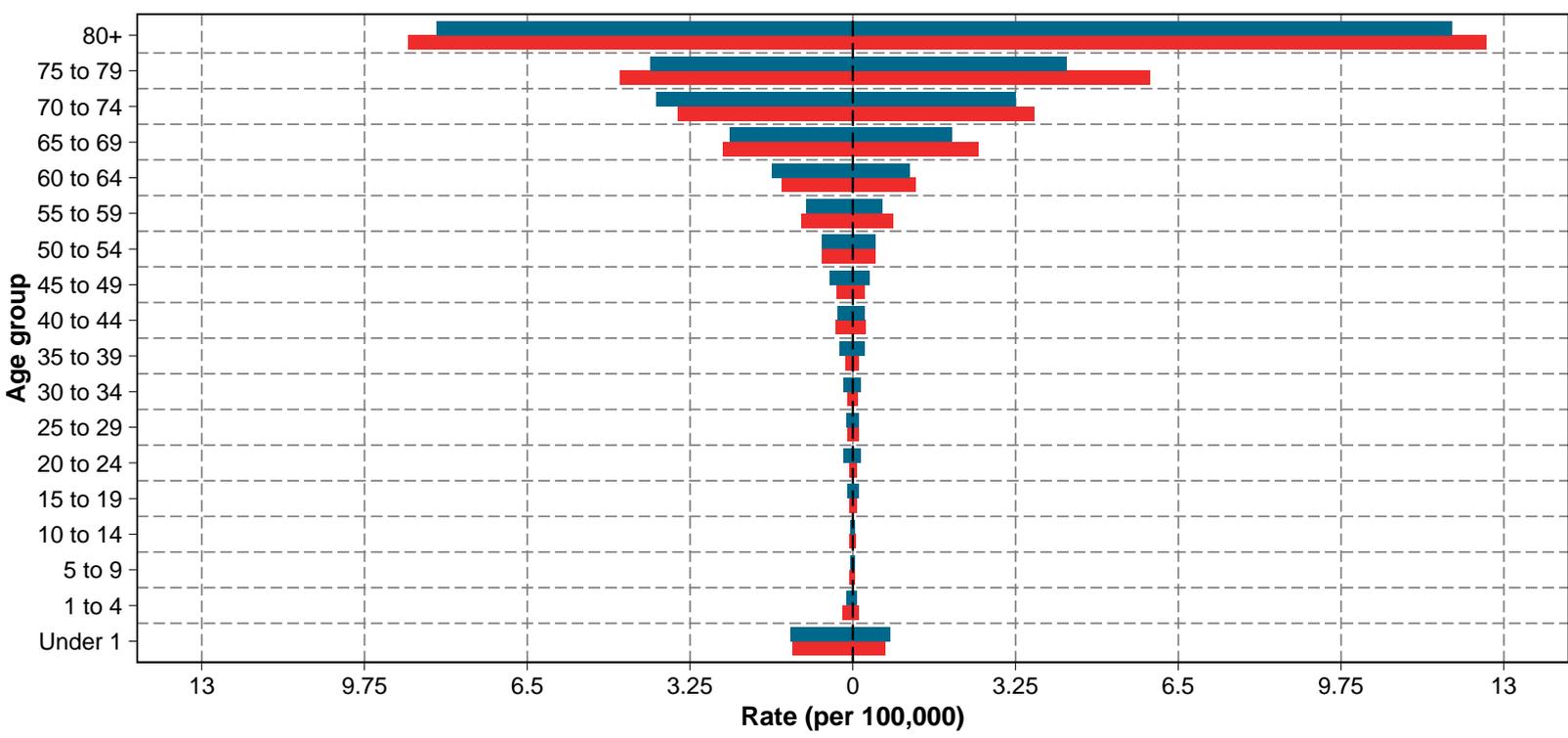
Incidence 1990 2019



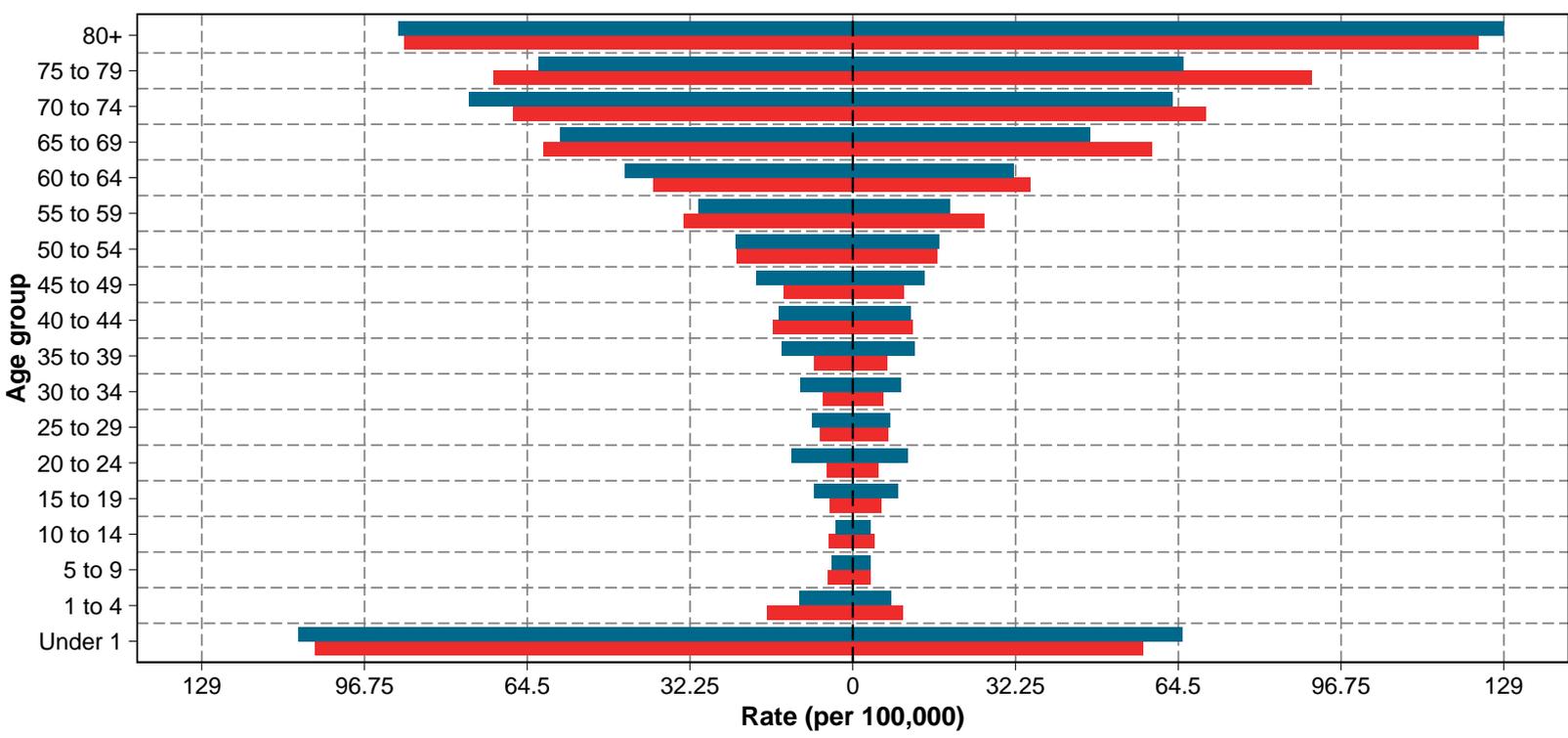
Prevalence 1990 2019



Deaths 1990 2019



DALYs 1990 2019

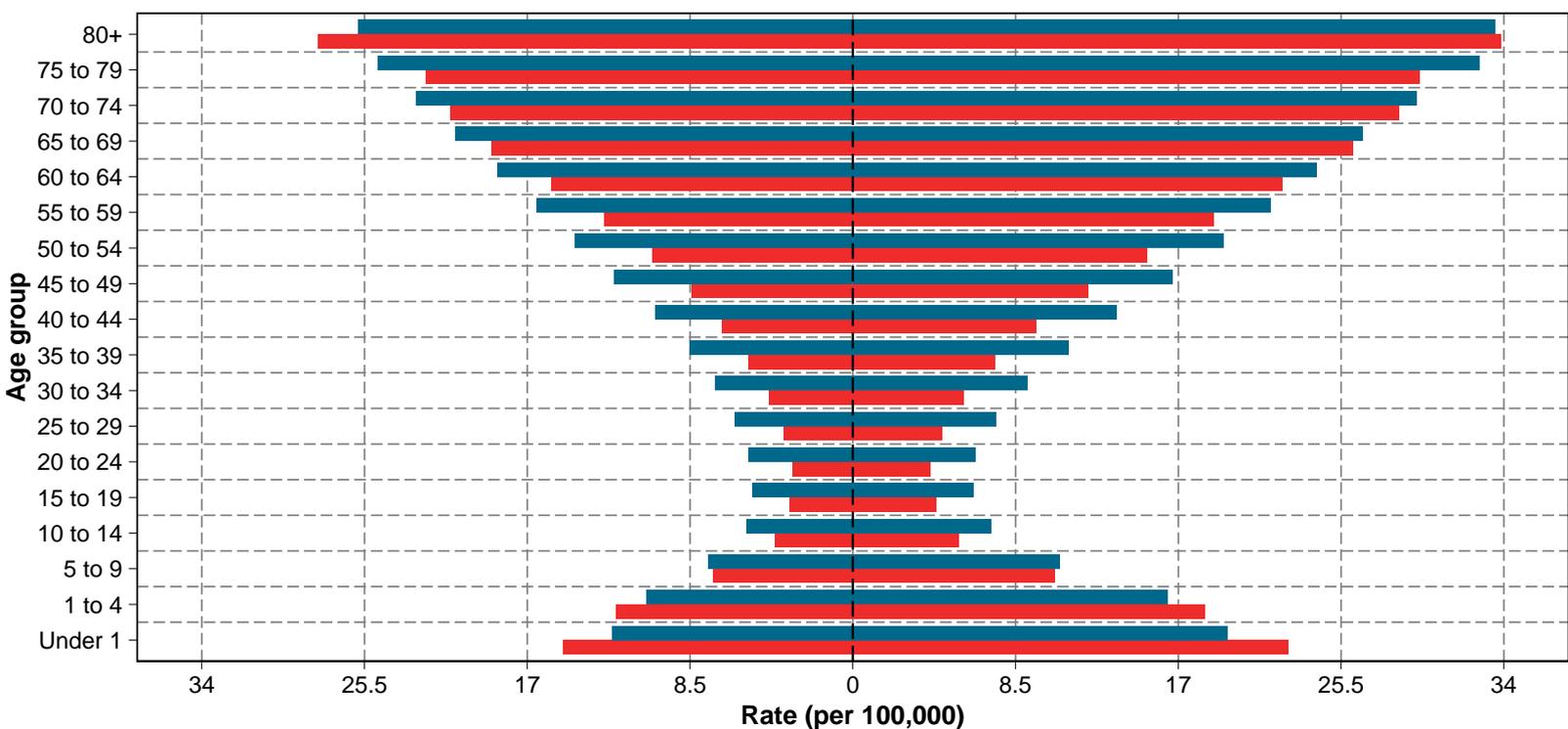


Sex
Female Male

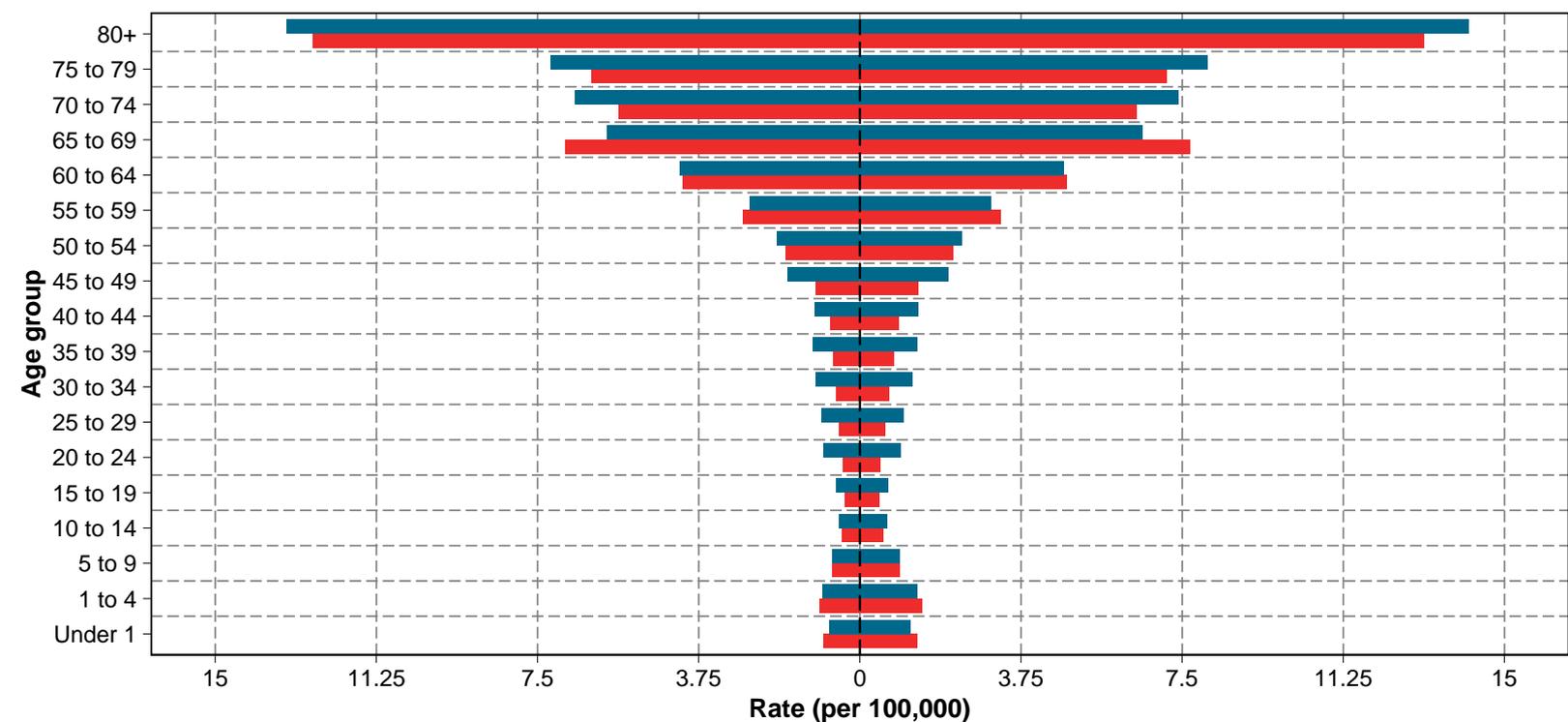
Palestine

70

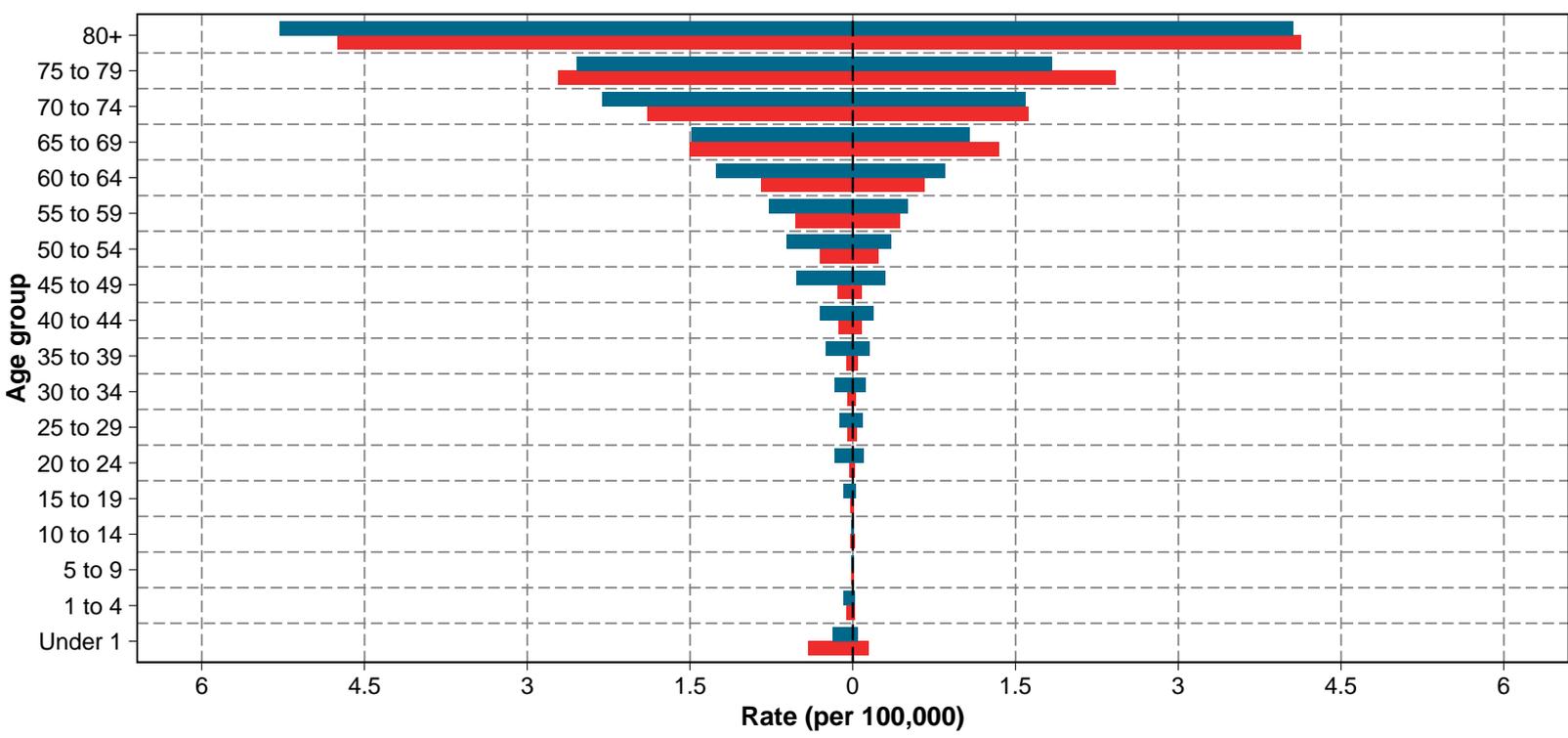
Incidence 1990 2019



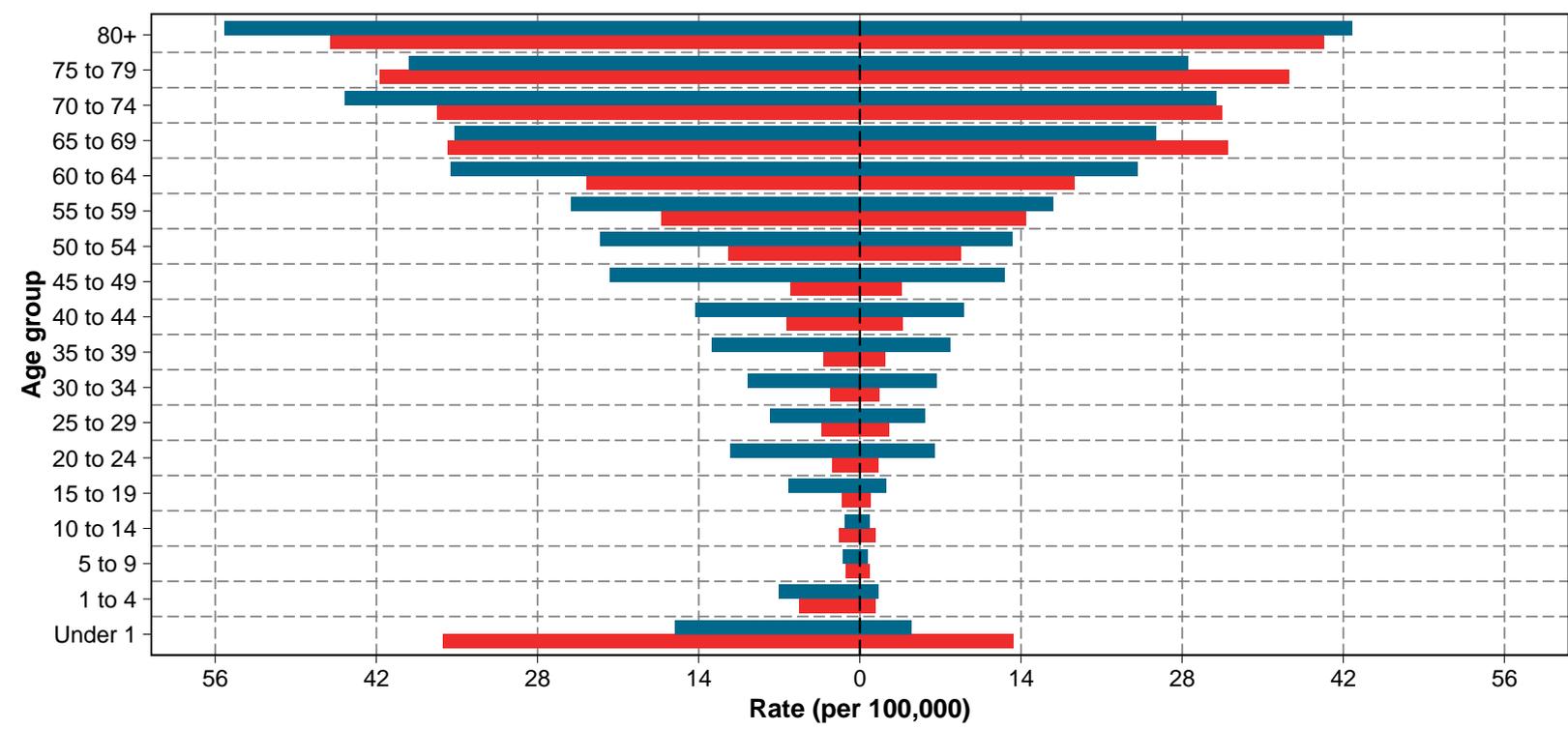
Prevalence 1990 2019



Deaths 1990 2019



DALYs 1990 2019

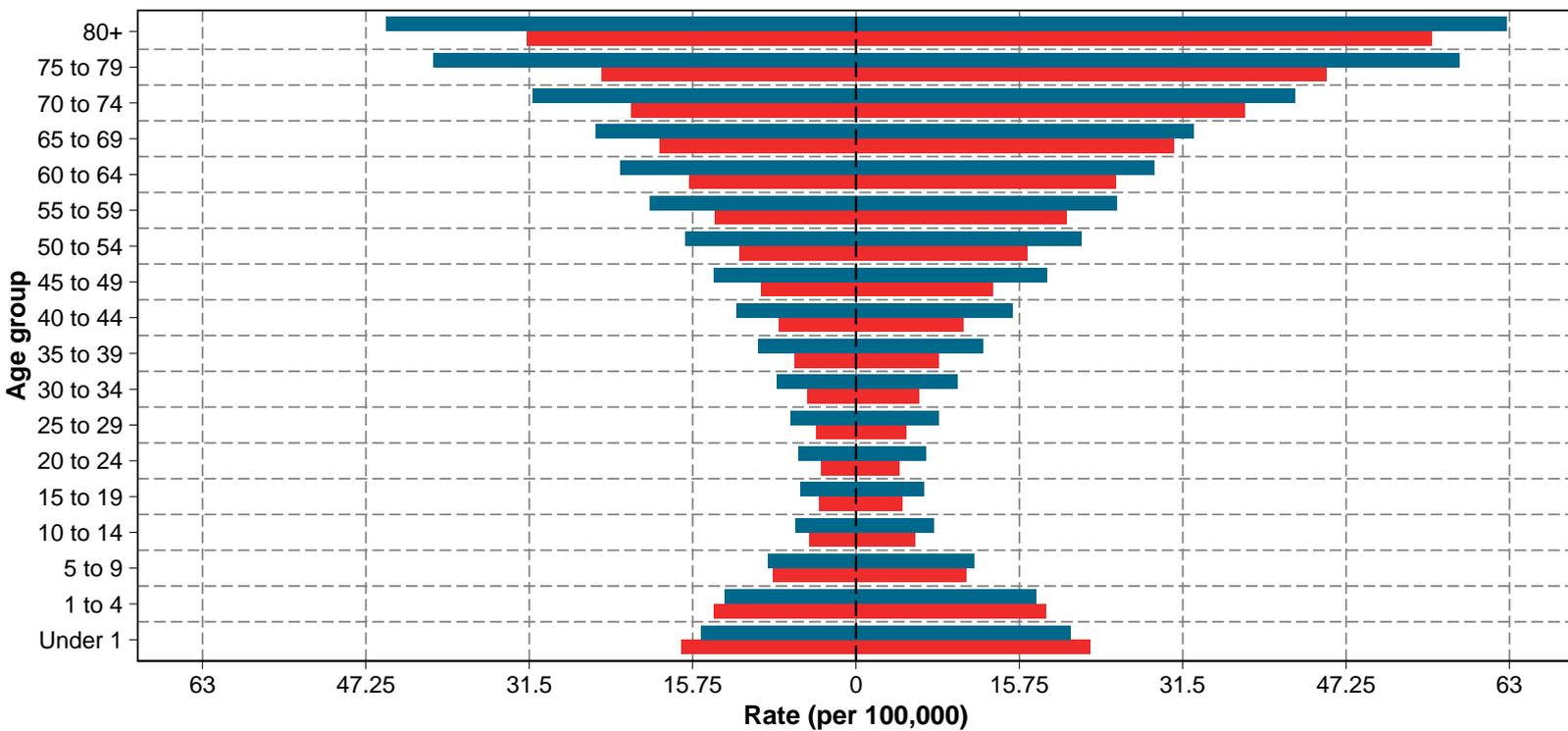


Sex
█ Female █ Male

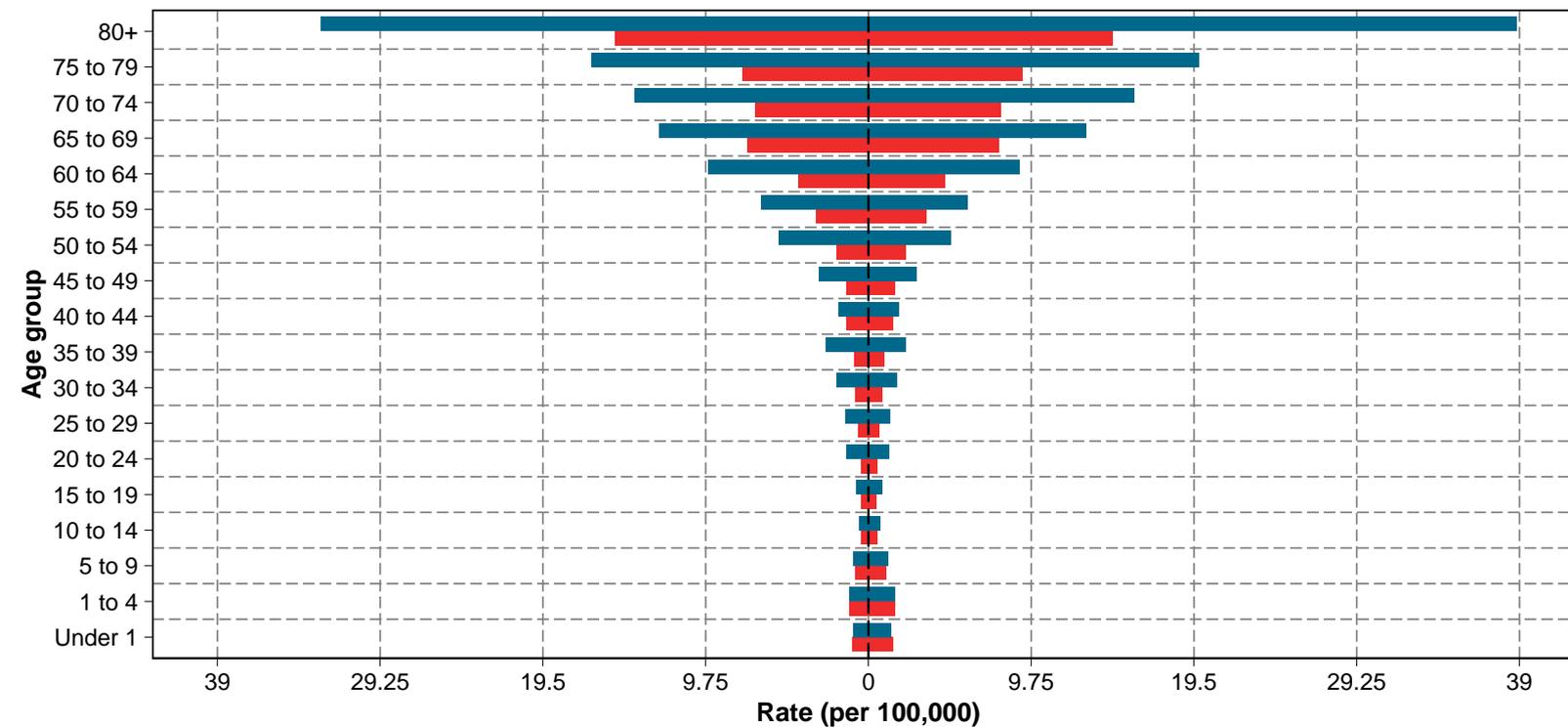
Qatar

71

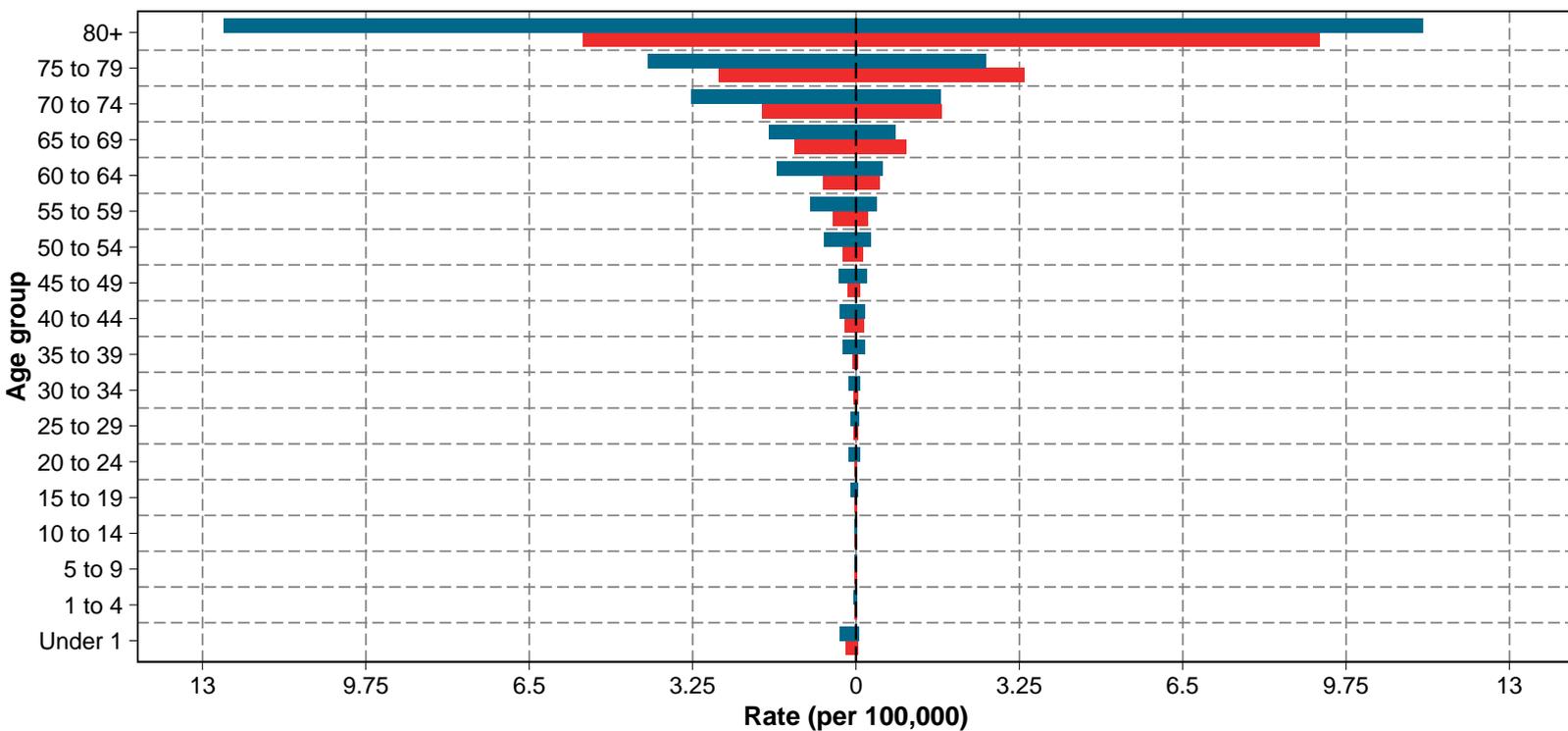
Incidence
1990 2019



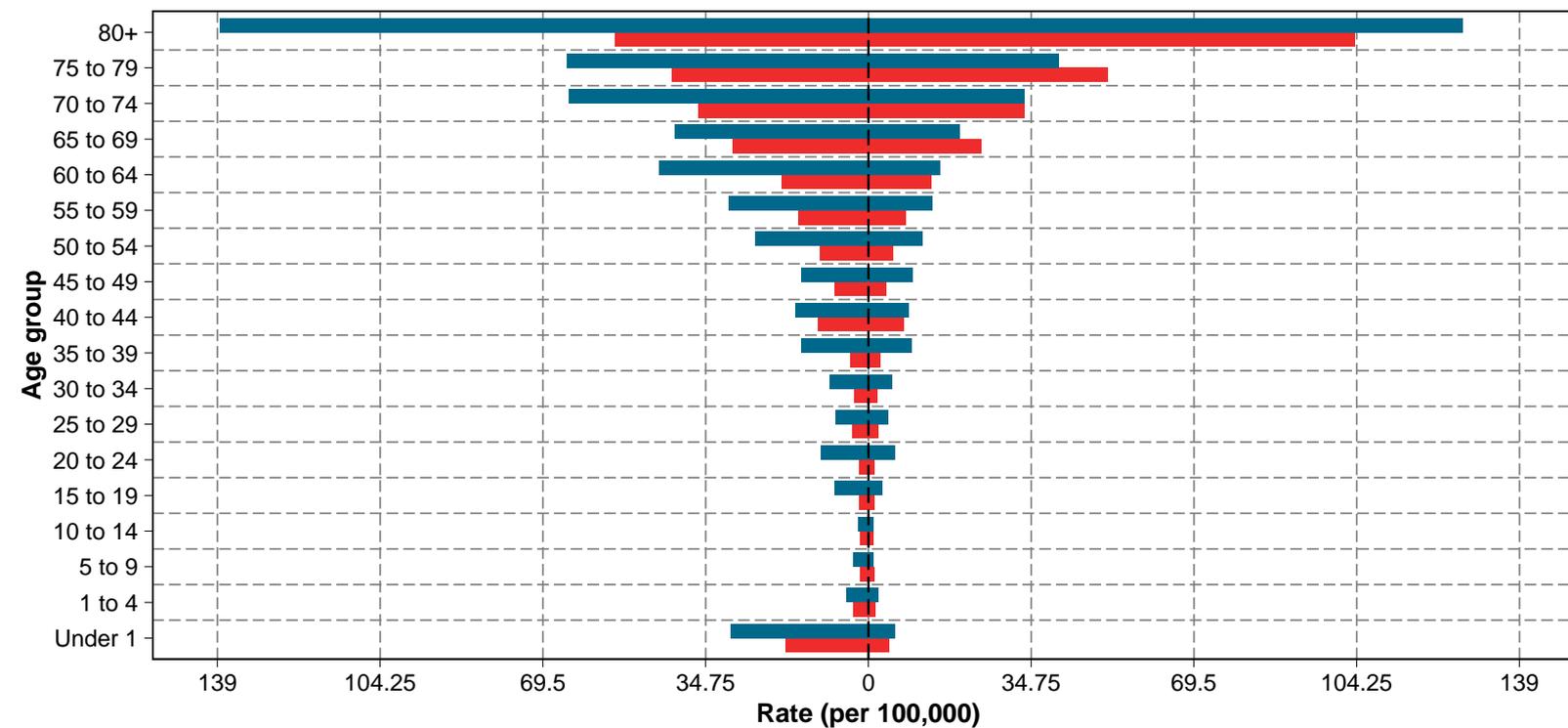
Prevalence
1990 2019



Deaths
1990 2019



DALYs
1990 2019

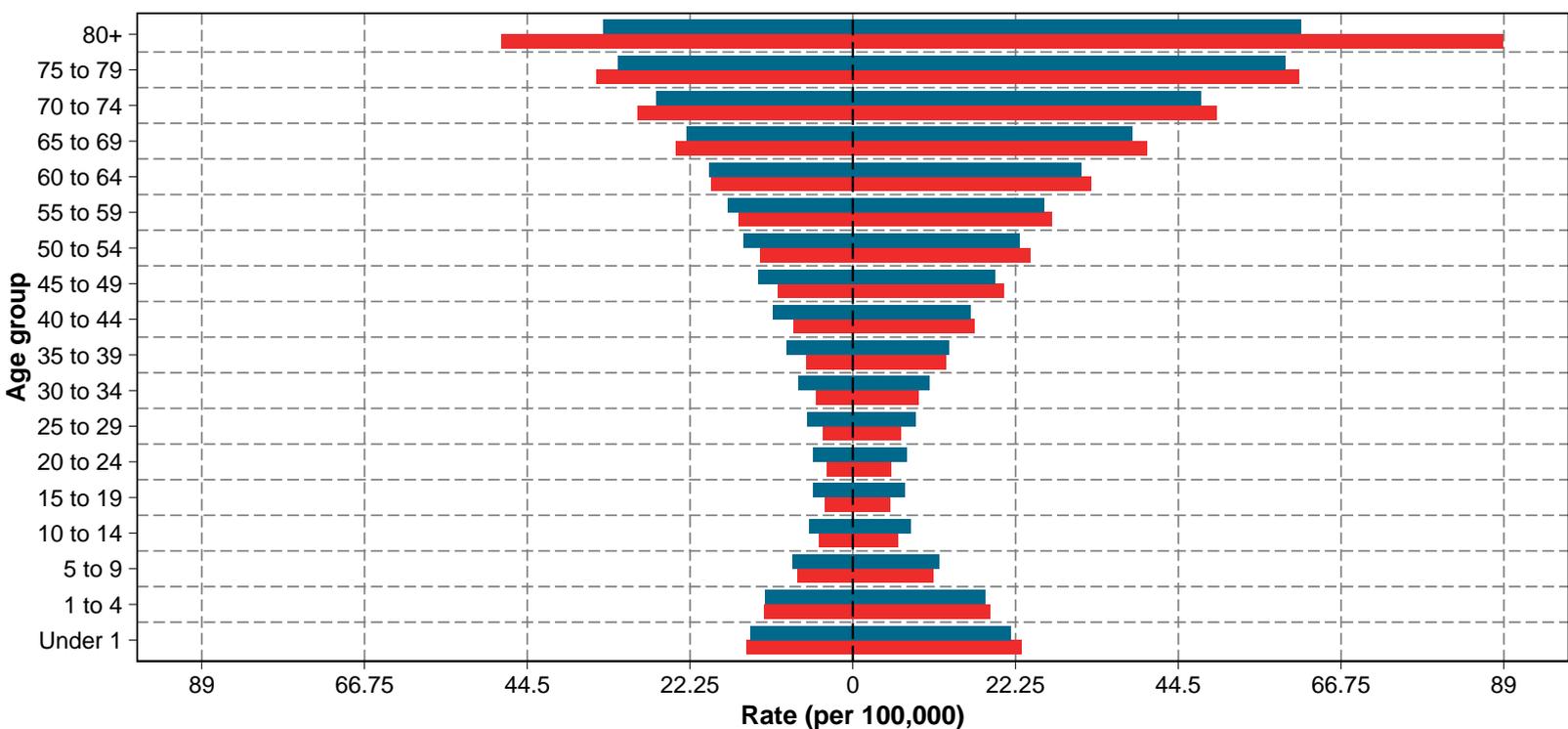


Sex
Female Male

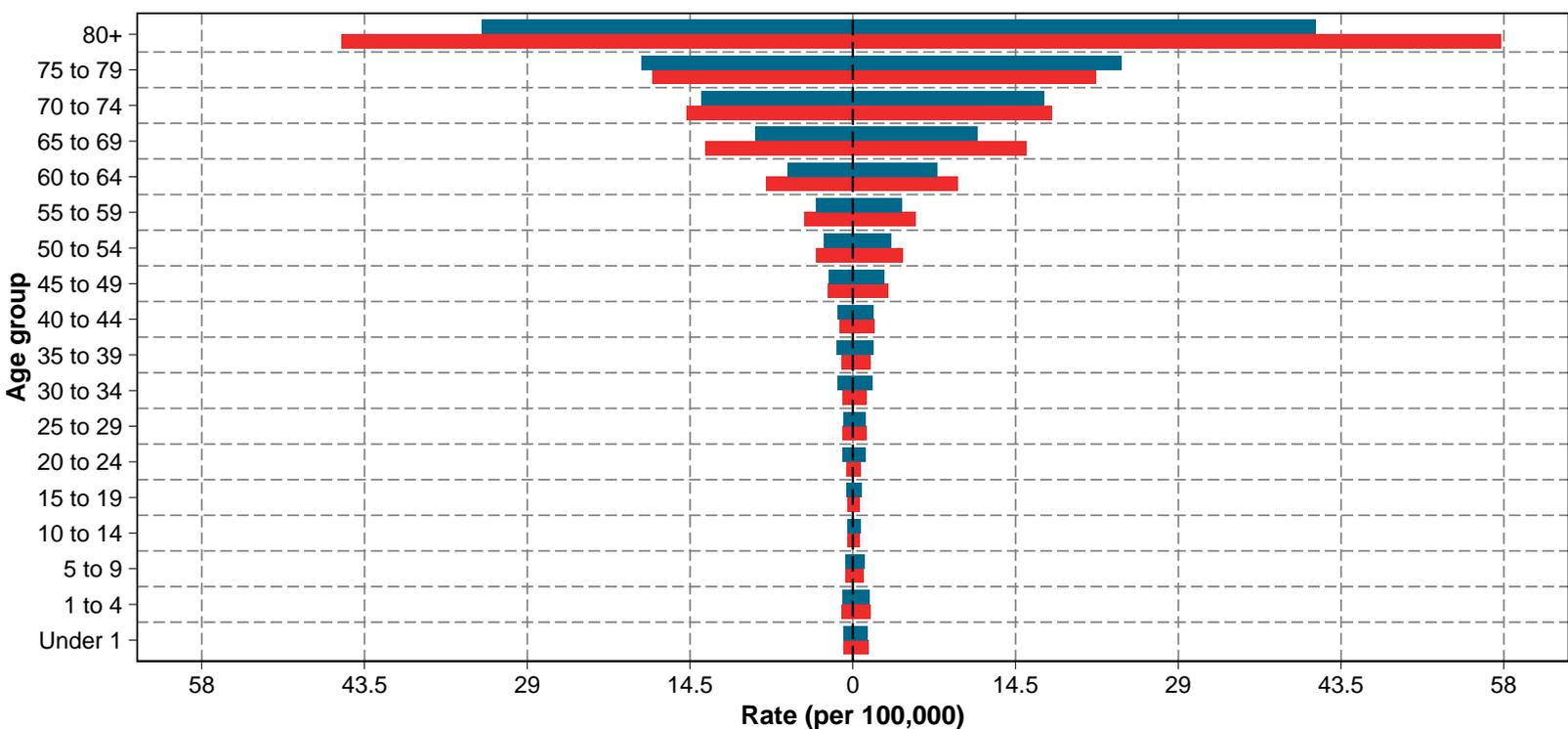
Saudi Arabia

72

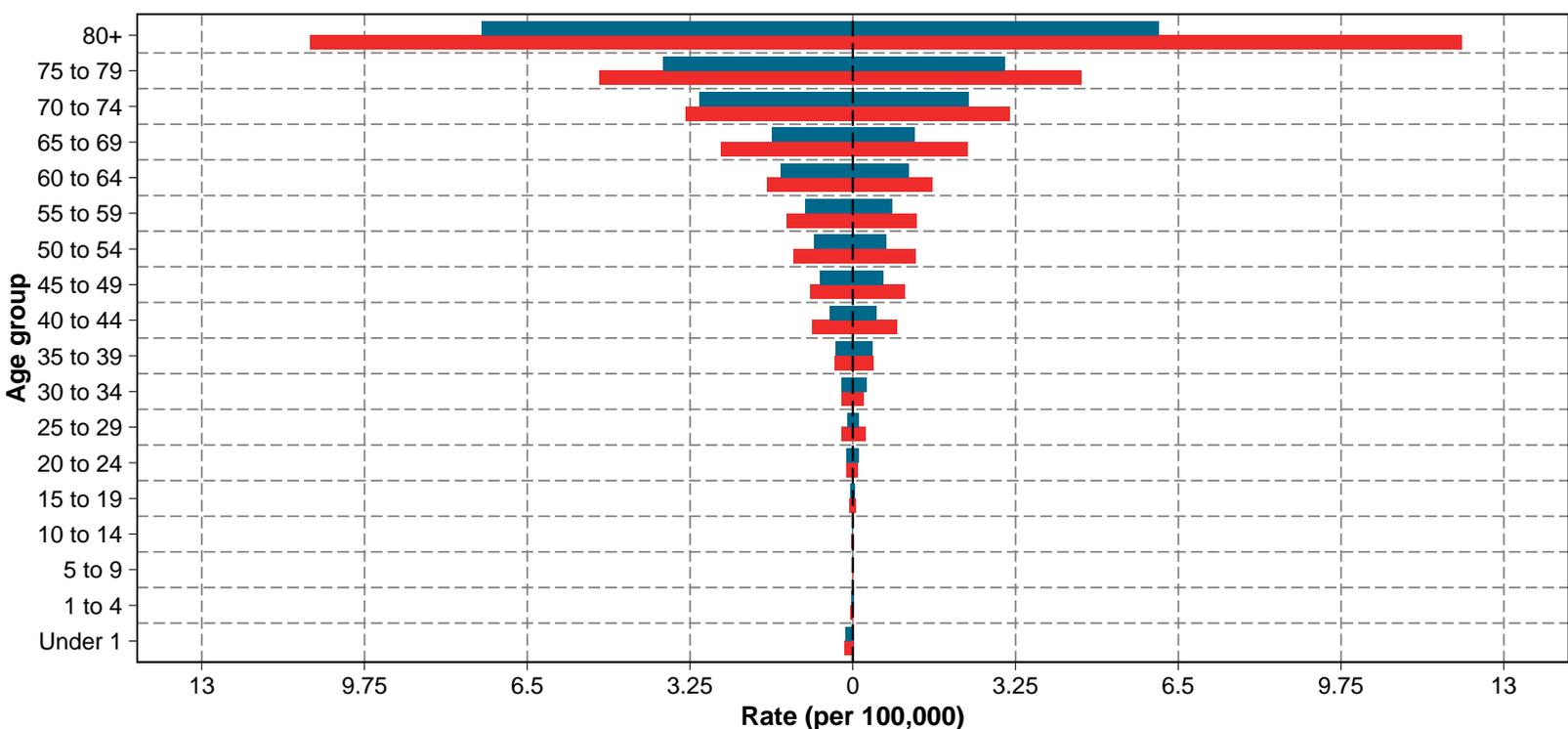
Incidence
1990 2019



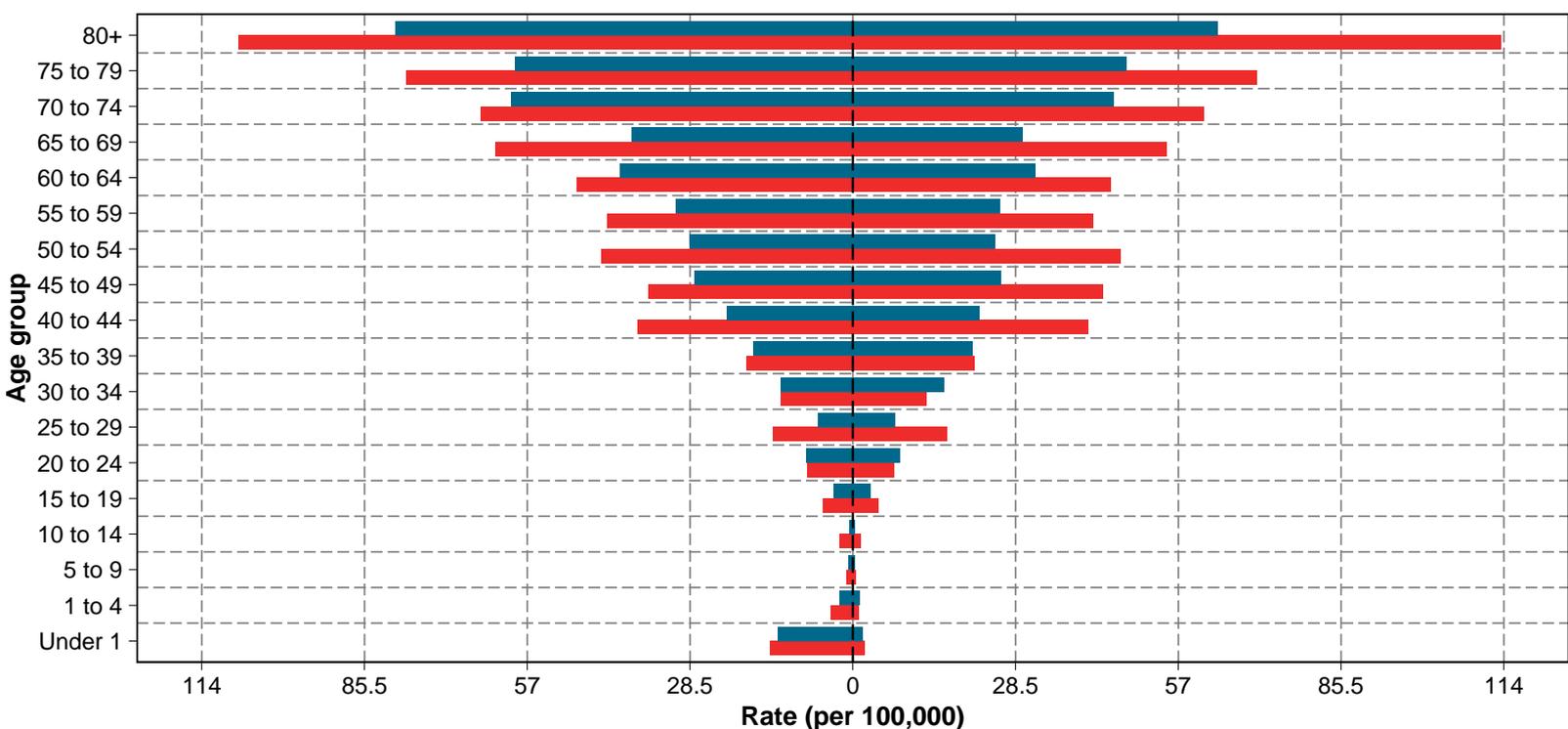
Prevalence
1990 2019



Deaths
1990 2019



DALYs
1990 2019

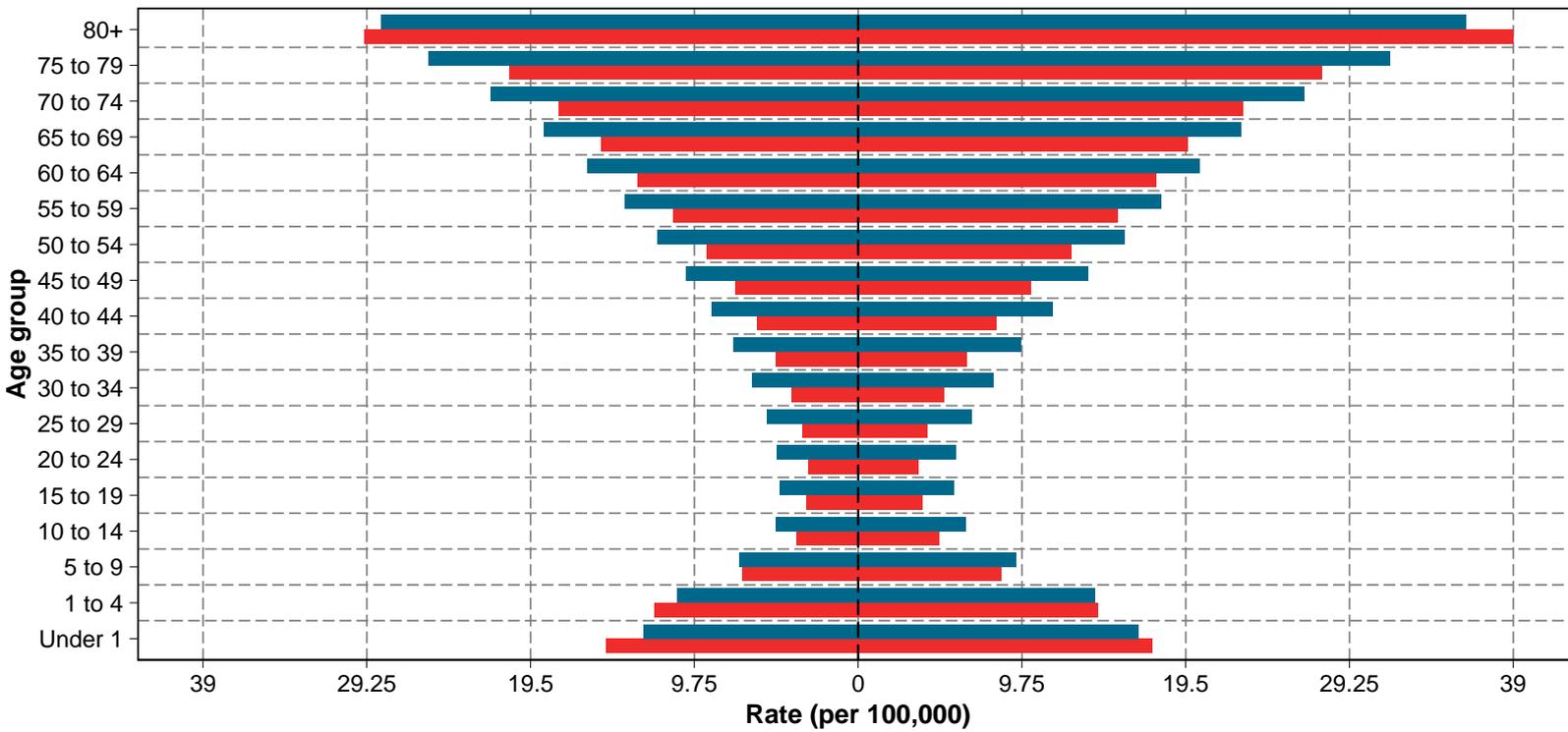


Sex
Female Male

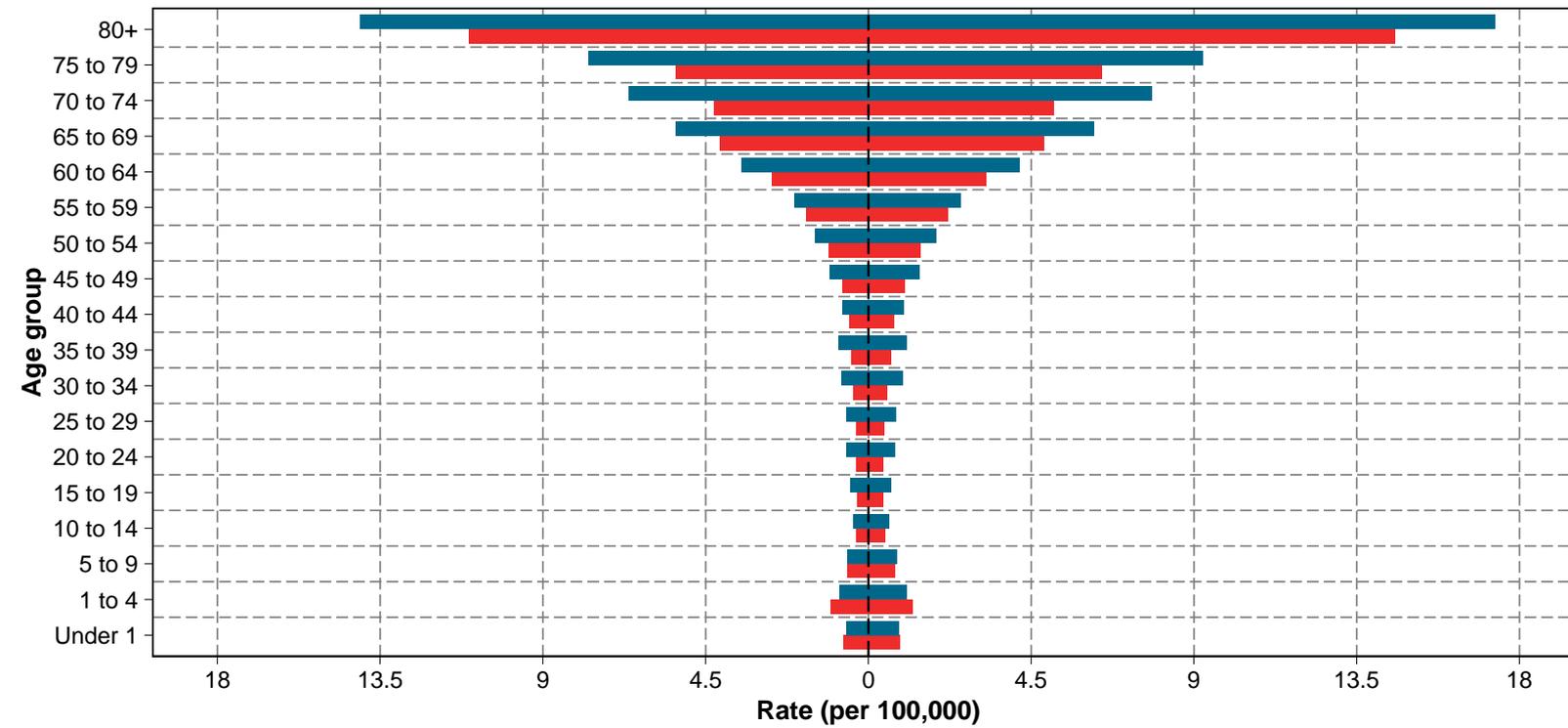
Sudan

73

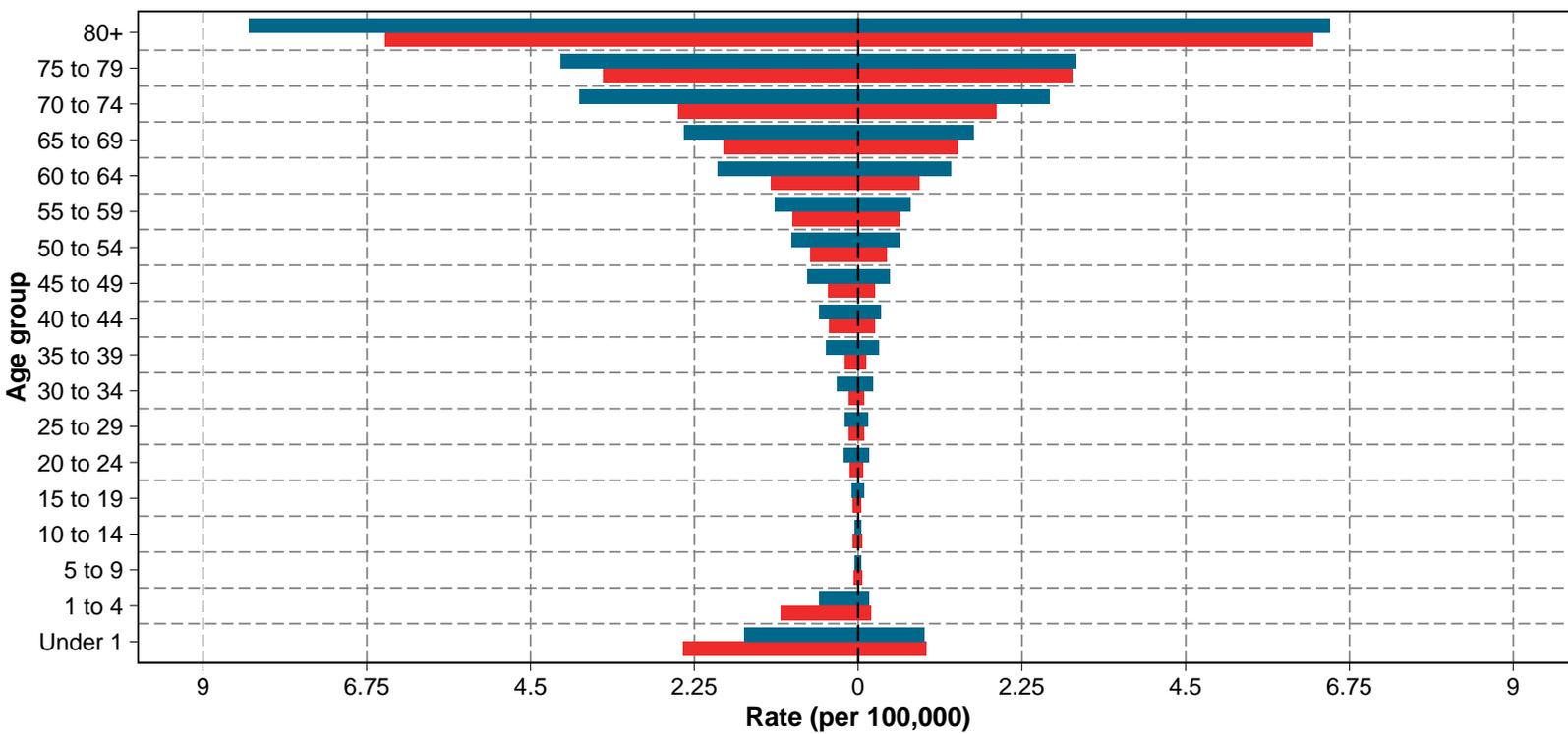
Incidence
1990 2019



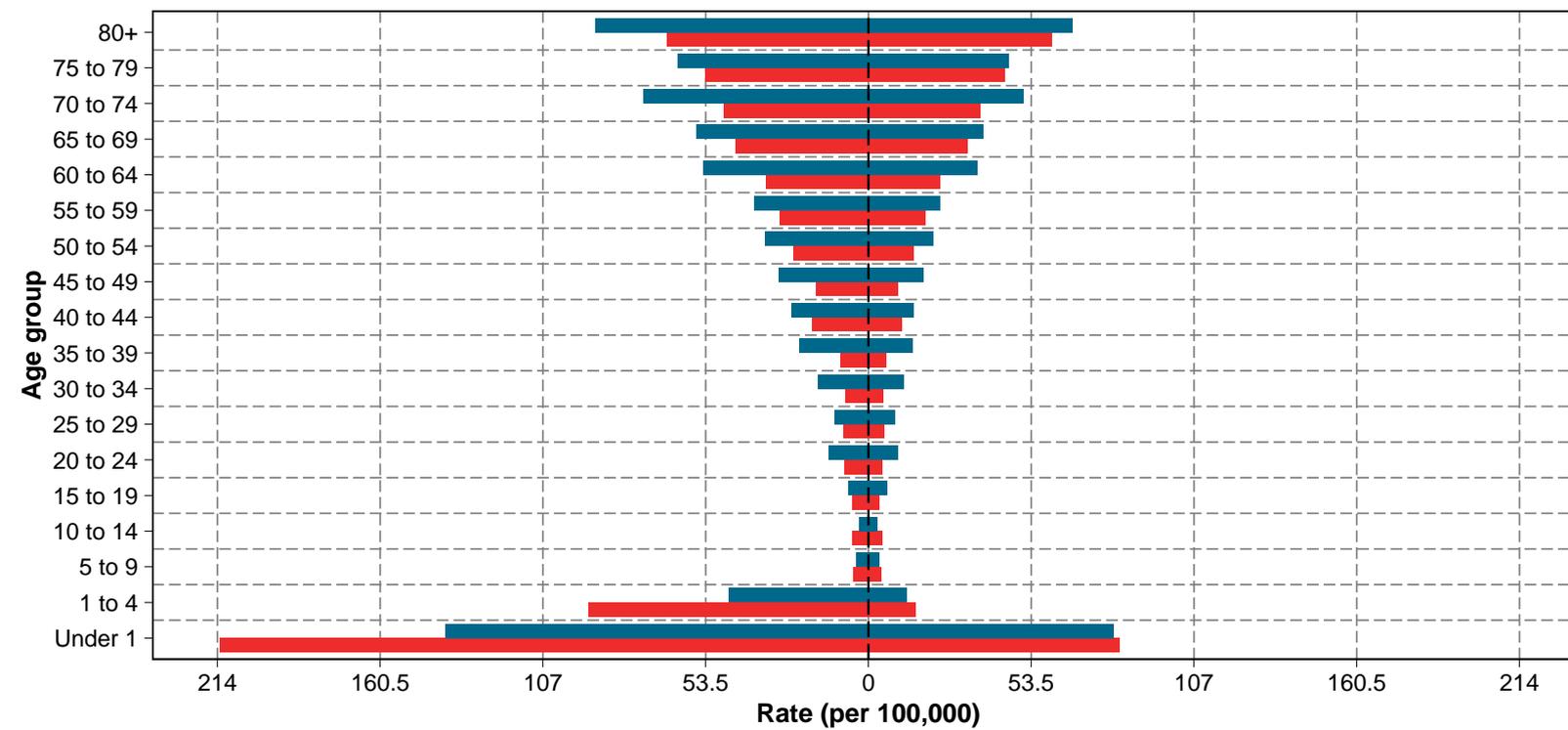
Prevalence
1990 2019



Deaths
1990 2019



DALYs
1990 2019

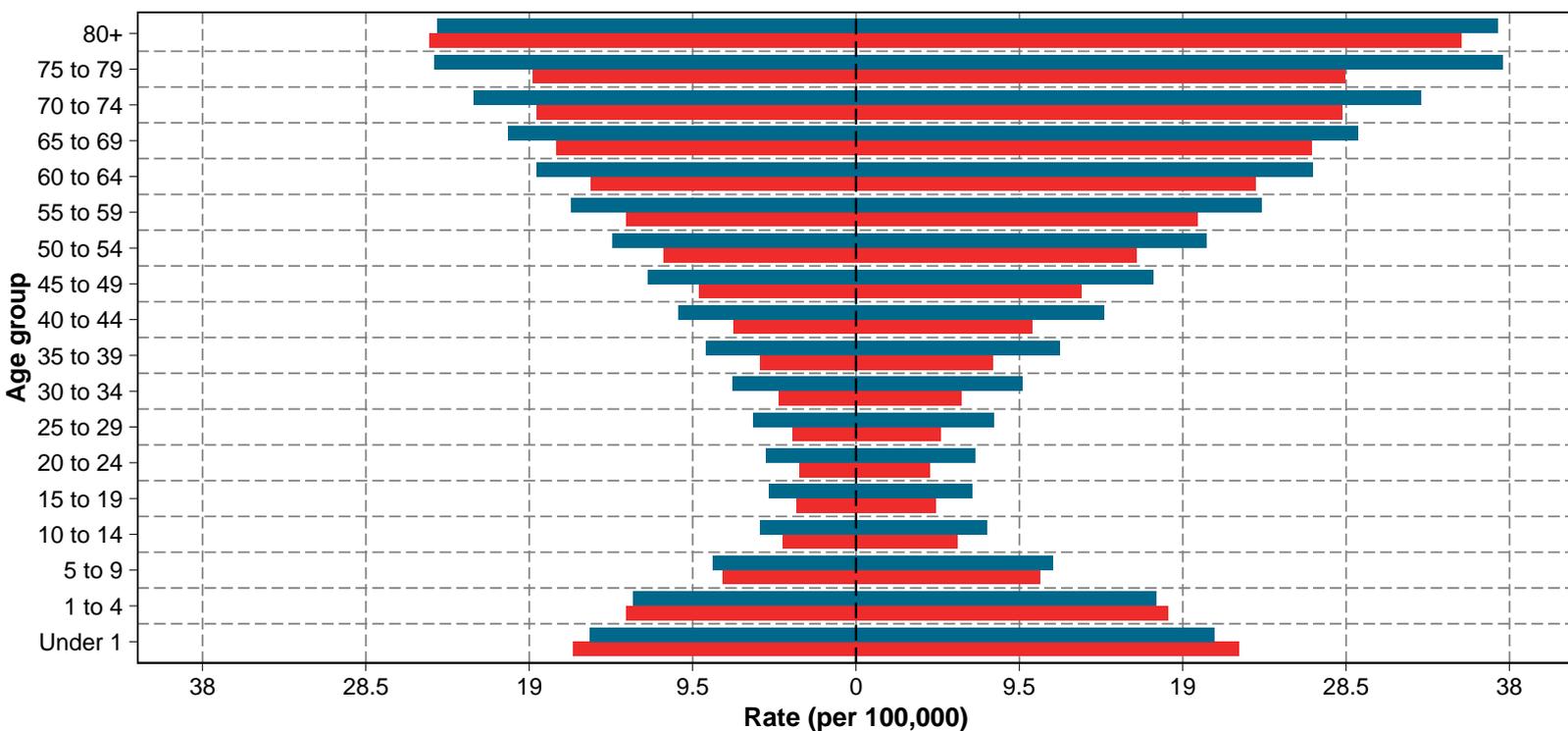


Sex
Female Male

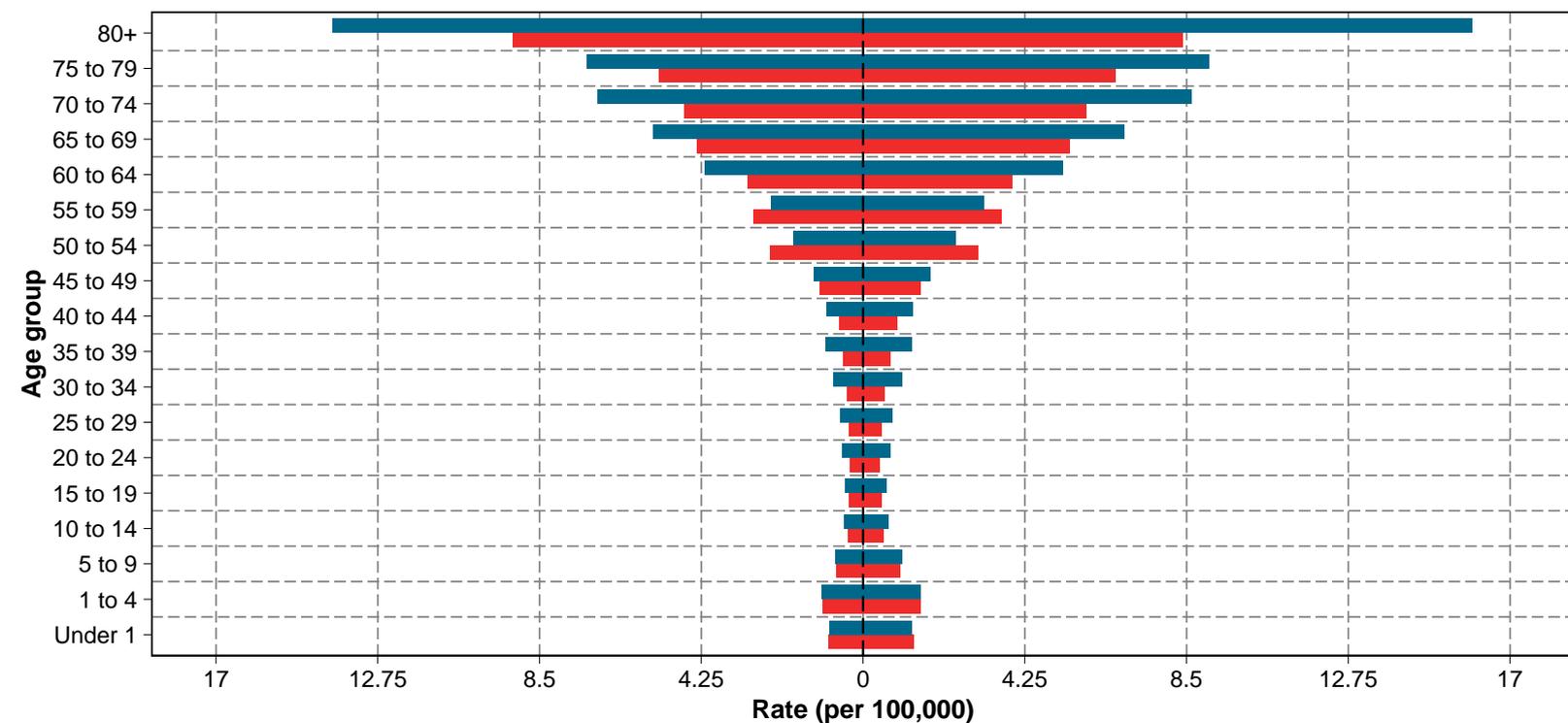
Syrian Arab Republic

74

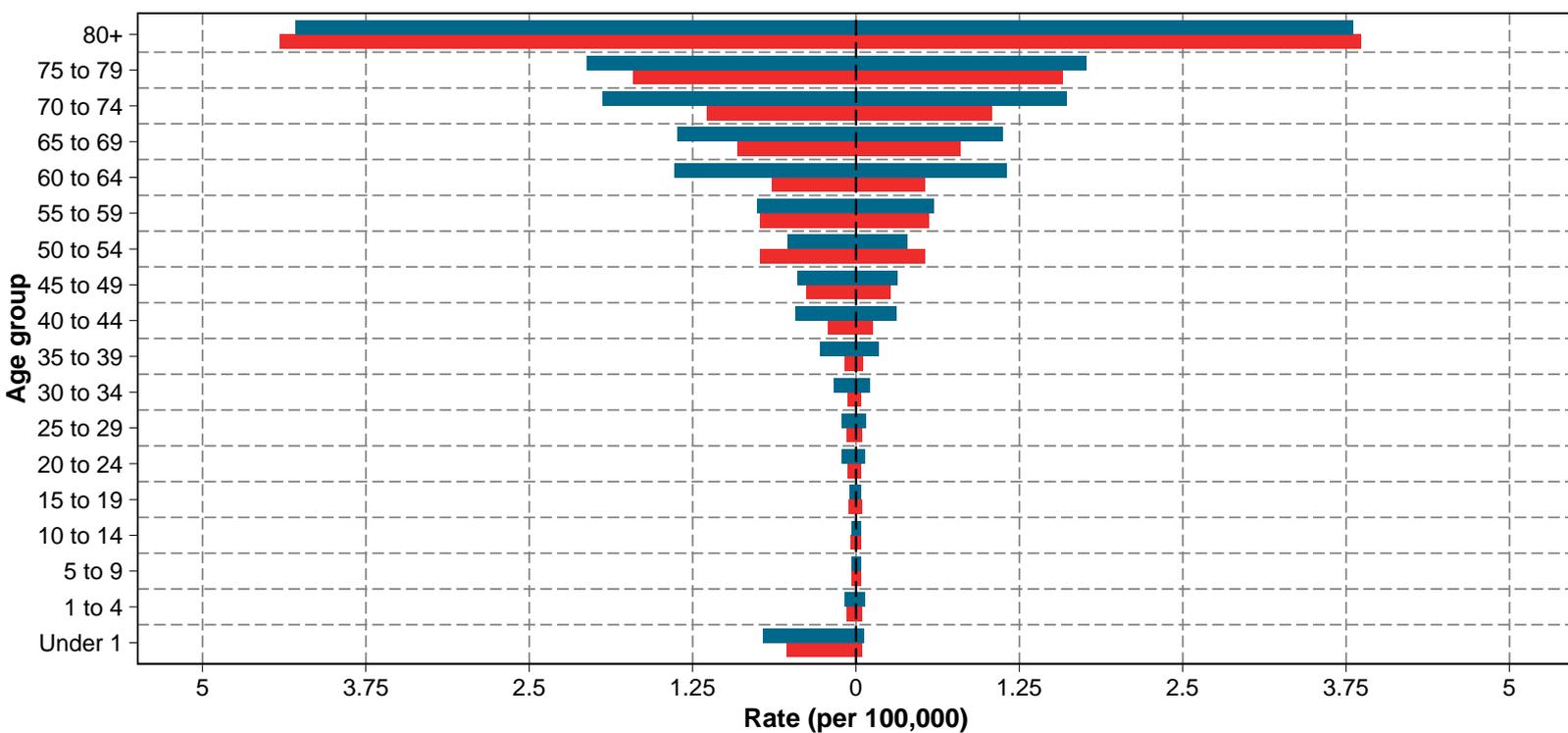
Incidence
1990 2019



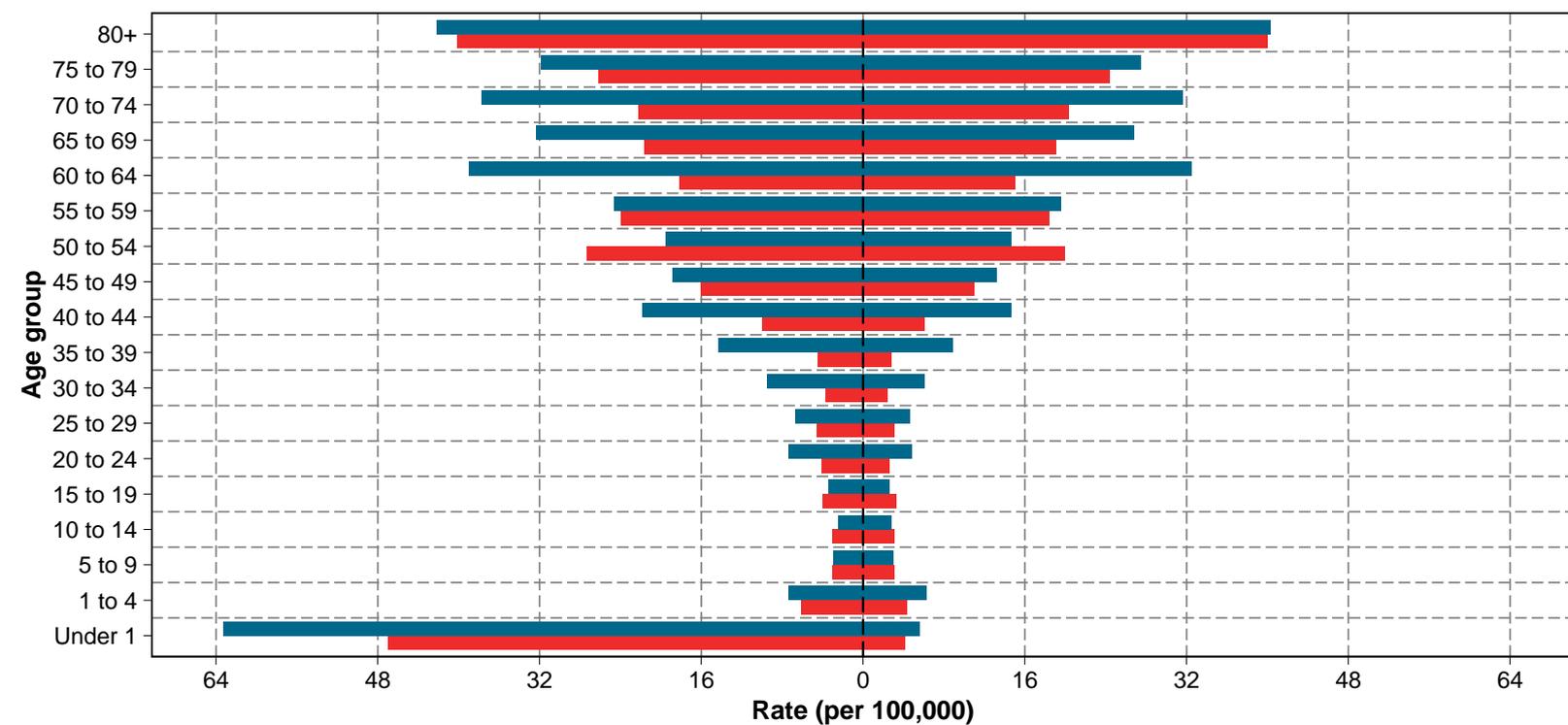
Prevalence
1990 2019



Deaths
1990 2019



DALYs
1990 2019

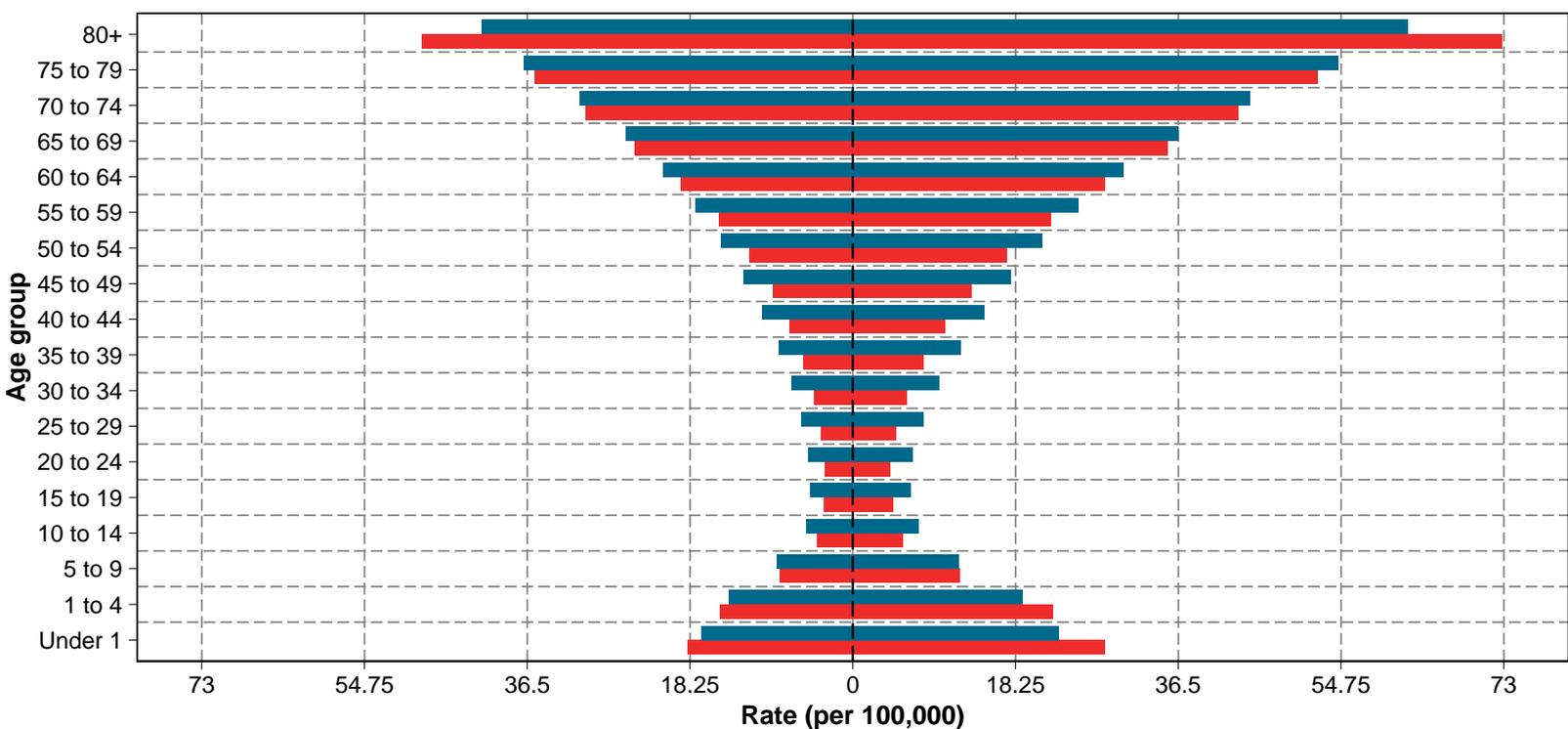


Sex
Female Male

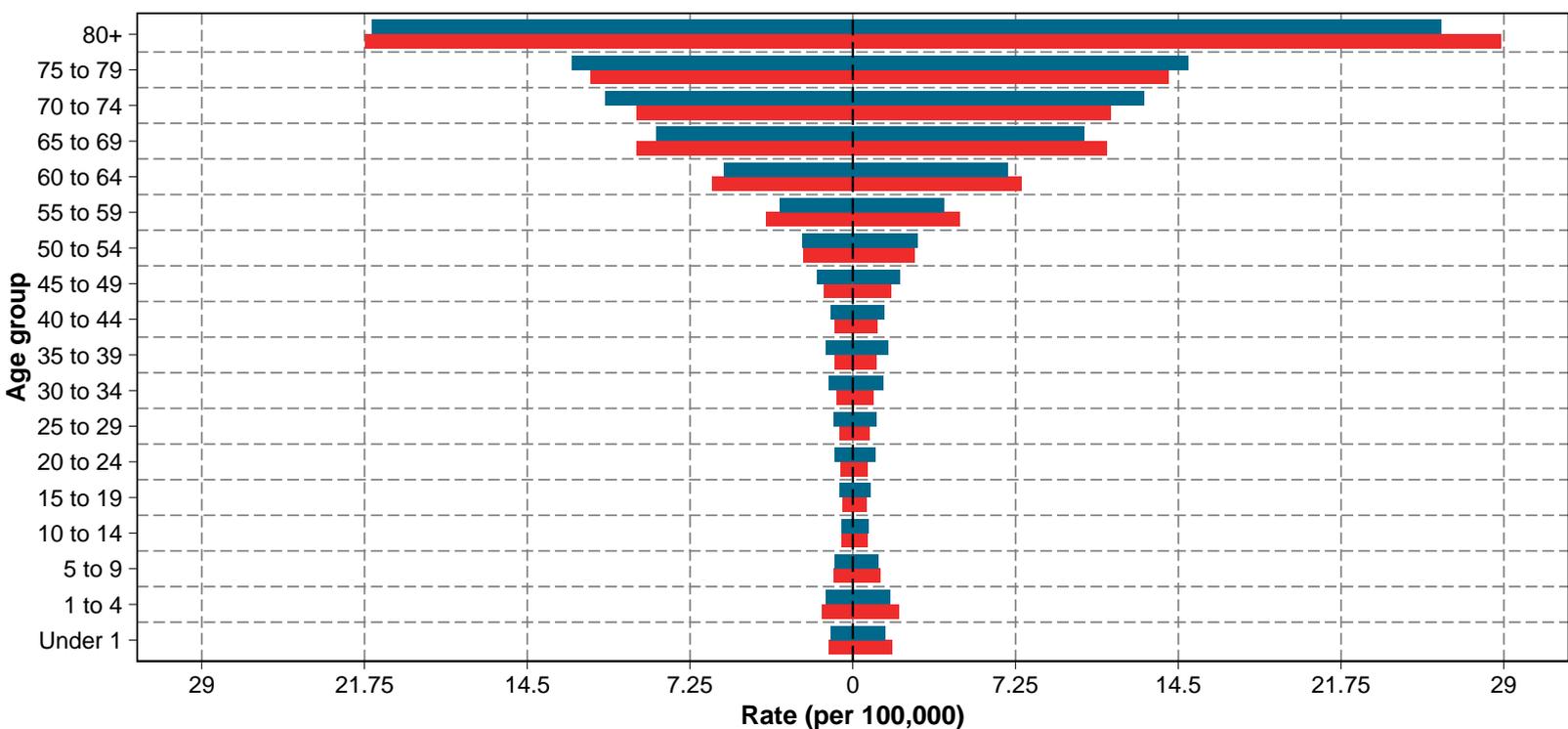
Tunisia

75

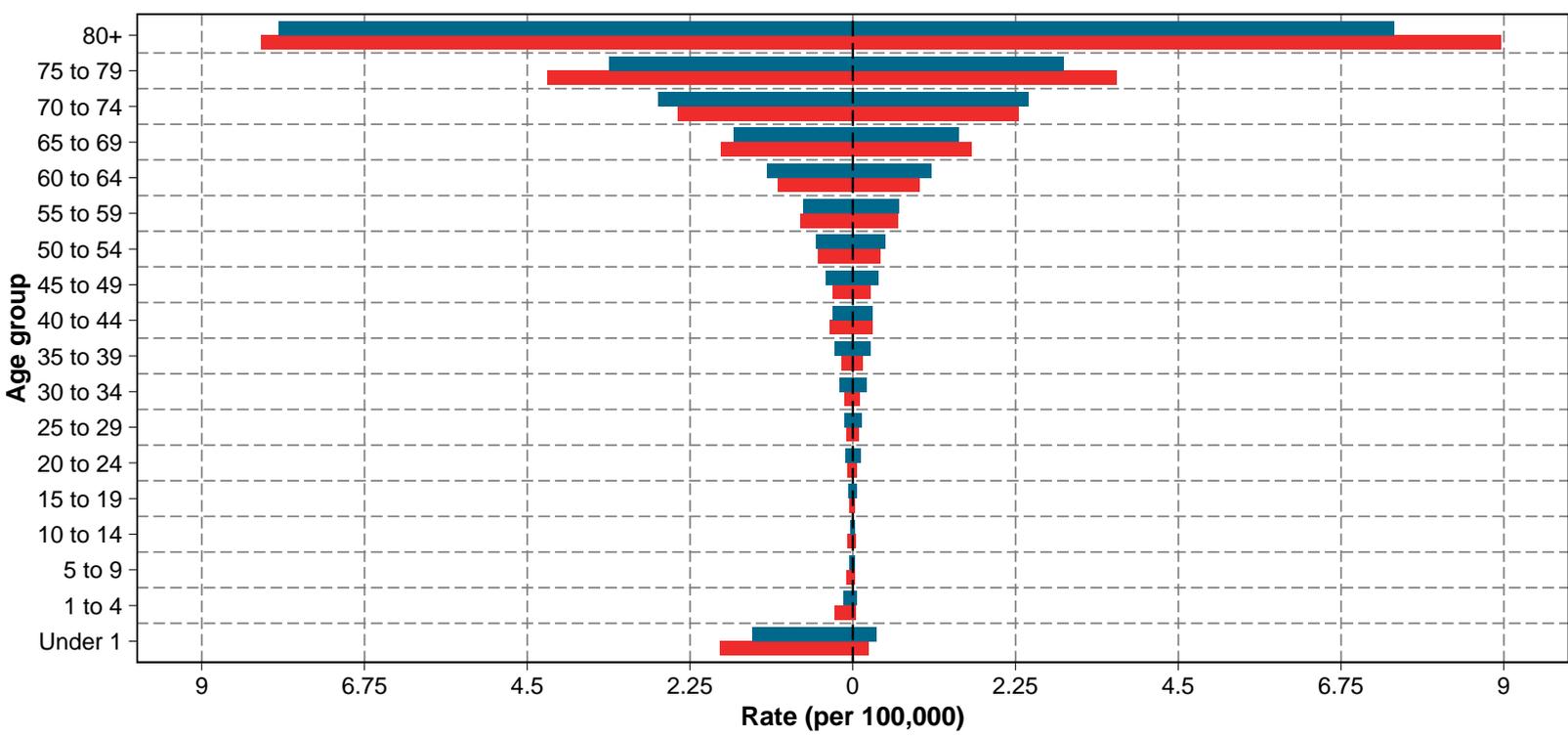
Incidence
1990 2019



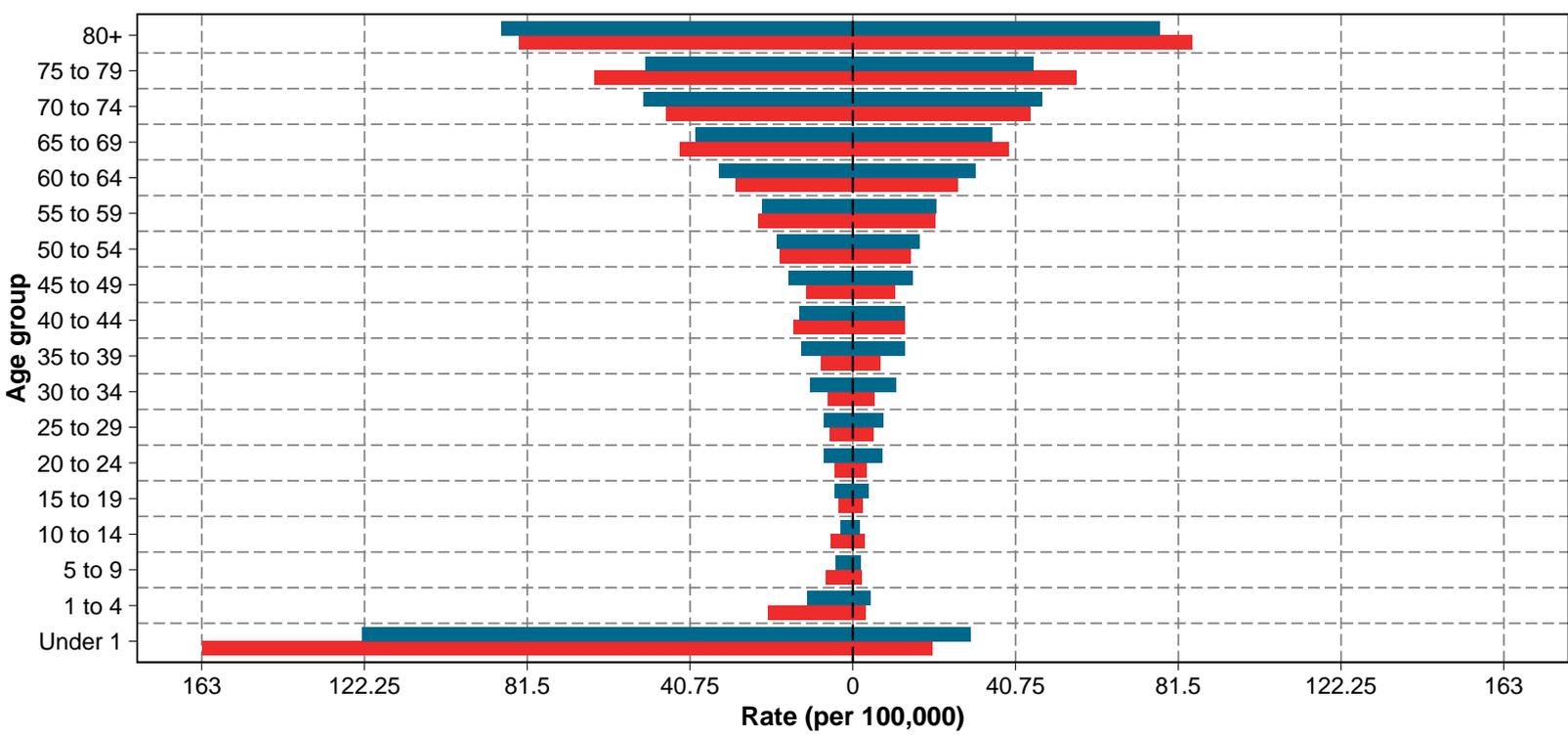
Prevalence
1990 2019



Deaths
1990 2019



DALYs
1990 2019

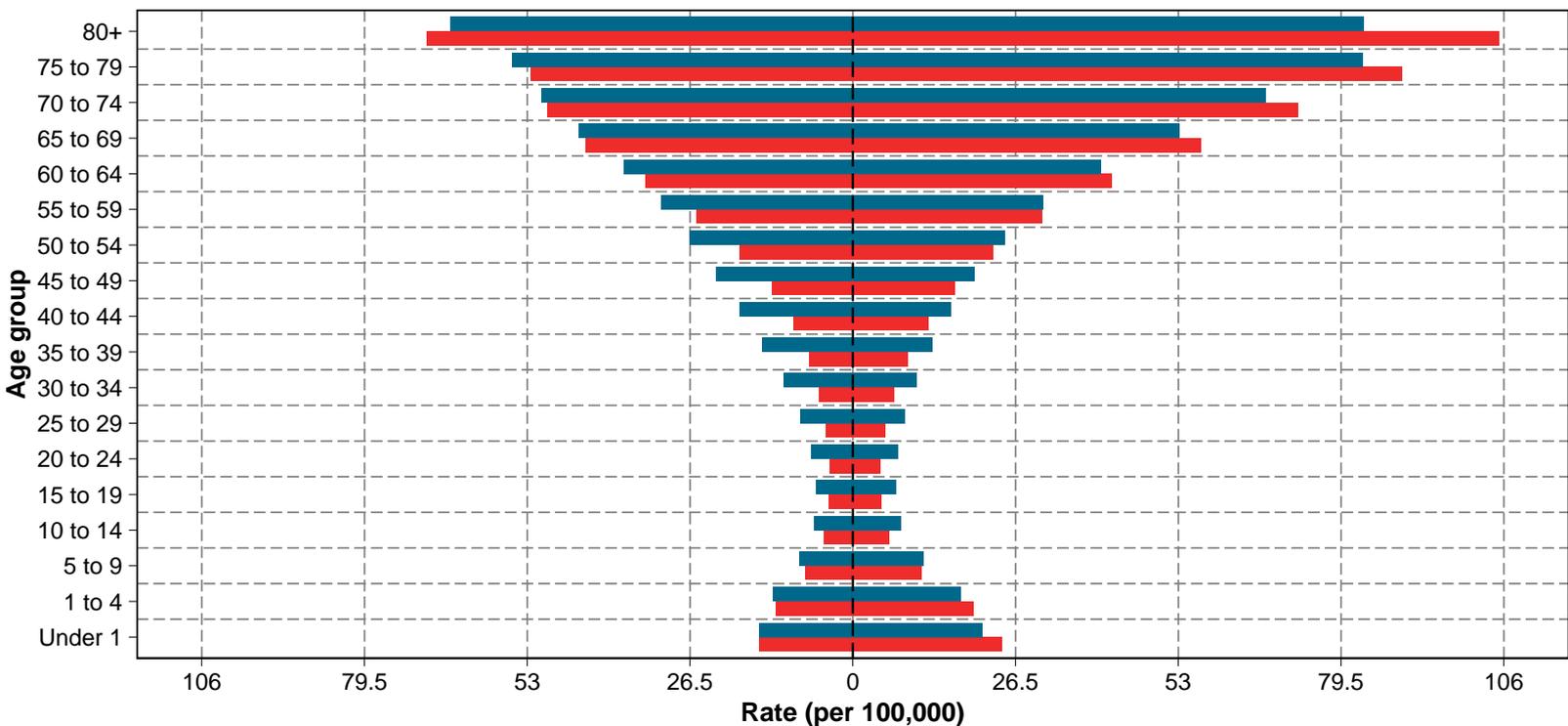


Sex
Female Male

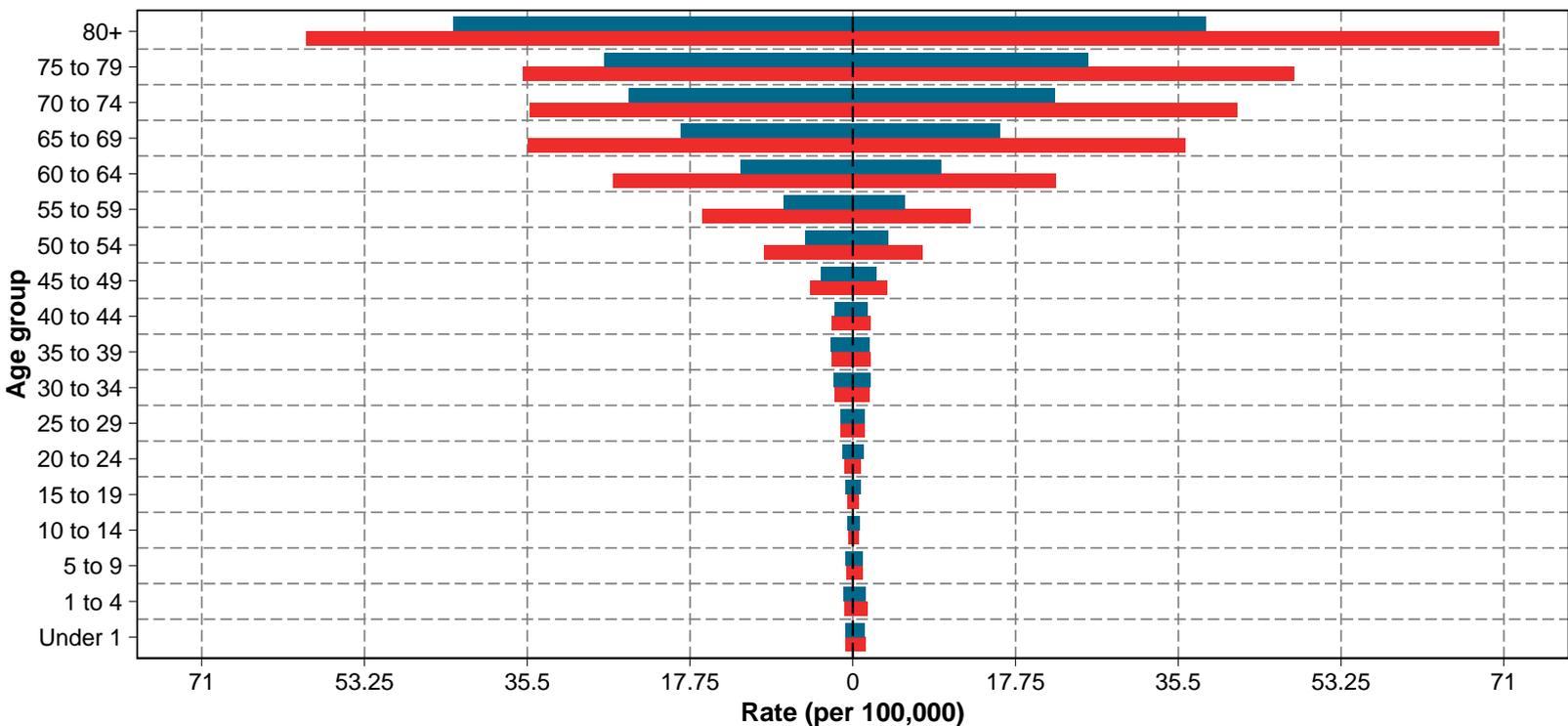
Turkey

76

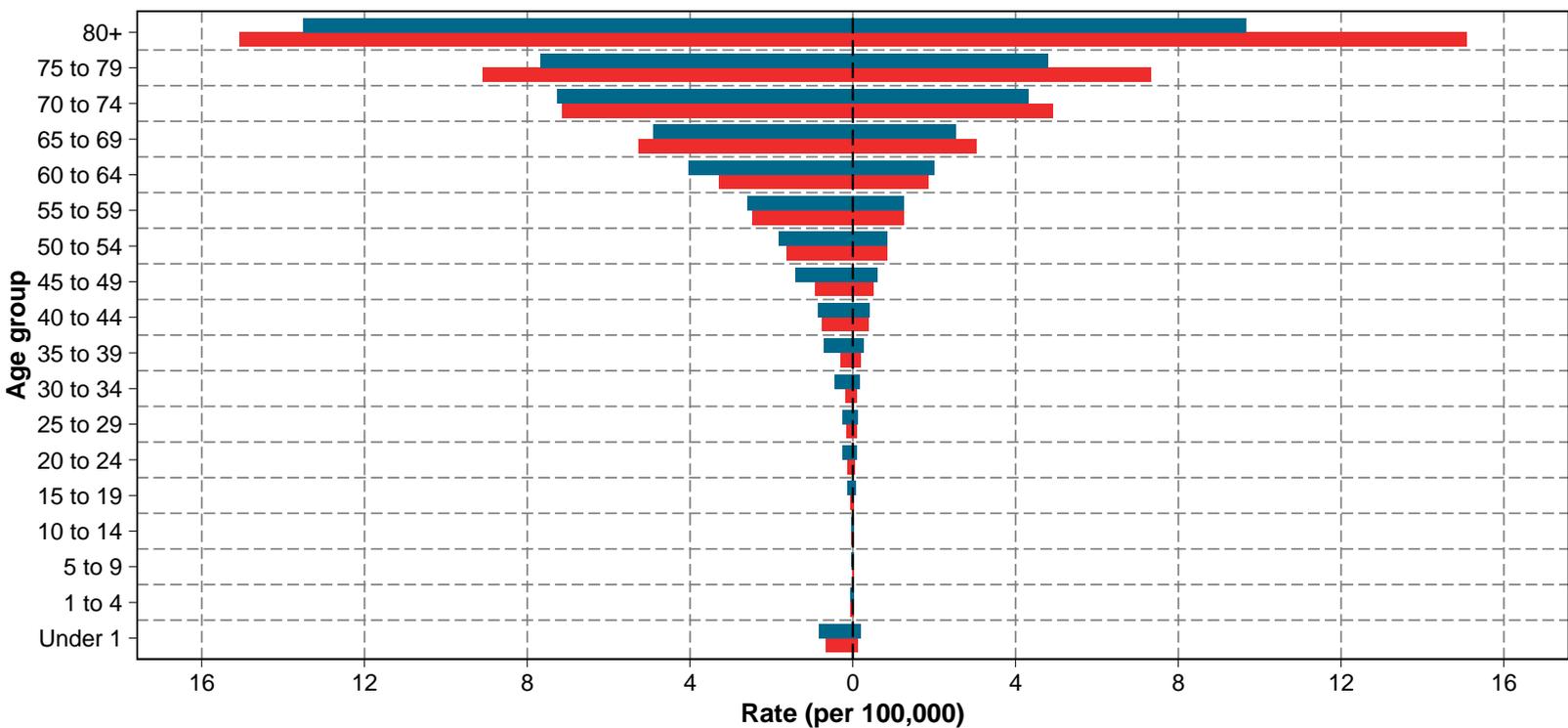
Incidence
1990 2019



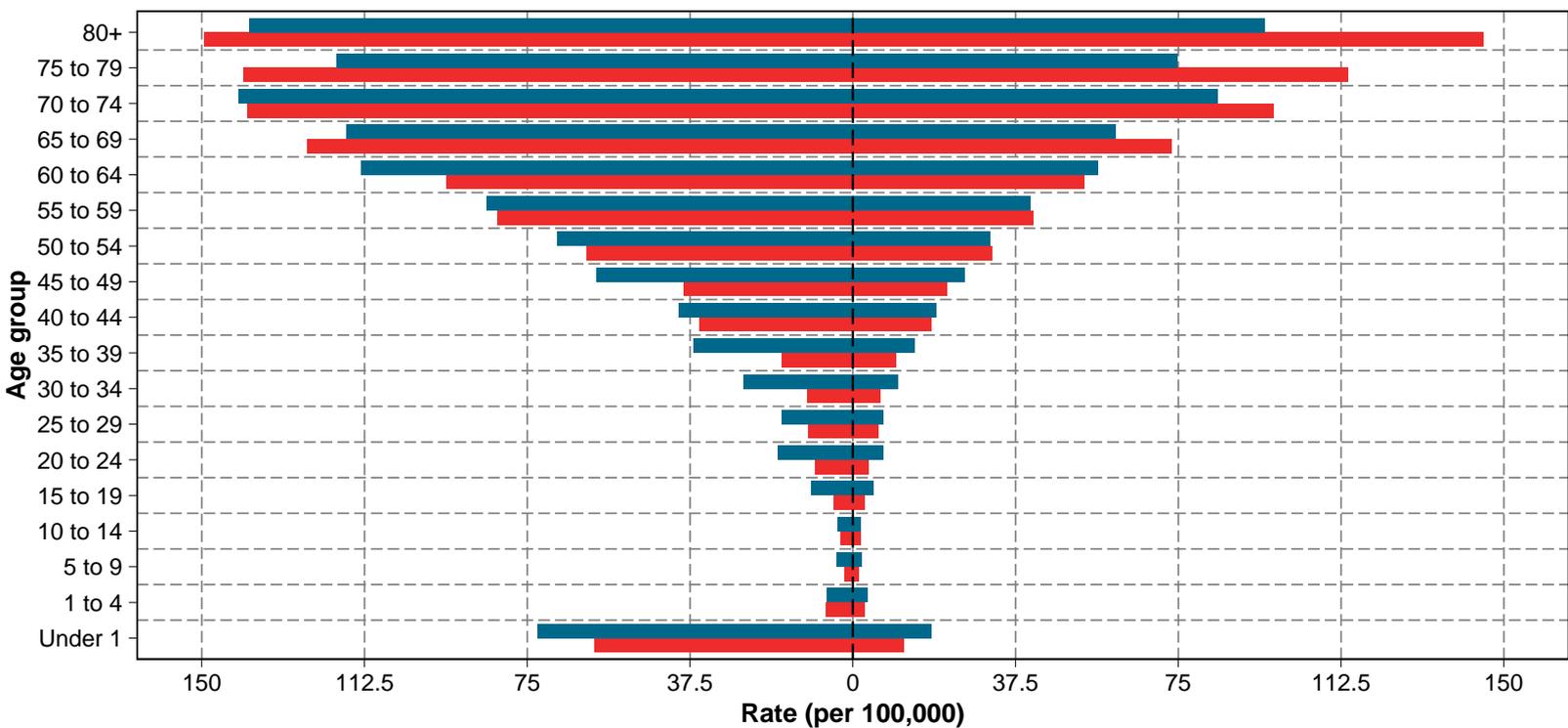
Prevalence
1990 2019



Deaths
1990 2019



DALYs
1990 2019

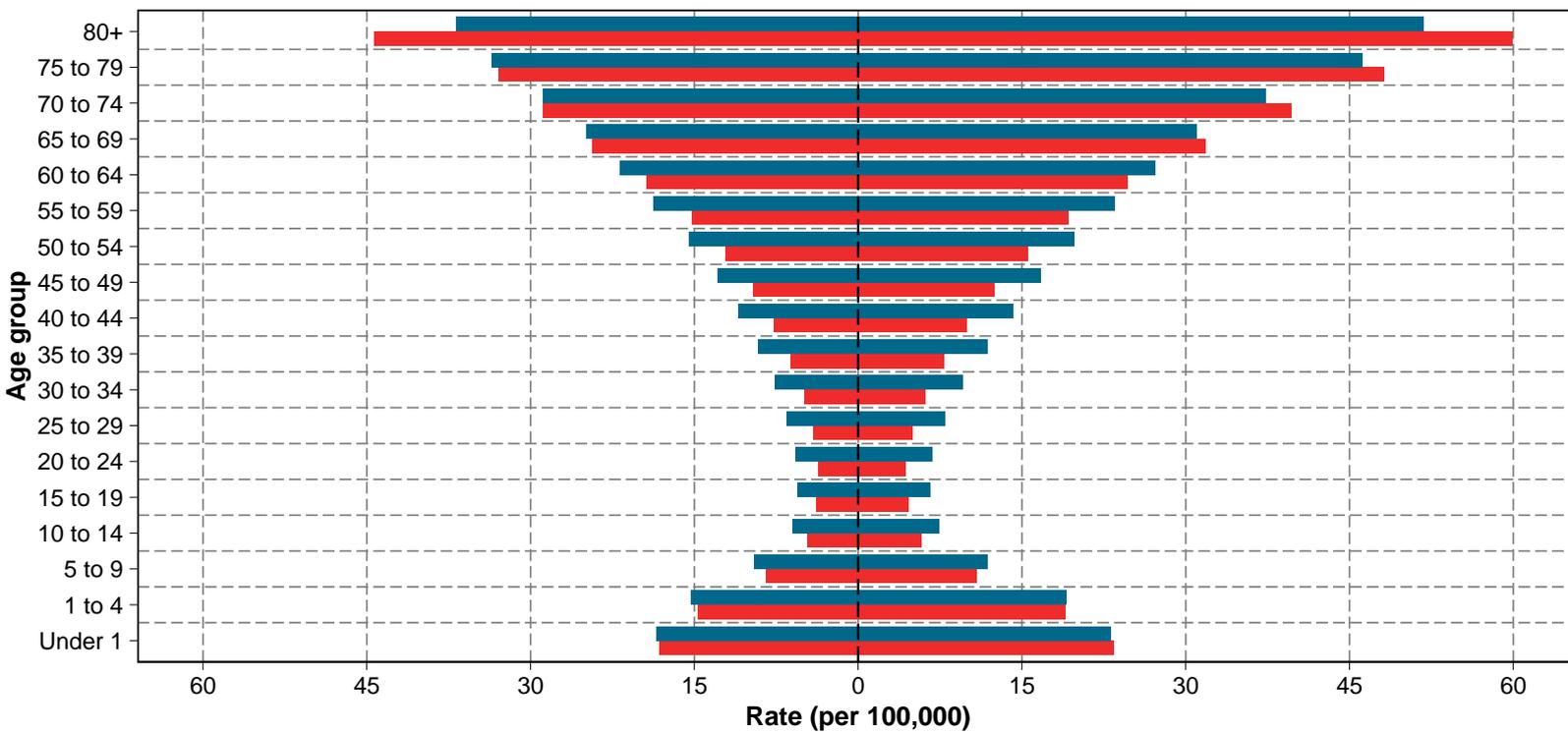


Sex
Female Male

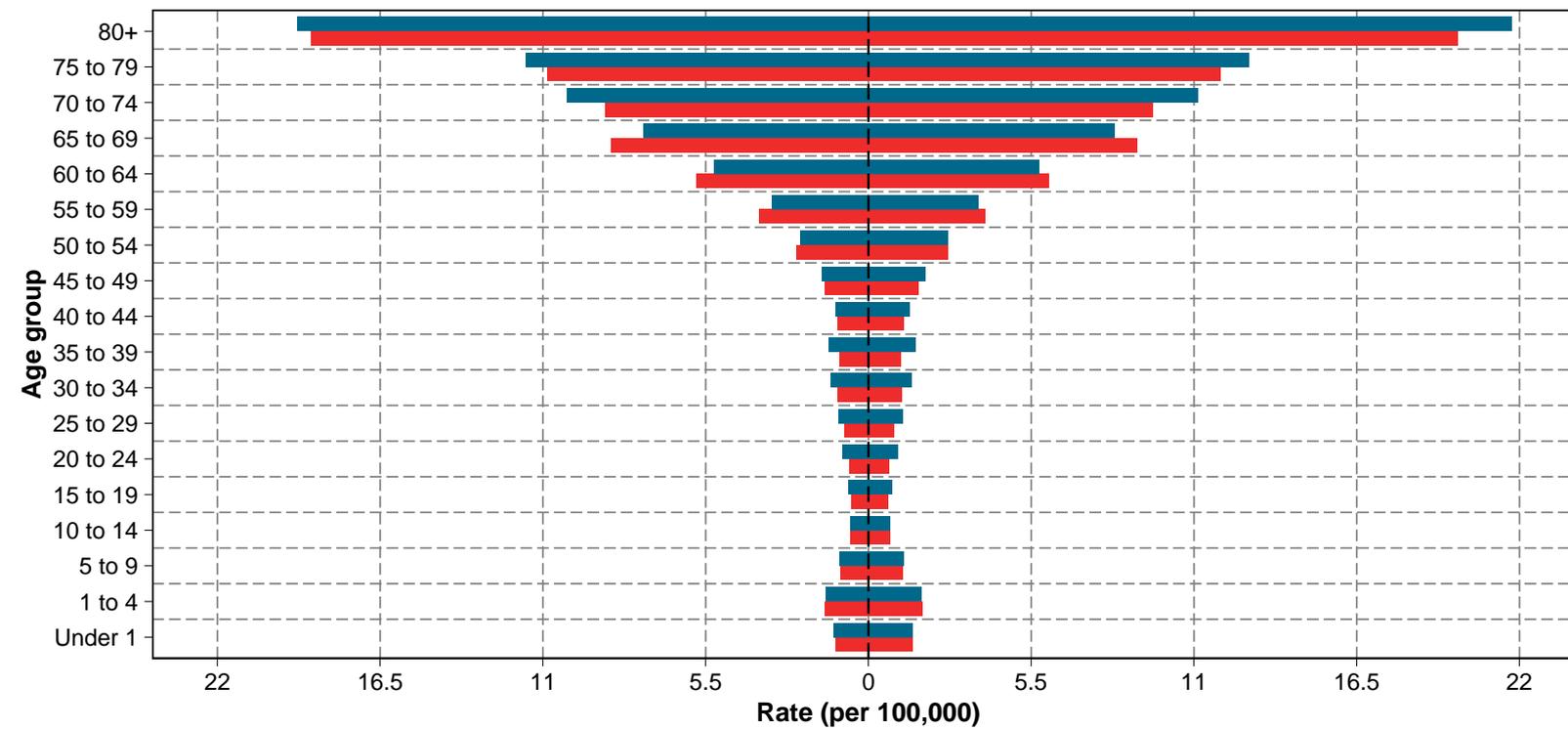
United Arab Emirates

77

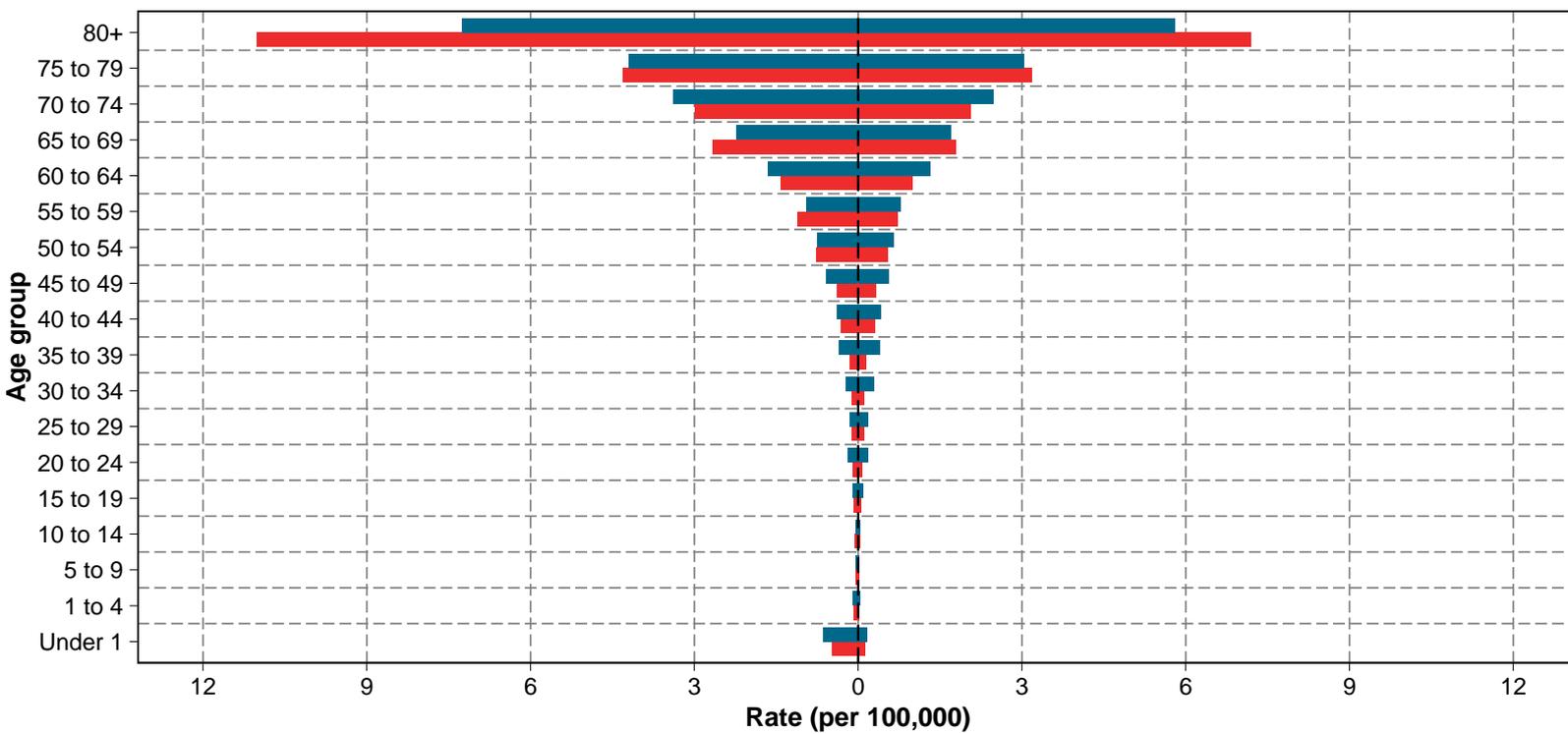
Incidence
1990 2019



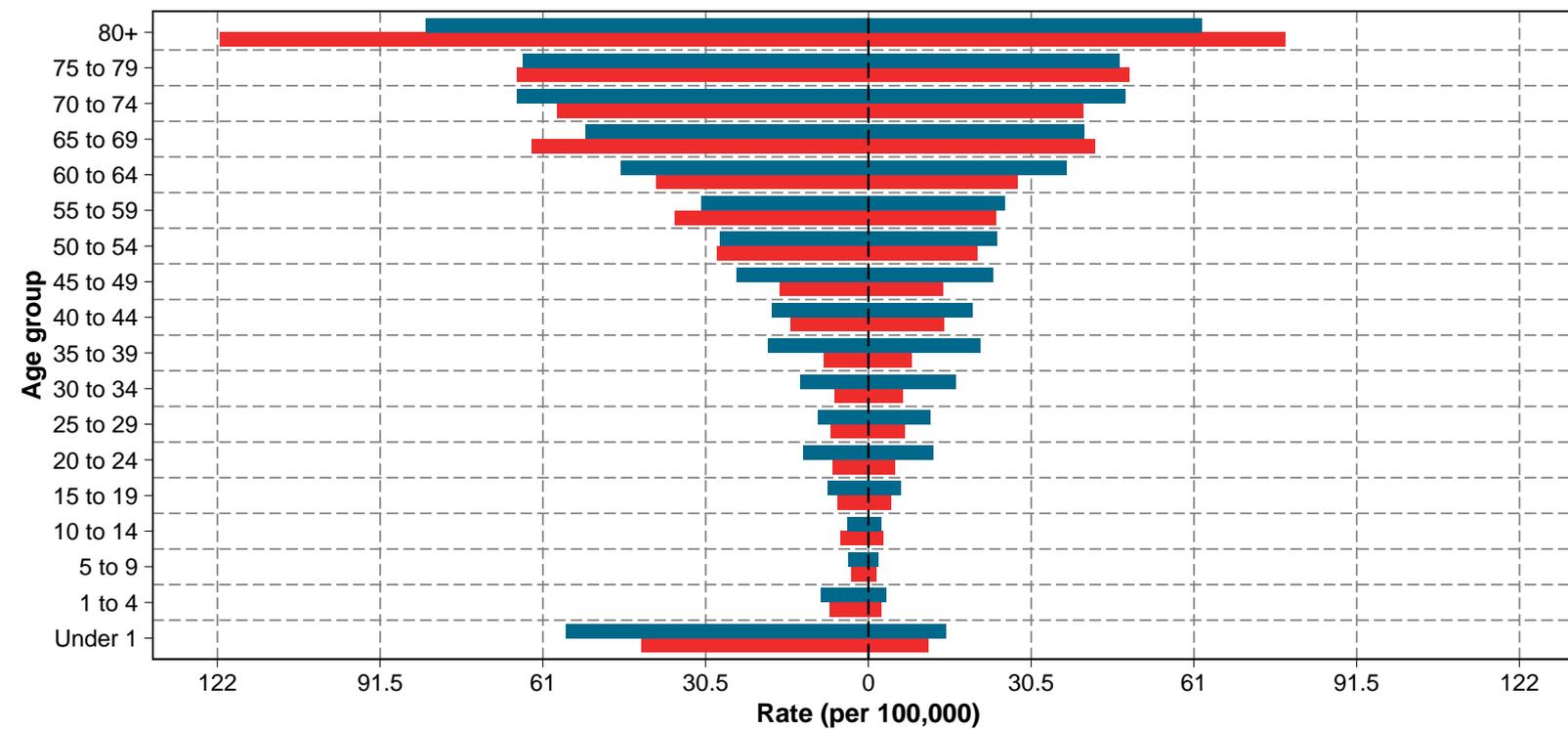
Prevalence
1990 2019



Deaths
1990 2019



DALYs
1990 2019

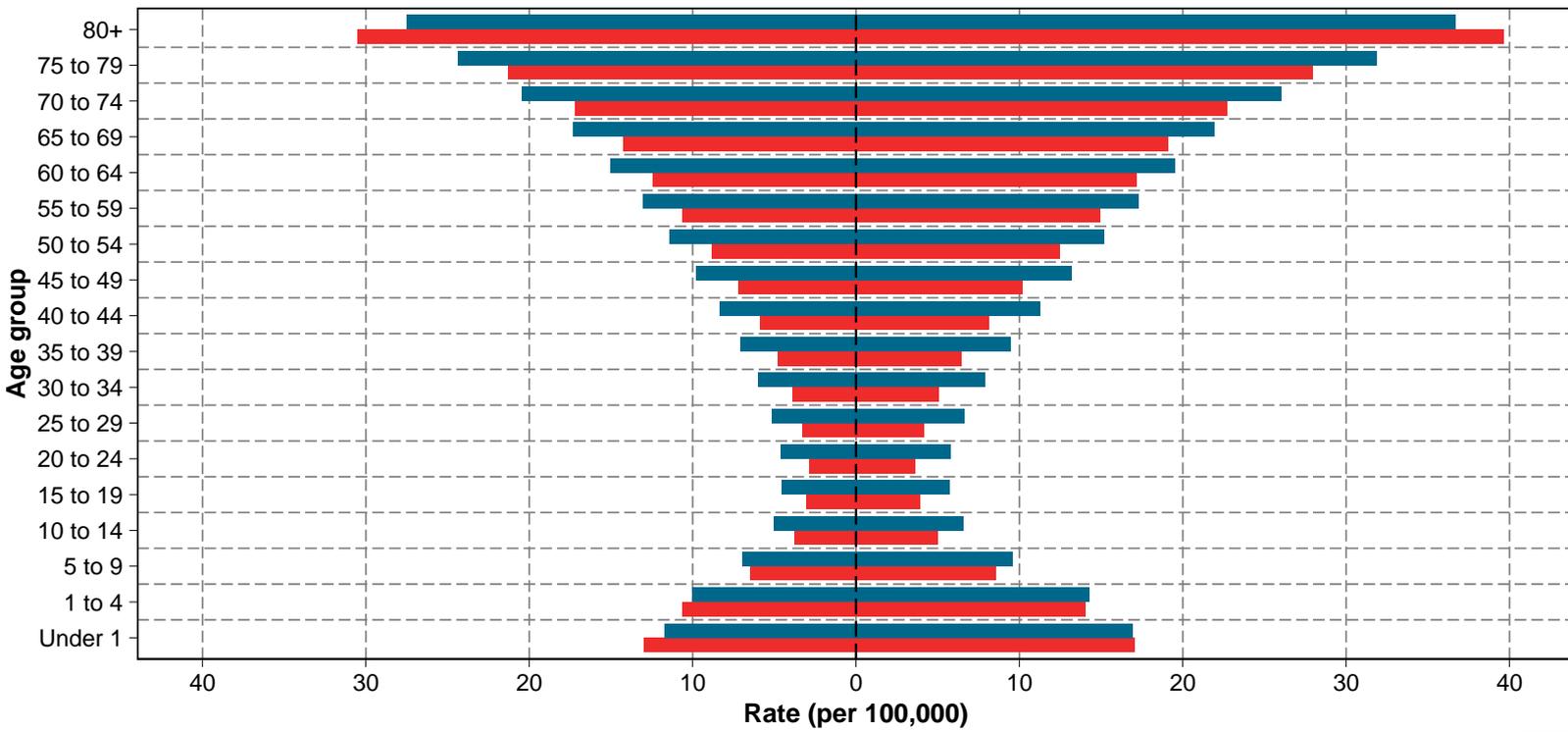


Sex
Female Male

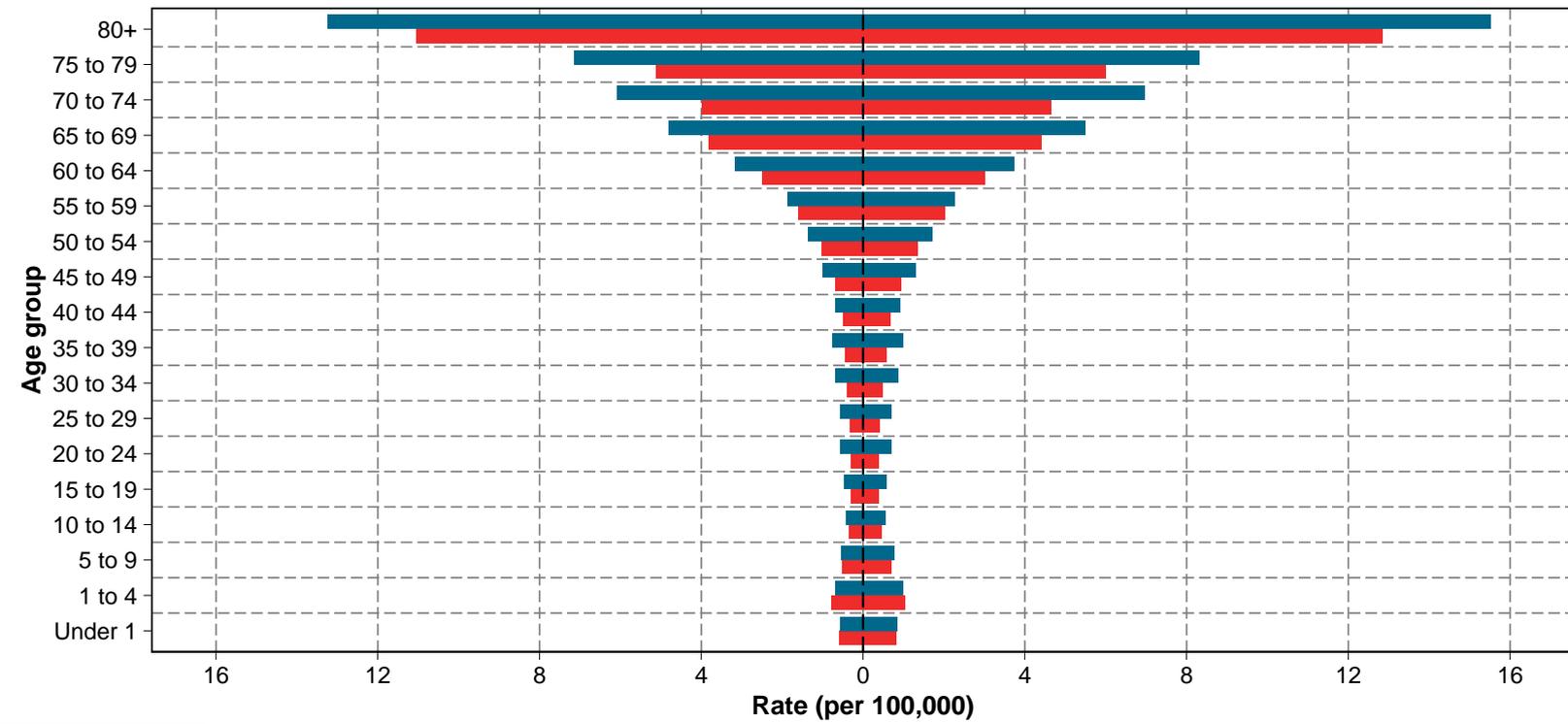
Yemen

78

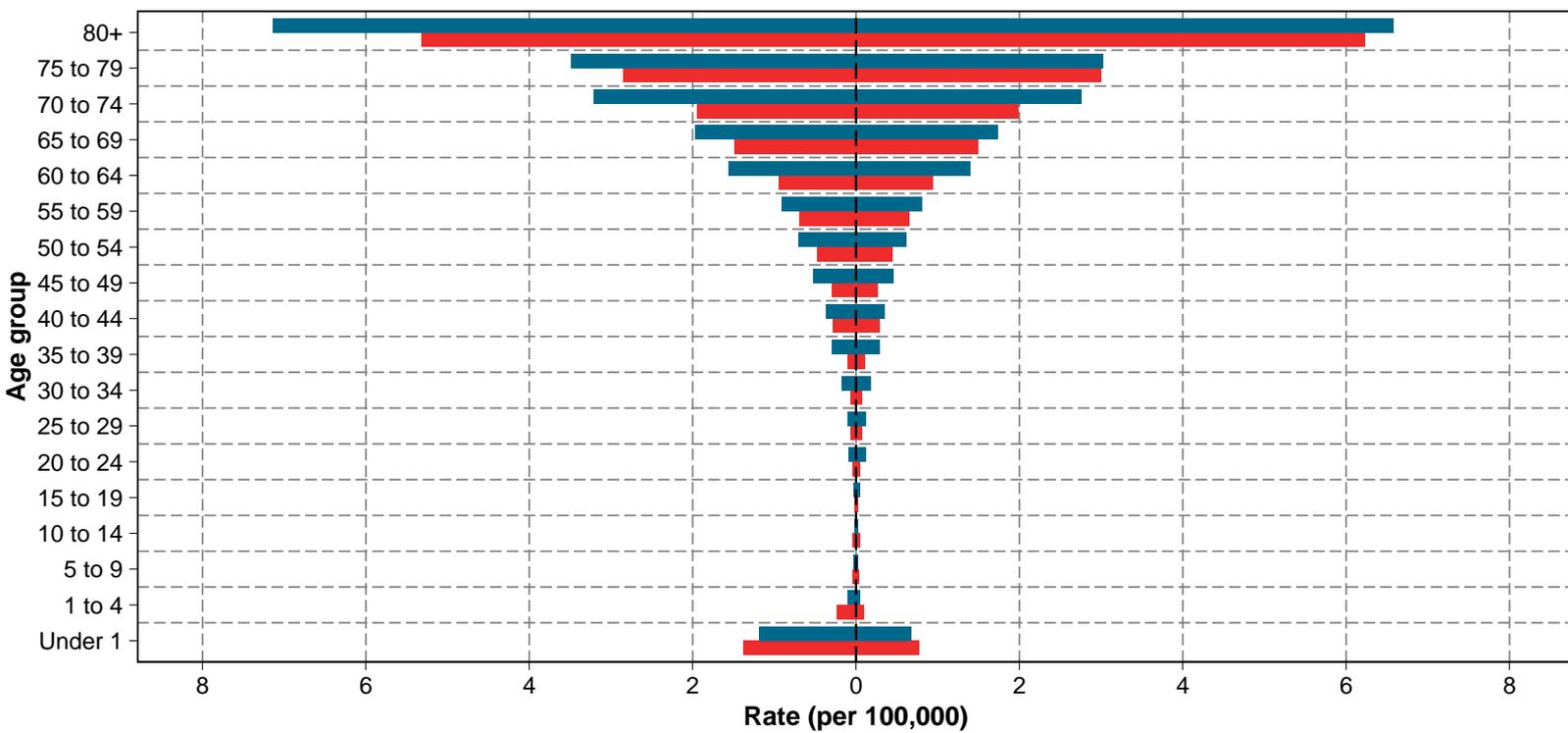
Incidence 1990 2019



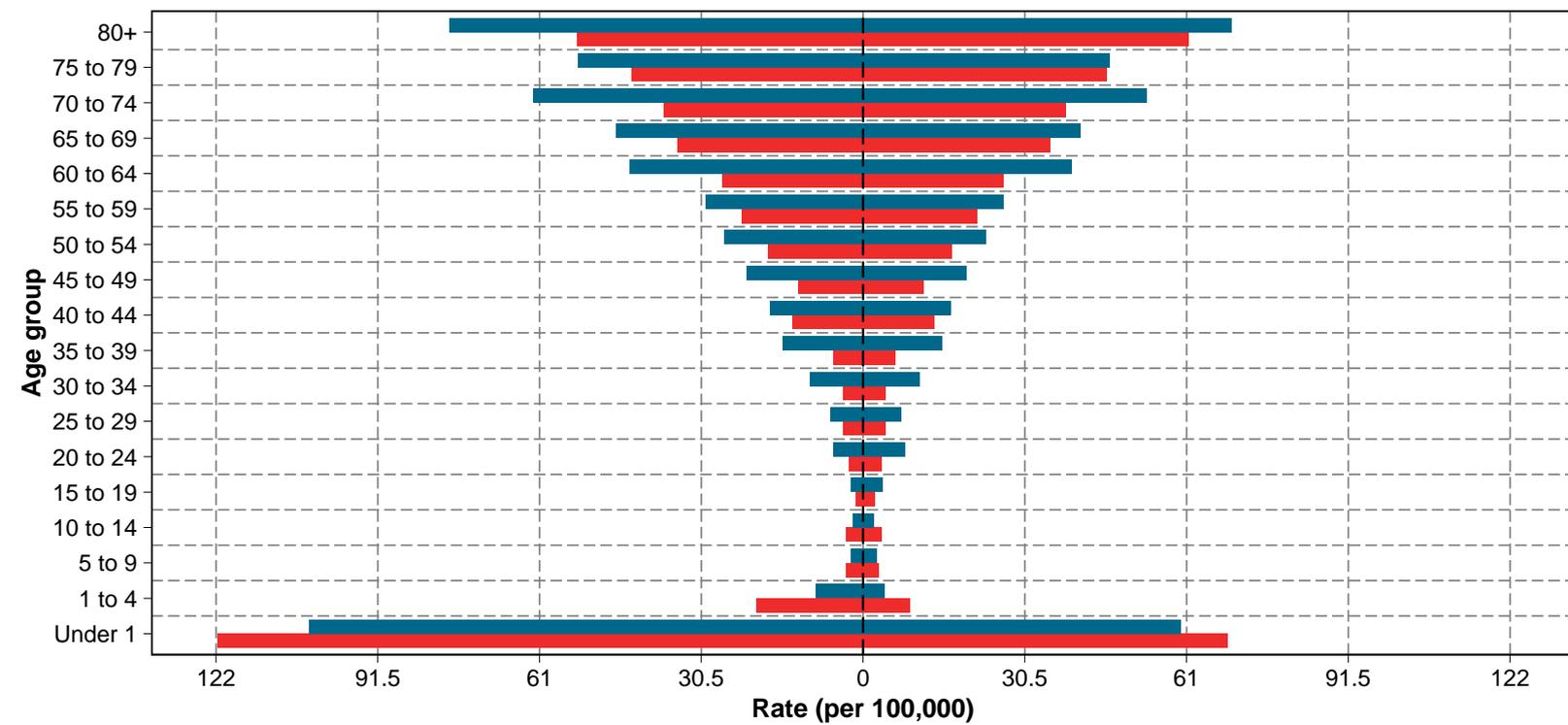
Prevalence 1990 2019



Deaths 1990 2019



DALYs 1990 2019



Sex
Female Male

S20 Fig.

Temporal trend of age-standardized incidence rate per 100,000 in North Africa and the Middle East region and the 21 countries of this region

(Reference: <https://vizhub.healthdata.org/gbd-compare/>)

Endocarditis

Both sexes, Age-standardized

