Figure 1

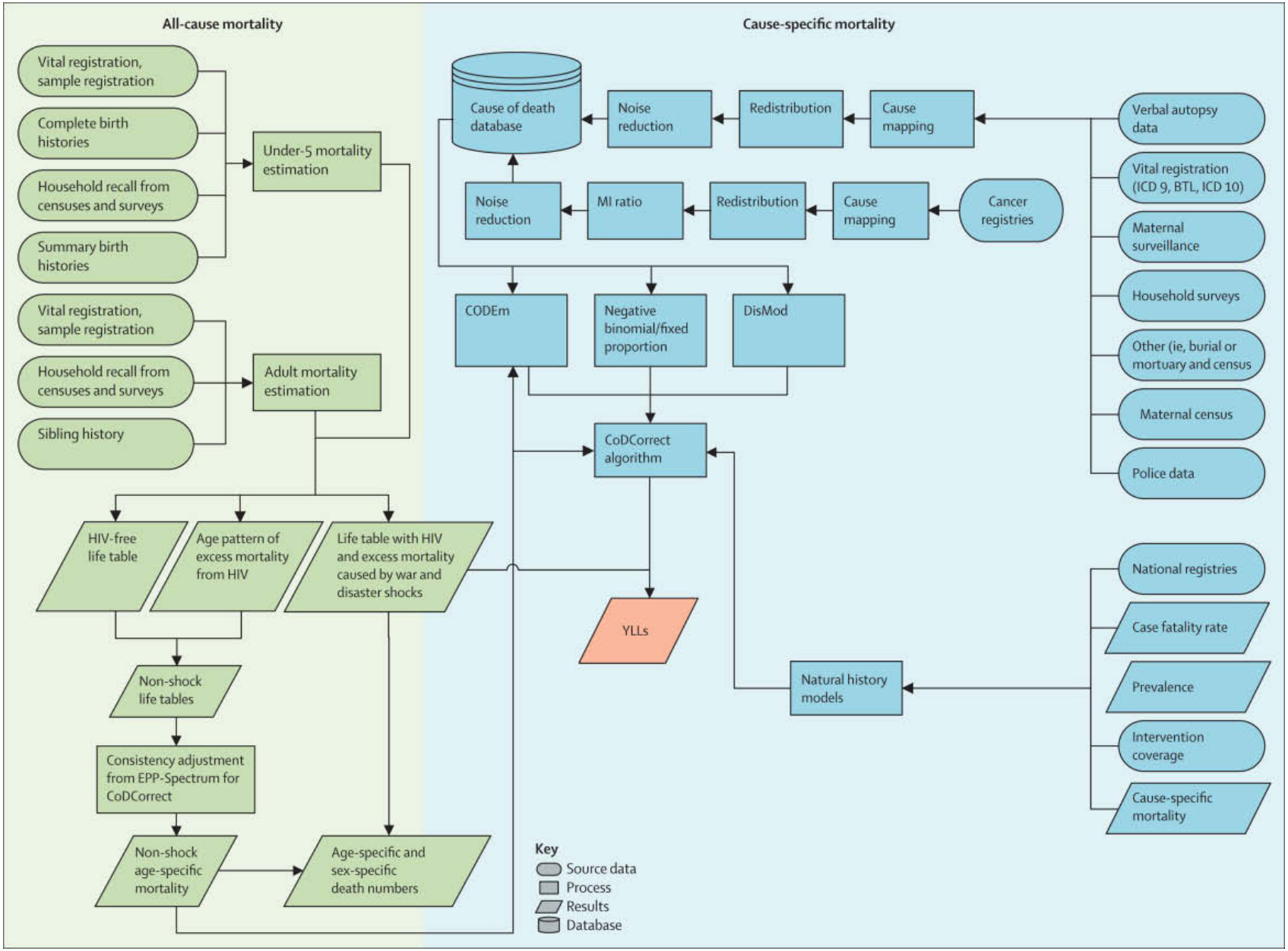

All-cause mortality
Cause-specific mortality
Vital registration, sample registration
Complete birth histories
Household recall from censuses and surveys
Summary birth histories
Under-5 mortality estimation
Vital registration, sample registration
Household recall from censuses and surveys
Sibling history
Adult mortality estimation
HIV-free life table
Age pattern of excess mortality from HIV
Life table with HIV and excess mortality caused by war and disaster shocks
Non-shock life tables
Consistency adjustment from EPP-Spectrum for CoDCorrect
Non-shock age-specific mortality
Age-specific and sex-specific death numbers
Cause of death database
Noise reduction
Redistribution
Cause mapping
Verbal autopsy data
Vital registration (ICD 9, BTL, ICD 10)
Maternal surveillance
Household surveys
Other (ie, burial or mortuary and census
Maternal census
Police data
Noise reduction
MI ratio
Redistribution
Cause mapping
Cancer registries
CODEm
Negative binomial/fixed proportion
DisMod
CoDCorrect algorithm
YLLs
Natural history models
National registries
Case fatality rate
Prevalence
Intervention coverage
Cause-specific mortality
Key
Source data
Process
Results
Database

Figure 2

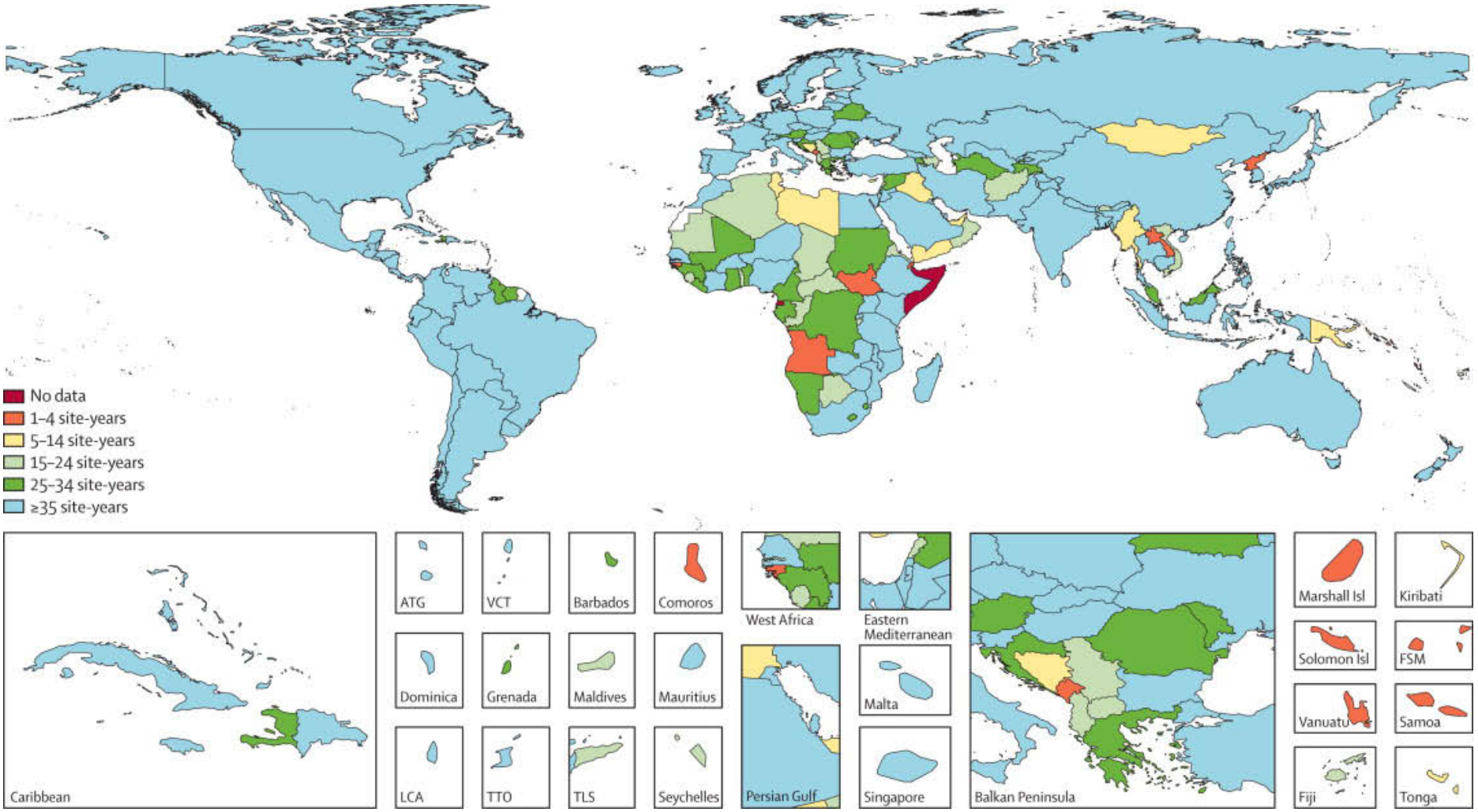

No data
1–4 site-years
5–14 site-years
15–24 site-years
25–34 site-years
≥35 site-years
Caribbean
ATG
VCT
Barbados
Comoros
Dominica
Grenada
Maldives
Mauritius
LCA
TTO
TLS
Seychelles
West Africa
Persian Gulf
Eastern Mediterranean
Malta
Singapore
Balkan Peninsula
Marshall Isl
Kiribati
Solomon Isl
FSM
Vanuatu
Samoa
Fiji
Tonga

Figure 3

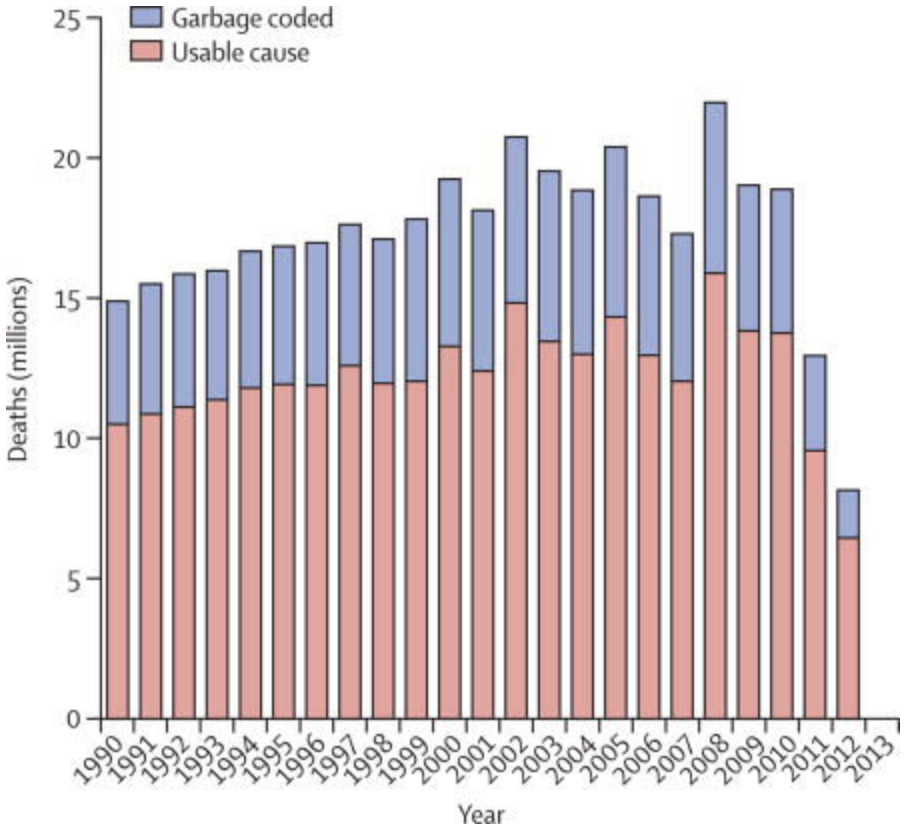

Garbage coded
Usable cause
Deaths (millions)
25
20
15
10
5
0
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Year

Figure 4

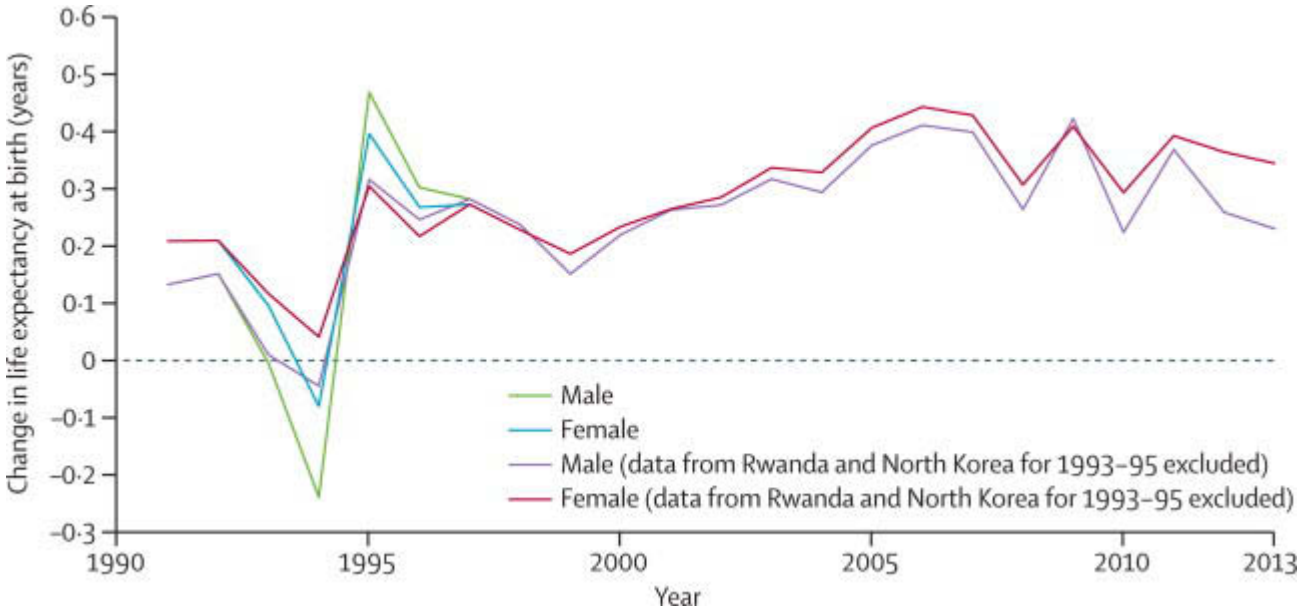

0·6
0·5
0·4
0·3
0·2
0·1
0
−0·1
−0·2
−0·3
Change in life expectancy at birth (years)
1990
1995
2000
2005
2010
2013
Year
Male
Female
Male (data from Rwanda and North Korea for 1993–95 excluded)
Female (data from Rwanda and North Korea for 1993–95 excluded)

Figure 5

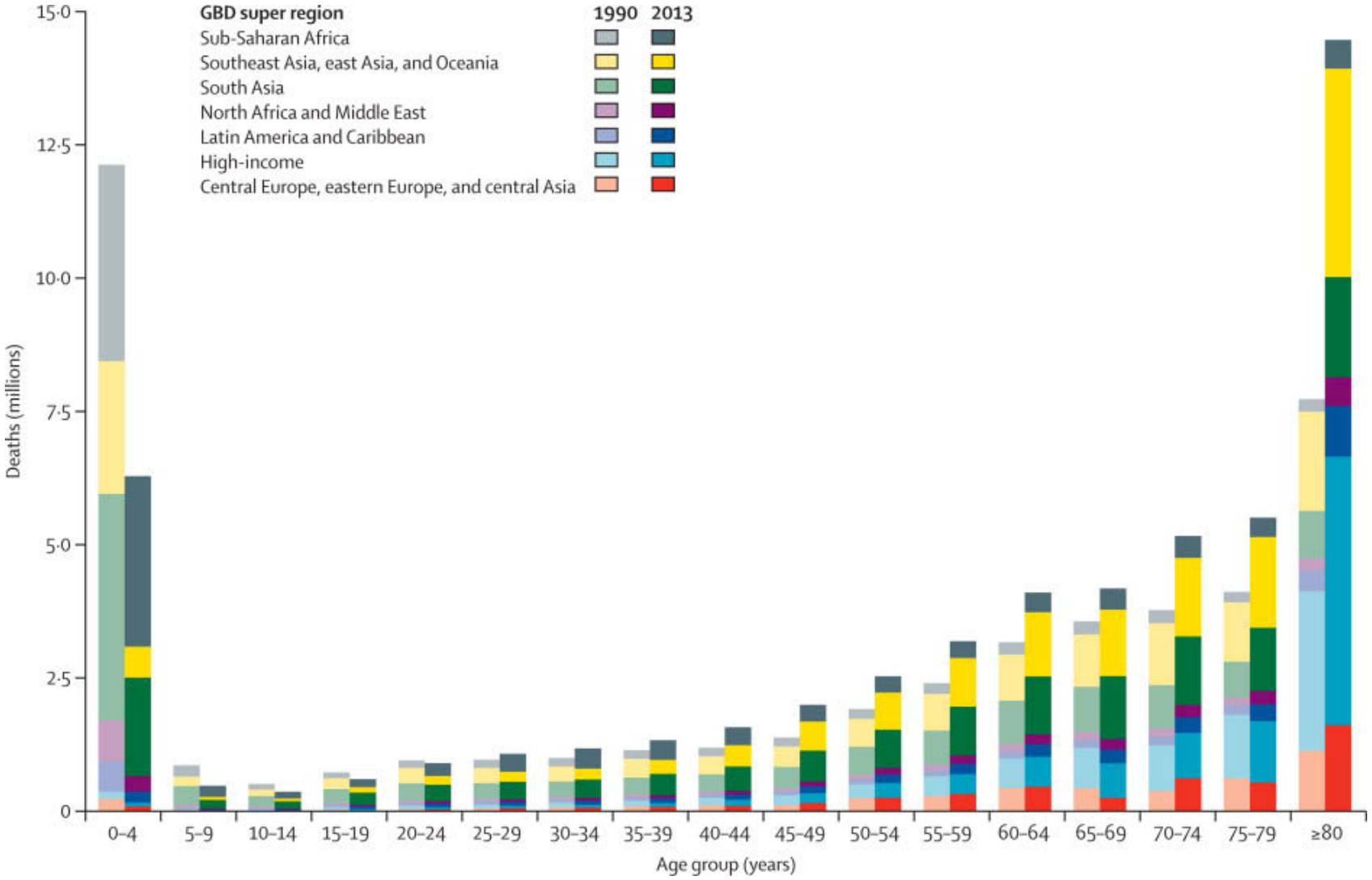

GBD super region
1990
2013
Sub-Saharan Africa
Southeast Asia, east Asia, and Oceania
South Asia
North Africa and Middle East
Latin America and Caribbean
High-income
Central Europe, eastern Europe, and central Asia
15·0
12·5
10·0
7·5
5·0
2·5
0
Deaths (millions)
0–4
5–9
10–14
15–19
20–24
25–29
30–34
35–39
40–44
45–49
50–54
55–59
60–64
65–69
70–74
75–79
≥80
Age group (years)

Figure 6

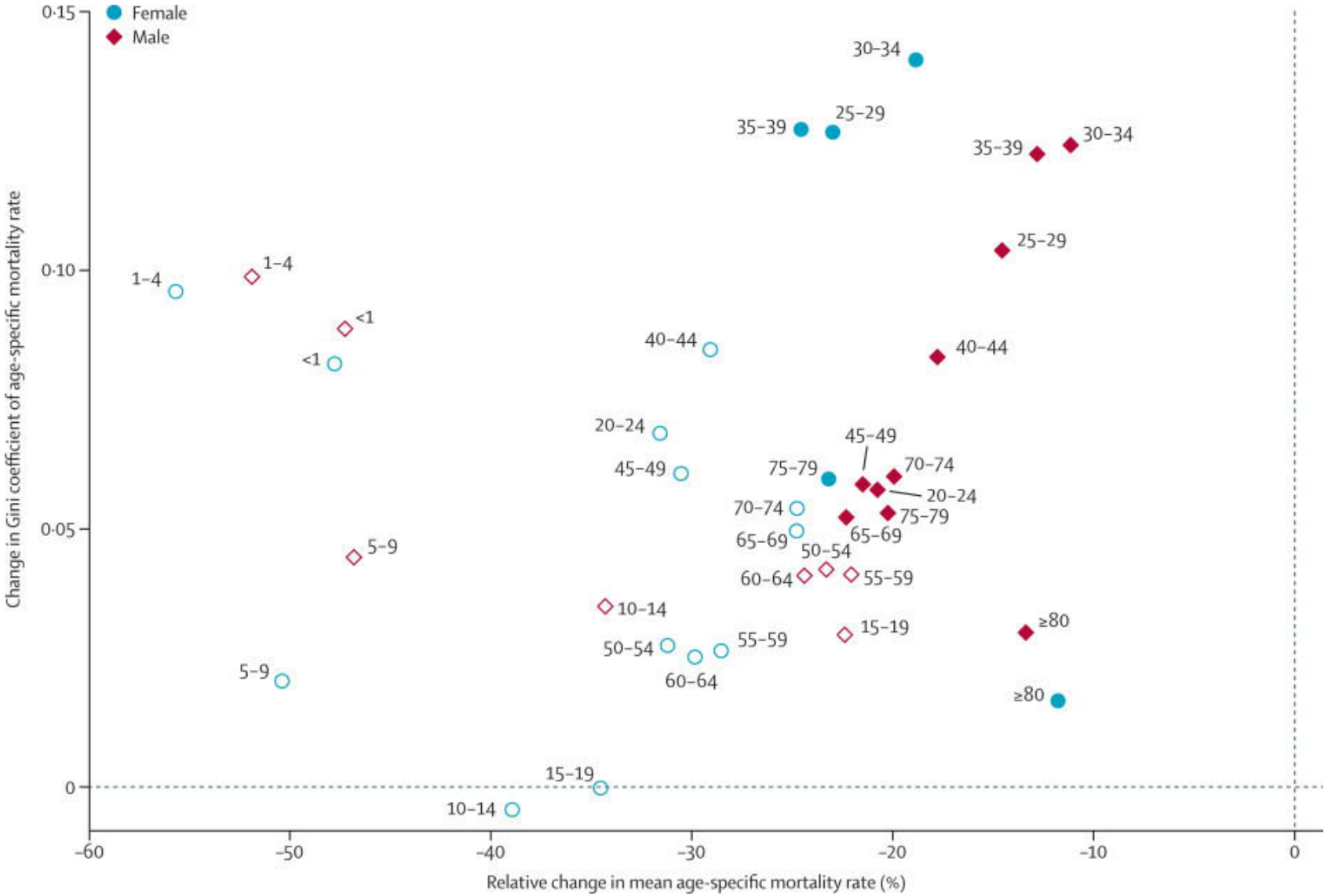

Female
Male
0·15
0·10
0·05
0
Change in Gini coefficient of age-specific mortality rate
30–34
25–29
35–39
35–39
30–34
25–29
1–4
1–4
<1
<1
40–44
40–44
20–24
45–49
45–49
75–79
70–74
20–24
70–74
75–79
65–69
65–69
50–54
5–9
60–64
55–59
10–14
15–19
≥80
50–54
55–59
60–64
5–9
≥80
15–19
10–14
−60
−50
−40
−30
−20
−10
0
Relative change in mean age-specific mortality rate (%)

Figure 7


Forces of nature, war, and legal intervention
Self-harm and interpersonal injuries
Unintentional injuries
Transport injuries
Other NCDs
Musculoskeletal disorders
Diabetes, urogenital, blood, and endocrine diseases
Mental and behavioural disorders
Neurological disorders
Digestive diseases
Cirrhosis
Chronic respiratory disease
Cardiovascular diseases
Neoplasms
Other communicable, maternal, and nutritional diseases
Nutritional deficiencies
Neonatal disorders
Maternal disorders
NTDs and malaria
Diarrhoea, lower respiratory infections, and other common infectious diseases
HIV and tuberculosis
South sub-Saharan Africa (−5·1 years)
Eastern Europe (1·7 years)
Central Asia (2·9 years)
High-income north America (3·6 years)
Oceania (3·6 years)
Central Latin America (4 years)
Southern Latin America (4·1 years)
Australasia (4·9 years)
Western Europe (4·9 years)
Caribbean (5 years)
High-income Asia Pacific (5·2 years)
Southeast Asia (5·5 years)
Western sub-Saharan Africa (5·6 years)
Central Europe (5·6 years)
Tropical Latin America (5·7 years)
Central sub–Saharan Africa (5·8 years)
Global (6·3 years)
Andean Latin America (6·9 years)
North Africa and Middle East (7·1 years)
South Asia (8·3 years)
East Asia (8·3 years)
Eastern sub-Saharan Africa (9·2 years)
−10
−8
−6
−4
−2
0
0
2
4
6
8
10
Years
Decreases
Increases

Figure 8

	Age-standardised death rates (% change)	Mean absolute difference in age-standardised death rate		Gini coefficient	
		2013	Change (1990–2013)	2013	Change (1990–2013)
All causes	−24·2%	182·04	−19·40	0·19	0·024
Communicable, maternal, neonatal, and nutritional diseases	−40·5%	104·87	−42·23	0·54	0·068
HIV/AIDS and tuberculosis	−23·0%	35·91	−1·37	0·69	0·114
Diarrhoea, lower respiratory, and other common infectious diseases	−49·6%	40·44	−29·80	0·49	0·027
Neglected tropical diseases and malaria	−24·5%	9·28	−4·37	0·78	0·023
Maternal disorders	−43·4%	2·88	−1·64	0·69	0·085
Neonatal disorders	−41·1%	9·75	−5·07	0·44	0·068
Nutritional deficiencies	−28·9%	8·00	−1·40	0·59	0·044
Other communicable, maternal, neonatal, and nutritional diseases	−37·2%	2·96	−1·54	0·49	0·011
Non-communicable diseases	−18·5%	86·74	2·02	0·13	0·021
Neoplasms	−14·8%	18·65	−6·44	0·15	−0·021
Cardiovascular diseases	−21·9%	59·97	7·51	0·18	0·044
Chronic respiratory diseases	−30·1%	32·35	−18·44	0·36	−0·030
Cirrhosis	−13·6%	6·45	−0·08	0·30	0·028
Digestive diseases	−33·2%	7·31	−3·31	0·32	−0·001
Neurological disorders	2·5%	5·51	0·24	0·18	−0·003
Mental and substance use disorders	−6·4%	1·77	−0·04	0·44	0·002
Diabetes, urogenital, blood, and endocrine diseases	14·5%	16·67	3·99	0·30	0·026
Musculoskeletal disorders	8·3%	0·32	0·01	0·18	−0·012
Other non-communicable diseases	−17·6%	2·49	0·27	0·24	0·071
Injuries	−20·8%	17·31	−0·33	0·23	0·039
Transport injuries	−8·5%	5·80	0·84	0·25	0·048
Unintentional injuries	−25·5%	9·21	−2·67	0·28	0·001
Self-harm and interpersonal violence	−20·7%	6·06	0·23	0·34	0·072
Forces of nature, war, and legal intervention	−65·9%	0·85	−1·65	0·90	−0·038

Significant increase No significant increase Significant decrease

Figure 9

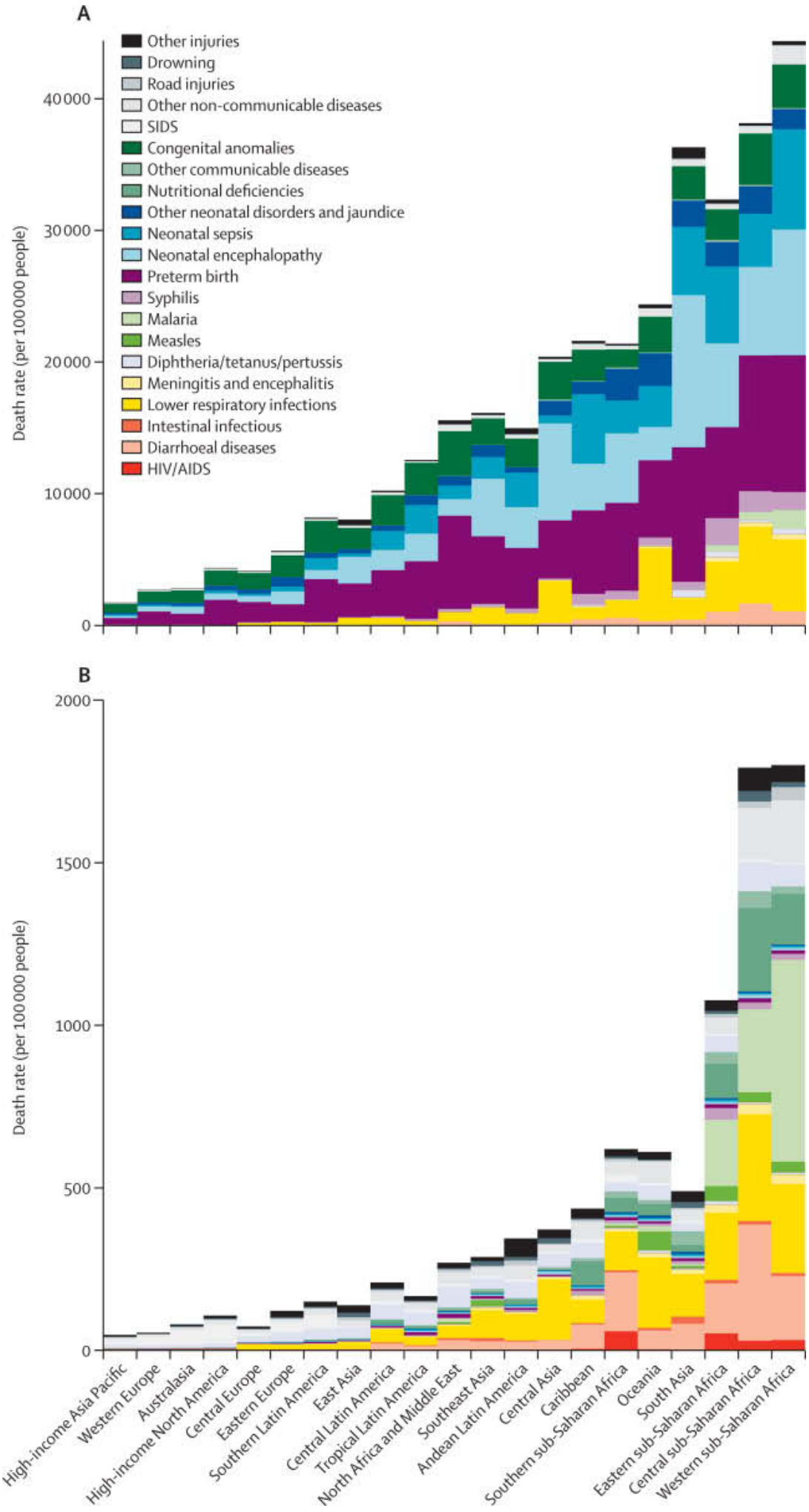

A
Other injuries
Drowning
Road injuries
Other non-communicable diseases
SIDS
Congenital anomalies
Other communicable diseases
Nutritional deficiencies
Other neonatal disorders and jaundice
Neonatal sepsis
Neonatal encephalopathy
Preterm birth
Syphilis
Malaria
Measles
Diphtheria/tetanus/pertussis
Meningitis and encephalitis
Lower respiratory infections
Intestinal infectious
Diarrhoeal diseases
HIV/AIDS
Death rate (per 100 000 people)
40 000
30 000
20 000
10 000
0
B
2000
1500
1000
500
0
Death rate (per 100 000 people)
High-income Asia Pacific
Western Europe
Australasia
High-income North America
Central Europe
Eastern Europe
Southern Latin America
East Asia
Central Latin America
Tropical Latin America
North Africa and Middle East
Southeast Asia
Andean Latin America
Central Asia
Caribbean
Southern sub-Saharan Africa
Oceania
South Asia
Eastern sub-Saharan Africa
Central sub-Saharan Africa
Western sub-Saharan Africa

Figure 10

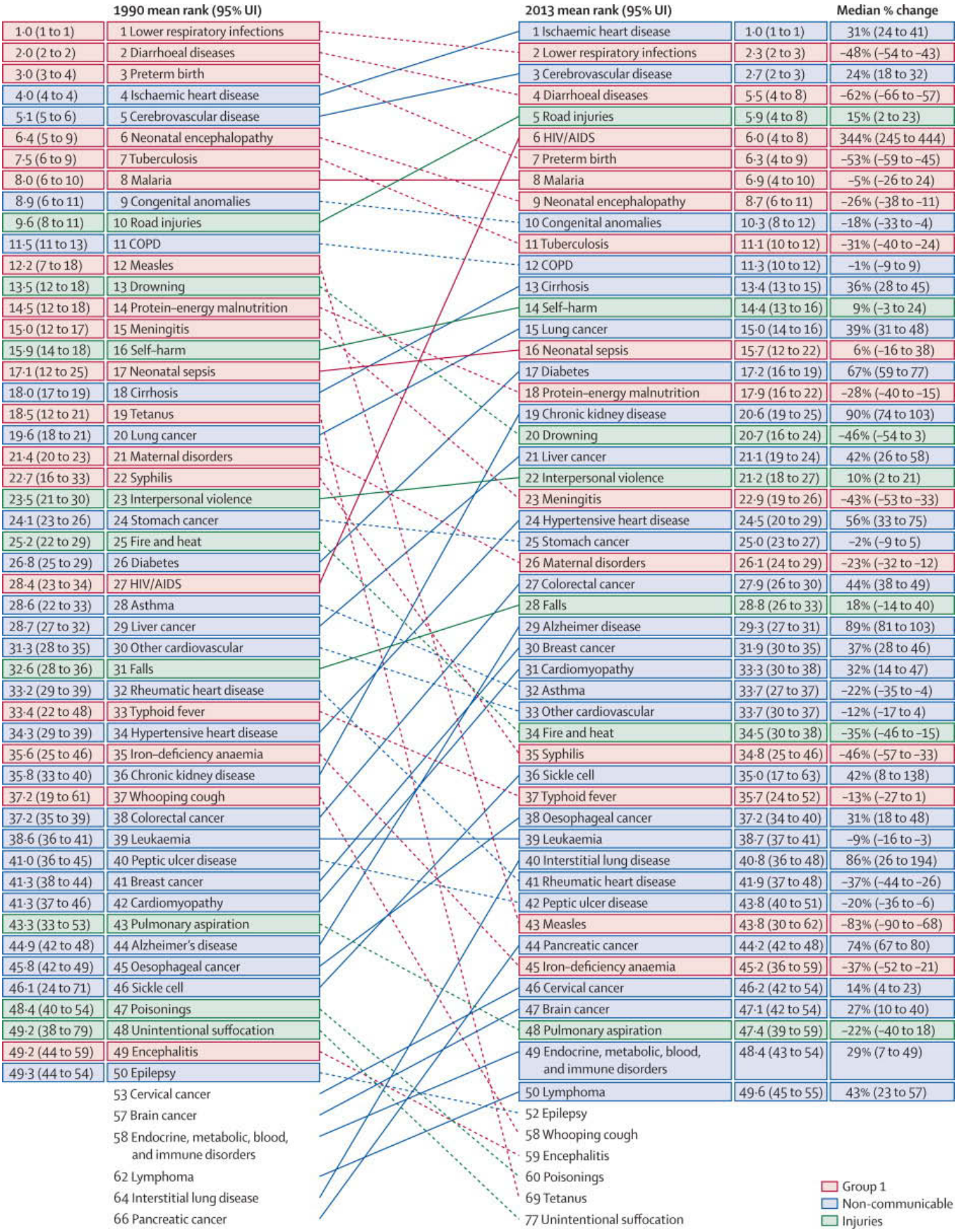
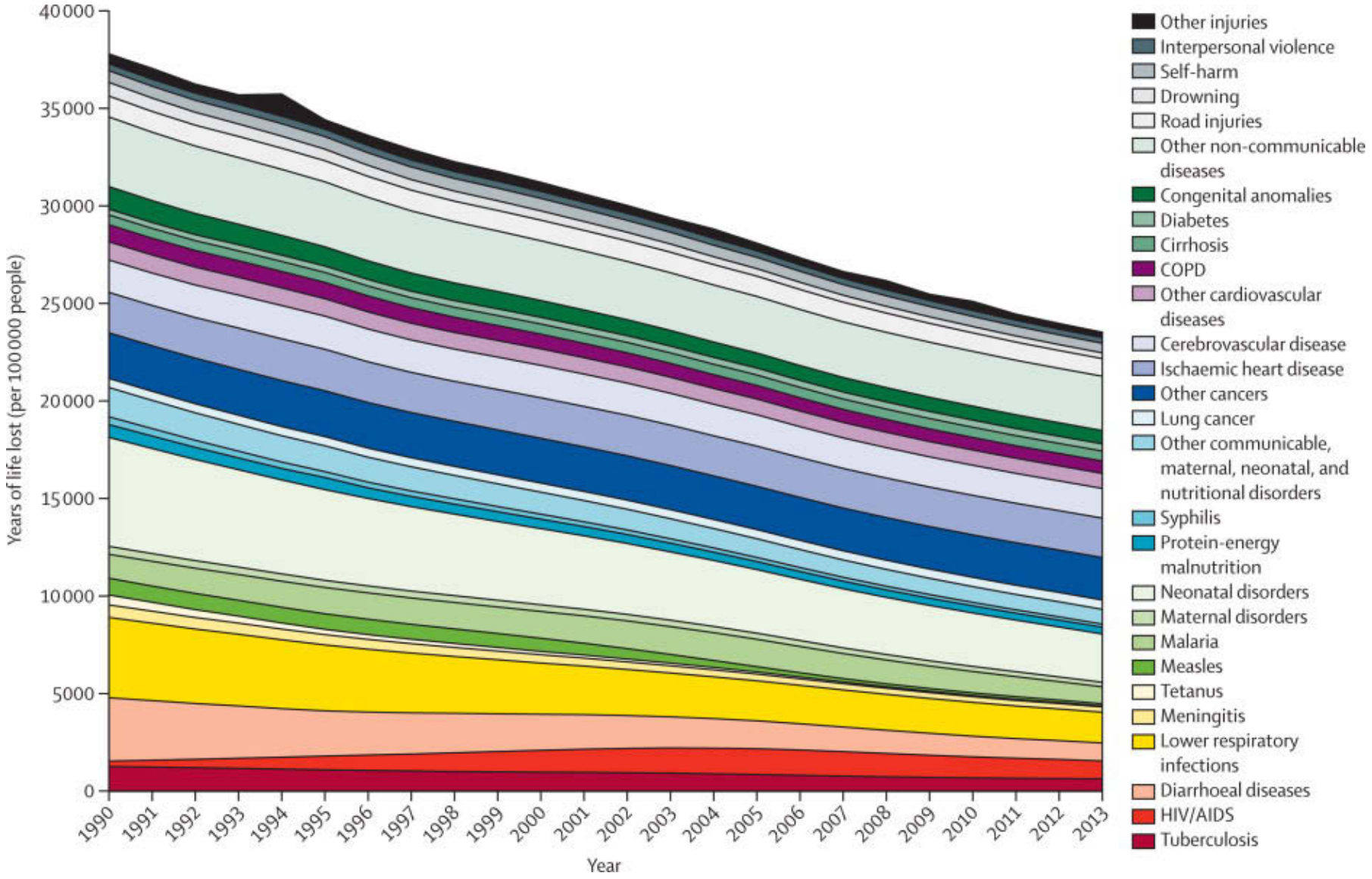

1990 mean rank (95% UI)
2013 mean rank (95% UI)
Median % change
1·0 (1 to 1) 1 Lower respiratory infections
2·0 (2 to 2) 2 Diarrhoeal diseases
3·0 (3 to 4) 3 Preterm birth
4·0 (4 to 4) 4 Ischaemic heart disease
5·1 (5 to 6) 5 Cerebrovascular disease
6·4 (5 to 9) 6 Neonatal encephalopathy
7·5 (6 to 9) 7 Tuberculosis
8·0 (6 to 10) 8 Malaria
8·9 (6 to 11) 9 Congenital anomalies
9·6 (8 to 11) 10 Road injuries
11·5 (11 to 13) 11 COPD
12·2 (7 to 18) 12 Measles
13·5 (12 to 18) 13 Drowning
14·5 (12 to 18) 14 Protein–energy malnutrition
15·0 (12 to 17) 15 Meningitis
15·9 (14 to 18) 16 Self-harm
17·1 (12 to 25) 17 Neonatal sepsis
18·0 (17 to 19) 18 Cirrhosis
18·5 (12 to 21) 19 Tetanus
19·6 (18 to 21) 20 Lung cancer
21·4 (20 to 23) 21 Maternal disorders
22·7 (16 to 33) 22 Syphilis
23·5 (21 to 30) 23 Interpersonal violence
24·1 (23 to 26) 24 Stomach cancer
25·2 (22 to 29) 25 Fire and heat
26·8 (25 to 29) 26 Diabetes
28·4 (23 to 34) 27 HIV/AIDS
28·6 (22 to 33) 28 Asthma
28·7 (27 to 32) 29 Liver cancer
31·3 (28 to 35) 30 Other cardiovascular
32·6 (28 to 36) 31 Falls
33·2 (29 to 39) 32 Rheumatic heart disease
33·4 (22 to 48) 33 Typhoid fever
34·3 (29 to 39) 34 Hypertensive heart disease
35·6 (25 to 46) 35 Iron-deficiency anaemia
35·8 (33 to 40) 36 Chronic kidney disease
37·2 (19 to 61) 37 Whooping cough
37·2 (35 to 39) 38 Colorectal cancer
38·6 (36 to 41) 39 Leukaemia
41·0 (36 to 45) 40 Peptic ulcer disease
41·3 (38 to 44) 41 Breast cancer
41·3 (37 to 46) 42 Cardiomyopathy
43·3 (33 to 53) 43 Pulmonary aspiration
44·9 (42 to 48) 44 Alzheimer's disease
45·8 (42 to 49) 45 Oesophageal cancer
46·1 (24 to 71) 46 Sickle cell
48·4 (40 to 54) 47 Poisonings
49·2 (38 to 79) 48 Unintentional suffocation
49·2 (44 to 59) 49 Encephalitis
49·3 (44 to 54) 50 Epilepsy
53 Cervical cancer
57 Brain cancer
58 Endocrine, metabolic, blood, and immune disorders
62 Lymphoma
64 Interstitial lung disease
66 Pancreatic cancer
1 Ischaemic heart disease 1·0 (1 to 1) 31% (24 to 41)
2 Lower respiratory infections 2·3 (2 to 3) −48% (−54 to −43)
3 Cerebrovascular disease 2·7 (2 to 3) 24% (18 to 32)
4 Diarrhoeal diseases 5·5 (4 to 8) −62% (−66 to −57)
5 Road injuries 5·9 (4 to 8) 15% (2 to 23)
6 HIV/AIDS 6·0 (4 to 8) 344% (245 to 444)
7 Preterm birth 6·3 (4 to 9) −53% (−59 to −45)
8 Malaria 6·9 (4 to 10) −5% (−26 to 24)
9 Neonatal encephalopathy 8·7 (6 to 11) −26% (−38 to −11)
10 Congenital anomalies 10·3 (8 to 12) −18% (−33 to −4)
11 Tuberculosis 11·1 (10 to 12) −31% (−40 to −24)
12 COPD 11·3 (10 to 12) −1% (−9 to 9)
13 Cirrhosis 13·4 (13 to 15) 36% (28 to 45)
14 Self-harm 14·4 (13 to 16) 9% (−3 to 24)
15 Lung cancer 15·0 (14 to 16) 39% (31 to 48)
16 Neonatal sepsis 15·7 (12 to 22) 6% (−16 to 38)
17 Diabetes 17·2 (16 to 19) 67% (59 to 77)
18 Protein–energy malnutrition 17·9 (16 to 22) −28% (−40 to −15)
19 Chronic kidney disease 20·6 (19 to 25) 90% (74 to 103)
20 Drowning 20·7 (16 to 24) −46% (−54 to 3)
21 Liver cancer 21·1 (19 to 24) 42% (26 to 58)
22 Interpersonal violence 21·2 (18 to 27) 10% (2 to 21)
23 Meningitis 22·9 (19 to 26) −43% (−53 to −33)
24 Hypertensive heart disease 24·5 (20 to 29) 56% (33 to 75)
25 Stomach cancer 25·0 (23 to 27) −2% (−9 to 5)
26 Maternal disorders 26·1 (24 to 29) −23% (−32 to −12)
27 Colorectal cancer 27·9 (26 to 30) 44% (38 to 49)
28 Falls 28·8 (26 to 33) 18% (−14 to 40)
29 Alzheimer disease 29·3 (27 to 31) 89% (81 to 103)
30 Breast cancer 31·9 (30 to 35) 37% (28 to 46)
31 Cardiomyopathy 33·3 (30 to 38) 32% (14 to 47)
32 Asthma 33·7 (27 to 37) −22% (−35 to −4)
33 Other cardiovascular 33·7 (30 to 37) −12% (−17 to 4)
34 Fire and heat 34·5 (30 to 38) −35% (−46 to −15)
35 Syphilis 34·8 (25 to 46) −46% (−57 to −33)
36 Sickle cell 35·0 (17 to 63) 42% (8 to 138)
37 Typhoid fever 35·7 (24 to 52) −13% (−27 to 1)
38 Oesophageal cancer 37·2 (34 to 40) 31% (18 to 48)
39 Leukaemia 38·7 (37 to 41) −9% (−16 to −3)
40 Interstitial lung disease 40·8 (36 to 48) 86% (26 to 194)
41 Rheumatic heart disease 41·9 (37 to 48) −37% (−44 to −26)
42 Peptic ulcer disease 43·8 (40 to 51) −20% (−36 to −6)
43 Measles 43·8 (30 to 62) −83% (−90 to −68)
44 Pancreatic cancer 44·2 (42 to 48) 74% (67 to 80)
45 Iron-deficiency anaemia 45·2 (36 to 59) −37% (−52 to −21)
46 Cervical cancer 46·2 (42 to 54) 14% (4 to 23)
47 Brain cancer 47·1 (42 to 54) 27% (10 to 40)
48 Pulmonary aspiration 47·4 (39 to 59) −22% (−40 to 18)
49 Endocrine, metabolic, blood, and immune disorders 48·4 (43 to 54) 29% (7 to 49)
50 Lymphoma 49·6 (45 to 55) 43% (23 to 57)
52 Epilepsy
58 Whooping cough
59 Encephalitis
60 Poisonings
69 Tetanus
77 Unintentional suffocation
Group 1
Non-communicable
Injuries

Figure 11


Years of life lost (per 100 000 people)
40 000
35 000
30 000
25 000
20 000
15 000
10 000
5000
0
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Year
Other injuries
Interpersonal violence
Self-harm
Drowning
Road injuries
Other non-communicable diseases
Congenital anomalies
Diabetes
Cirrhosis
COPD
Other cardiovascular diseases
Cerebrovascular disease
Ischaemic heart disease
Other cancers
Lung cancer
Other communicable, maternal, neonatal, and nutritional disorders
Syphilis
Protein-energy malnutrition
Neonatal disorders
Maternal disorders
Malaria
Measles
Tetanus
Meningitis
Lower respiratory infections
Diarrhoeal diseases
HIV/AIDS
Tuberculosis

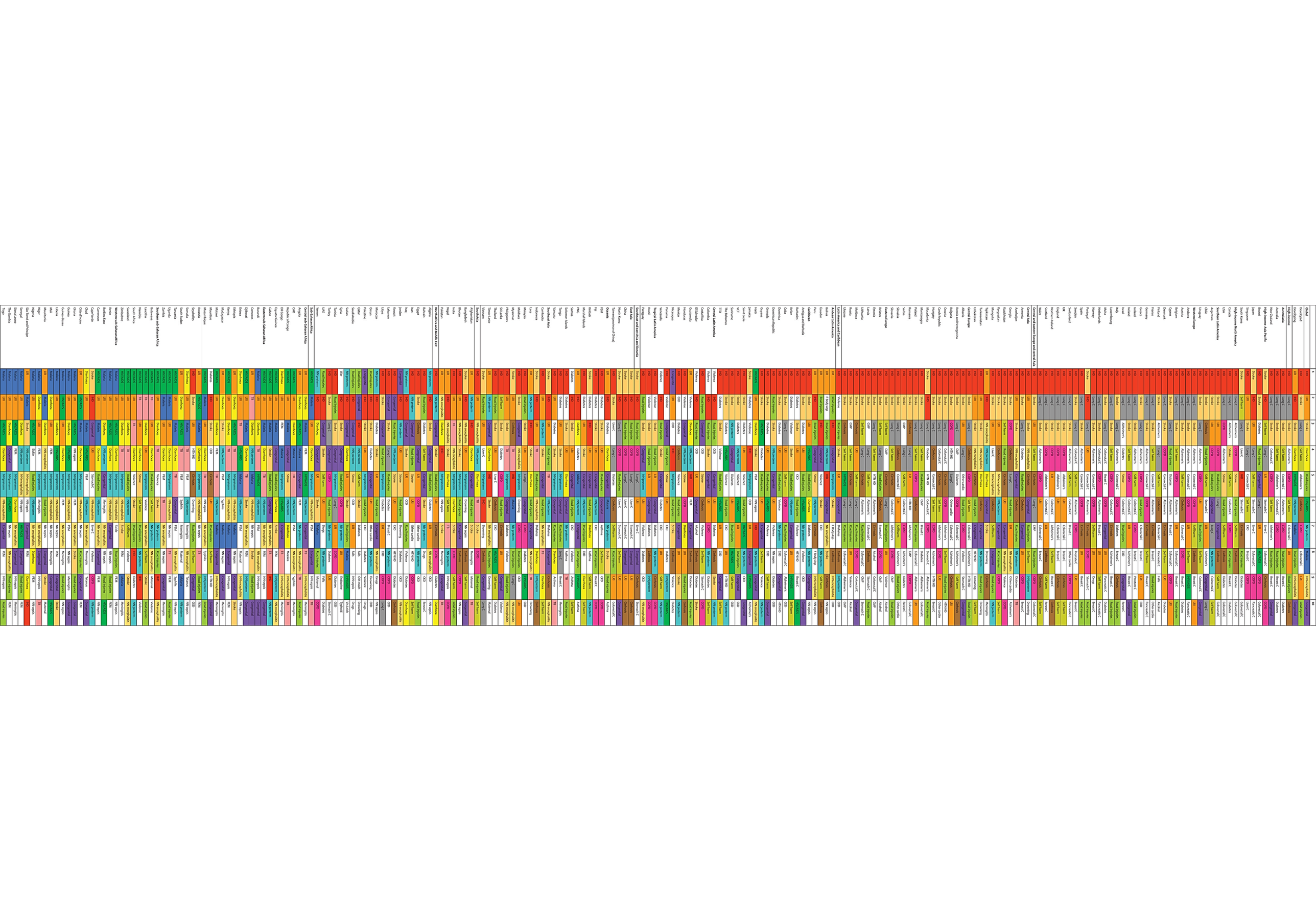


Table 1.

Number of site-years in database by source type

	All geographies			GBD 2013		
	GBD 2010	GBD 2013	Difference	National	State, province, or region*	Local
Vital registration	2798	5039	2241†	2765	2112	162
Cancer registry	2715	3860	1145	1216	979	1665
Sibling history	1557	1798	241	1788	0	10
Police records	1129	1433	304	1429	1	3
Surveillance	128	1430	1302	73	1074	283
Verbal autopsy	486	538	52	110	0	428
Survey or census; hospital; burial or mortuary	154	146	−8‡	94	0	52
Total	8967	14 244	5277	7475	4166	2603

GBD=Global Burden of Disease Study.

*Data were analysed at the state level for Mexico, the province level for China, and the region level for the UK.
†Significant increase because of incorporation of subnational sites in China, Mexico, and the UK.
‡Decrease caused by omission of World Health Survey data where adequate vital registration data was available for GBD 2013.

Table 2.

Global deaths for 235 causes in 1990 and 2013 for all ages and both sexes combined and age-standardised death rates

	All ages deaths (thousands)			Age-standardised death rate (per 100 000)		
	1990	2013	Median % change	1990	2013	Median % change
All causes	**47 468·7 (46 771·7 to 48 223·3)**	**54 863·8 (53 576·1 to 56 333·6)**	**15·6 (12·54 to 19·11)**	**1160·5 (1143·2 to 1179·0)**	**879·7 (859·9 to 902·2)**	**−24·2 (−26·20 to −21·96)**
Communicable, maternal, neonatal, and nutritional diseases	**16 149·4 (15 674·5 to 16 597·6)**	**11 809·6 (11 335·5 to 12 283·0)**	**−26·8 (−29·99 to −24·10)**	**289·5 (281·2 to 298·4)**	**172·2 (165·2 to 178·8)**	**−40·5 (−42·98 to −38·35)**
HIV/AIDS and tuberculosis	2072·5 (1938·2 to 2246·1)	2631·2 (2497·3 to 2863·2)	26·8 (17·08 to 37·92)	49·3 (46·2 to 53·3)	38·0 (36·0 to 41·6)	−23·1 (−29·02 to −16·39)
Tuberculosis	1786·1 (1666·4 to 1945·4)	1290·3 (1167·3 to 1406·2)	−27·7 (−34·99 to −20·56)	43·5 (40·4 to 47·2)	19·4 (17·6 to 21·2)	−55·3 (−59·67 to −51·01)
HIV/AIDS	286·4 (227·4 to 370·3)	1341·0 (1257·8 to 1482·6)	374·2 (262·47 to 490·73)	5·8 (4·6 to 7·6)	18·5 (17·4 to 20·5)	222·0 (145·14 to 303·34)
HIV/AIDS resulting in mycobacterial infection	27·8 (20·5 to 37·4)	84·0 (67·4 to 104·9)	205·1 (130·68 to 291·83)	0·6 (0·4 to 0·8)	1·2 (0·9 to 1·4)	105·5 (55·00 to 166·22)
HIV/AIDS resulting in other diseases	258·6 (206·1 to 334·4)	1257·0 (1178·1 to 1391·1)	393·2 (276·86–511·66)	5·3 (4·2 to 6·8)	17·4 (16·3 to 19·2)	235·0 (154·55 to 319·43)
Diarrhoea, lower respiratory infections, and other common infectious diseases	**7880·5 (7468·3 to 8337·2)**	**4750·5 (4388·8 to 5029·9)**	**−39·4 (−45·17 to −35·89)**	**143·7 (137·3 to 151·9)**	**72·4 (66·7 to 76·5)**	**−49·4 (−53·54 to −46·75)**
Diarrhoeal diseases	2578·7 (2412·2 to 2748·9)	1264·1 (1151·2 to 1383·2)	−51·0 (−55·55 to −46·25)	47·4 (44·4 to 50·1)	19·0 (17·4 to 20·8)	−59·8 (−63·54 to −55·96)
Intestinal infectious diseases	259·1 (145·6 to 424·6)	221·3 (122·6 to 362·6)	−14·3 (−26·08 to −2·75)	4·3 (2·4 to 7·0)	3·1 (1·7 to 5·0)	−28·7 (−38·19 to −18·98)
Typhoid fever	180·5 (96·4 to 302·3)	160·7 (85·9 to 268·0)	−10·8 (−23·70 to 4·24)	3·0 (1·6 to 5·0)	2·2 (1·2 to 3·7)	−25·9 (−36·31 to −13·57)
Paratyphoid fever	63·4 (33·6 to 106·7)	54·3 (29·3 to 92·0)	−14·9 (−30·51 to 9·48)	1·0 (0·6 to 1·7)	0·7 (0·4 to 1·3)	−28·0 (−40·99 to −7·97)
Other intestinal infectious diseases	15·3 (13·5 to 17·3)	6·3 (5·5 to 7·0)	−59·1 (−63·26 to −54·09)	0·3 (0·2 to 0·3)	0·1 (0·1 to 0·1)	−66·7 (−70·02 to −62·84)
Lower respiratory infections	3420·7 (3211·6 to 3638·4)	2652·6 (2368·0 to 2808·1)	−22·2 (−29·71 to −16·32)	66·8 (63·1 to 71·6)	41·7 (37·1 to 44·1)	−37·4 (−42·54 to −33·45)
Upper respiratory infections	4·7 (4·0 to 5·6)	3·9 (3·3 to 4·7)	−16·4 (−33·55 to 4·22)	0·1 (0·1 to 0·1)	0·1 (0·1 to	−40·8 (−52·40 to

	All ages deaths (thousands)			Age-standardised death rate (per 100 000)		
	1990	2013	Median % change	1990	2013	Median % change
					0·1)	−26·16)
Otitis media	4·9 (4·5 to 5·3)	2·4 (2·3 to 2·6)	−50·8 (−54·22 to −46·41)	0·1 (0·1 to 0·1)	0·0 (0·0 to 0·0)	−60·8 (−63·34 to −57·76)
Meningitis	464·4 (405·0 to 559·0)	303·5 (261·4 to 346·3)	−34·3 (−45·34 to −24·08)	7·7 (6·8 to 9·0)	4·3 (3·7 to 4·9)	−43·9 (−52·65 to −36·07)
Pneumococcal meningitis	112·1 (97·7 to 132·6)	79·1 (67·8 to 91·1)	−29·4 (−39·84 to −16·86)	1·9 (1·7 to 2·2)	1·1 (1·0 to 1·3)	−41·7 (−49·60 to −31·37)
Haemophilus influenzae type B meningitis	118·0 (98·2 to 147·0)	64·4 (53·0 to 76·4)	−45·4 (−54·79 to −33·50)	1·8 (1·5 to 2·2)	0·9 (0·7 to 1·1)	−49·7 (−58·21 to −39·32)
Meningococcal meningitis	88·1 (76·1 to 108·0)	65·7 (55·9 to 75·8)	−24·9 (−38·82 to −12·62)	1·5 (1·3 to 1·8)	0·9 (0·8 to 1·1)	−37·3 (−47·55 to −27·80)
Other meningitis	146·1 (128·0 to 174·9)	94·2 (82·2 to 106·4)	−35·1 (−47·16 to −24·71)	2·5 (2·2 to 2·9)	1·3 (1·2 to 1·5)	−45·9 (−54·98 to −37·48)
Encephalitis	92·2 (65·2 to 116·2)	77·3 (65·4 to 97·0)	−15·2 (−40·15 to 16·01)	1·6 (1·1 to 1·9)	1·1 (0·9 to 1·4)	−28·7 (−48·10 to −4·52)
Diphtheria	8·0 (3·9 to 18·8)	3·3 (1·7 to 6·6)	−57·7 (−85·61 to 12·54)	0·1 (0·1 to 0·3)	0·0 (0·0 to 0·1)	−60·8 (−86·70 to 2·82)
Whooping cough	138·2 (52·9 to 300·2)	60·6 (22·3 to 136·8)	−56·7 (−83·76 to 14·31)	1·9 (0·7 to 4·2)	0·8 (0·3 to 1·9)	−58·2 (−84·31 to 10·44)
Tetanus	356·2 (292·9 to 578·6)	58·9 (39·8 to 77·3)	−82·1 (−92·00 to −76·10)	5·7 (4·7 to 9·1)	0·8 (0·6 to 1·1)	−83·9 (−92·72 to −77·84)
Measles	544·5 (304·0 to 867·8)	95·6 (48·5 to 172·9)	−83·0 (−90·23 to −67·93)	7·8 (4·3 to 12·4)	1·3 (0·7 to 2·4)	−83·7 (−90·66 to −69·19)
Varicella	8·9 (7·2 to 11·7)	7·0 (5·7 to 8·7)	−21·4 (−43·72 to 4·63)	0·2 (0·2 to 0·3)	0·1 (0·1 to 0·1)	−45·6 (−61·28 to −27·33)
Neglected tropical diseases and malaria	**1 092·4 (994·1 to 1 196·7)**	**997·0 (840·5 to 1 185·2)**	**−9·2 (−25·09 to 10·78)**	**18·5 (17·0 to 20·2)**	**13·9 (11·8 to 16·5)**	**−24·9 (−37·19 to −9·70)**
Malaria	888·1 (793·4 to 992·7)	854·6 (702·9 to 1 032·5)	−4·4 (−23·61 to 19·83)	14·6 (13·2 to 16·2)	11·9 (9·8 to 14·4)	−18·9 (−34·32 to 0·18)
Chagas disease	12·7 (5·2 to 39·4)	10·6 (4·2 to 33·0)	−19·3 (−41·12 to 25·58)	0·3 (0·1 to 1·1)	0·2 (0·1 to 0·5)	−51·7 (−66·06 to −24·52)
Leishmaniasis	52·2 (44·6 to 60·6)	62·5 (52·3 to 73·3)	19·8 (3·56 to 37·74)	0·9 (0·7 to 1·0)	0·9 (0·7 to 1·0)	−0·3 (−14·18 to 14·25)

	All ages deaths (thousands)			Age-standardised death rate (per 100 000)		
	1990	2013	Median % change	1990	2013	Median % change
Visceral leishmaniasis	52·2 (44·6 to 60·6)	62·5 (52·3 to 73·3)	19·8 (3·56 to 37·74)	0·9 (0·7 to 1·0)	0·9 (0·7 to 1·0)	−0·3 (−14·18 to 14·25)
African trypanosomiasis	23·0 (11·4 to 37·7)	6·9 (3·7 to 10·9)	−69·7 (−73·88 to −64·94)	0·5 (0·2 to 0·7)	0·1 (0·1 to 0·1)	−78·9 (−81·76 to −75·54)
Schistosomiasis	17·4 (14·8 to 20·6)	5·5 (4·9 to 6·2)	−68·2 (−73·56 to −61·68)	0·4 (0·4 to 0·5)	0·1 (0·1 to 0·1)	−80·7 (−84·06 to −76·71)
Cysticercosis	0·9 (0·8 to 1·1)	0·7 (0·5 to 1·0)	−28·6 (−35·23 to −15·09)	0·0 (0·0 to 0·0)	0·0 (0·0 to 0·0)	−53·0 (−57·59 to −43·63)
Cystic echinococcosis	4·0 (3·8 to 4·3)	2·2 (2·1 to 2·4)	−45·0 (−48·34 to −41·22)	0·1 (0·1 to 0·1)	0·0 (0·0 to 0·0)	−60·8 (−62·99 to −58·26)
Dengue	8·8 (5·2 to 11·3)	9·1 (5·6 to 10·8)	−1·3 (−21·69 to 74·08)	0·1 (0·1 to 0·2)	0·1 (0·1 to 0·2)	−13·6 (−31·42 to 42·41)
Yellow fever	2·2 (1·9 to 2·5)	0·5 (0·4 to 0·6)	−77·2 (−80·99 to −72·34)	0·0 (0·0 to 0·0)	0·0 (0·0 to 0·0)	−83·3 (−86·08 to −79·71)
Rabies	38·4 (26·7 to 48·7)	23·5 (17·3 to 28·6)	−38·3 (−53·14 to −24·37)	0·7 (0·5 to 0·9)	0·3 (0·2 to 0·4)	−54·0 (−64·09 to −44·23)
Intestinal nematode infections	9·1 (8·1 to 10·2)	4·5 (4·0 to 5·1)	−50·7 (−56·28 to −43·47)	0·1 (0·1 to 0·2)	0·1 (0·1 to 0·1)	−54·7 (−59·66 to −48·46)
Ascariasis	9·1 (8·1 to 10·2)	4·5 (4·0 to 5·1)	−50·7 (−56·28 to −43·47)	0·1 (0·1 to 0·2)	0·1 (0·1 to 0·1)	−54·7 (−59·66 to −48·46)
Other neglected tropical diseases	35·6 (26·4 to 44·2)	16·3 (13·9 to 19·6)	−54·4 (−64·57 to −36·37)	0·6 (0·5 to 0·8)	0·2 (0·2 to 0·3)	−62·3 (−69·58 to −49·75)
Maternal disorders	**376·6 (344·0 to 408·2)**	**293·3 (261·3 to 328·2)**	**−22·3 (−31·63 to −11·38)**	**6·9 (6·3 to 7·5)**	**3·9 (3·5 to 4·4)**	**−43·6 (−50·45 to −35·70)**
Maternal haemorrhage	71·4 (64·6 to 78·5)	44·2 (38·3 to 51·0)	−38·1 (−47·24 to −27·03)	1·3 (1·2 to 1·4)	0·6 (0·5 to 0·7)	−55·0 (−61·51 to −46·97)
Maternal sepsis and other maternal infections	34·1 (30·5 to 38·0)	23·8 (20·1 to 28·0)	−30·4 (−42·43 to −15·10)	0·6 (0·6 to 0·7)	0·3 (0·3 to 0·4)	−50·0 (−58·40 to −39·00)
Maternal hypertensive disorders	36·6 (33·3 to 39·9)	29·3 (25·7 to 33·5)	−20·0 (−30·89 to −7·22)	0·7 (0·6 to 0·7)	0·4 (0·3 to 0·4)	−41·3 (−49·14 to −32·20)
Obstructed labour	29·3 (26·3 to 32·7)	18·8 (16·3 to 21·8)	−35·9 (−45·56 to −23·86)	0·5 (0·5 to 0·6)	0·2 (0·2 to 0·3)	−53·4 (−60·20 to −44·45)
Complications of abortion	50·0 (45·8 to 54·8)	43·7 (38·3 to 49·9)	−12·6 (−24·72 to 2·00)	0·9 (0·9 to 1·0)	0·6 (0·5 to	−37·5 (−46·15 to

	All ages deaths (thousands)			Age-standardised death rate (per 100 000)		
	1990	2013	Median % change	1990	2013	Median % change
					0·7)	−26·71)
Indirect maternal deaths	40·1 (35·5 to 44·4)	31·1 (26·8 to 35·8)	−22·7 (−34·25 to −7·62)	0·7 (0·6 to 0·8)	0·4 (0·4 to 0·5)	−43·4 (−51·81 to −32·38)
Late maternal deaths	44·9 (36·4 to 53·2)	43·5 (35·7 to 52·4)	−1·8 (−26·81 to 21·95)	0·8 (0·7 to 1·0)	0·6 (0·5 to 0·7)	−28·4 (−46·61 to −11·67)
Maternal deaths aggravated by HIV/AIDS	0·8 (0·5 to 1·1)	2·1 (1·3 to 2·9)	161·7 (128·02 to 202·66)	0·0 (0·0 to 0·0)	0·0 (0·0 to 0·0)	94·1 (69·26 to 124·47)
Other maternal disorders	68·6 (58·4 to 80·4)	56·2 (48·7 to 64·4)	−18·2 (−31·79 to −0·04)	1·3 (1·1 to 1·5)	0·7 (0·6 to 0·9)	−40·8 (−50·36 to −27·88)
Neonatal disorders	**3 433·3 (3 225·7 to 3 586·1)**	**2 048·0 (1 934·7 to 2 160·3)**	**−40·3 (−43·96 to −36·30)**	**46·9 (44·1 to 49·0)**	**27·6 (26·1 to 29·1)**	**−41·1 (−44·71 to −37·13)**
Preterm birth complications	1 570·5 (1 285·0 to 1 803·5)	742·4 (591·3 to 910·8)	−52·9 (−58·70 to −45·50)	21·4 (17·5 to 24·6)	10·0 (8·0 to 12·3)	−53·5 (−59·23 to −46·20)
Neonatal encephalopathy (birth asphyxia/trauma)	874·1 (688·5 to 1 055·4)	643·8 (515·0 to 760·5)	−26·1 (−38·29 to −11·35)	11·9 (9·4 to 14·4)	8·7 (6·9 to 10·3)	−27·1 (−39·06 to −12·49)
Neonatal sepsis and other neonatal infections	346·4 (195·7 to 484·0)	366·0 (233·2 to 510·8)	6·1 (−15·94 to 38·04)	4·7 (2·7 to 6·6)	4·9 (3·1 to 6·9)	4·6 (−17·13 to 35·99)
Haemolytic disease and other neonatal jaundice	64·8 (39·5 to 96·3)	19·6 (13·0 to 29·7)	−70·0 (−79·78 to −50·43)	0·9 (0·5 to 1·3)	0·3 (0·2 to 0·4)	−70·6 (−80·17 to −51·17)
Other neonatal disorders	577·6 (457·5 to 756·0)	276·2 (219·6 to 350·7)	−52·3 (−62·41 to −36·77)	7·9 (6·3 to 10·3)	3·7 (3·0 to 4·7)	−53·0 (−63·01 to −37·68)
Nutritional deficiencies	**757·7 (641·5 to 934·4)**	**681·1 (533·5 to 795·5)**	**−9·7 (−22·87 to 1·86)**	**14·7 (12·4 to 18·2)**	**10·4 (8·2 to 12·2)**	**−28·6 (−38·77 to −20·45)**
Protein-energy malnutrition	507·9 (394·3 to 648·5)	468·8 (350·0 to 560·9)	−7·3 (−22·92 to 7·51)	9·2 (7·1 to 11·8)	7·1 (5·3 to 8·5)	−22·5 (−34·54 to −11·34)
Iodine deficiency	2·1 (1·4 to 3·4)	2·7 (1·5 to 4·7)	24·5 (−29·82 to 137·21)	0·0 (0·0 to 0·1)	0·0 (0·0 to 0·1)	−7·9 (−47·13 to 80·62)
Iron-deficiency anemia	213·4 (143·5 to 309·3)	183·4 (122·0 to 259·2)	−13·8 (−32·36 to 5·33)	4·6 (3·3 to 6·6)	2·8 (1·9 to 4·0)	−38·8 (−50·36 to −26·57)
Other nutritional deficiencies	34·3 (23·8 to 56·1)	26·2 (17·0 to 41·2)	−22·5 (−42·66 to −4·64)	0·8 (0·5 to 1·3)	0·4 (0·3 to 0·7)	−45·4 (−56·40 to −33·85)
Other communicable, maternal, neonatal, and nutritional diseases	**536·5 (433·0 to 674·9)**	**408·4 (342·1 to 488·3)**	**−23·8 (−33·94 to −11·53)**	**9·4 (7·9 to 11·4)**	**5·9 (5·0 to 7·0)**	**−37·4 (−44·55 to −28·28)**

	All ages deaths (thousands)			Age-standardised death rate (per 100 000)		
	1990	2013	Median % change	1990	2013	Median % change
Sexually transmitted diseases excluding HIV	257·6 (154·7 to 396·4)	142·0 (87·6 to 213·9)	−44·5 (−55·96 to −32·77)	3·8 (2·4 to 5·7)	1·9 (1·2 to 2·9)	−48·4 (−58·54 to −37·36)
Syphilis	250·6 (147·4 to 389·1)	136·8 (82·4 to 208·9)	−45·1 (−56·56 to −33·02)	3·6 (2·2 to 5·5)	1·9 (1·1 to 2·9)	−48·0 (−58·61 to −36·83)
Chlamydial infection	1·5 (1·1 to 1·9)	1·1 (0·9 to 1·4)	−23·0 (−42·59 to 0·03)	0·0 (0·0 to 0·0)	0·0 (0·0 to 0·0)	−51·1 (−64·66 to −34·62)
Gonococcal infection	3·2 (2·5 to 3·8)	2·3 (2·0 to 2·9)	−26·6 (−41·91 to −6·75)	0·1 (0·1 to 0·1)	0·0 (0·0 to 0·0)	−54·0 (−64·57 to −39·74)
Other sexually transmitted diseases	2·4 (1·9 to 2·8)	1·7 (1·5 to 2·1)	−27·3 (−42·08 to −10·71)	0·1 (0·0 to 0·1)	0·0 (0·0 to 0·0)	−53·2 (−63·49 to −40·60)
Hepatitis	162·0 (152·8 to 171·4)	136·7 (123·7 to 163·2)	−16·8 (−25·24 to 2·96)	3·3 (3·1 to 3·5)	2·0 (1·8 to 2·4)	−39·6 (−45·37 to −25·80)
Hepatitis A	22·6 (7·9 to 40·2)	14·9 (5·0 to 27·7)	−36·3 (−50·41 to −2·45)	0·3 (0·1 to 0·6)	0·2 (0·1 to 0·4)	−41·9 (−54·39 to −12·04)
Hepatitis B	85·0 (65·1 to 104·0)	68·6 (52·0 to 86·6)	−19·7 (−28·94 to −4·23)	1·9 (1·5 to 2·2)	1·1 (0·8 to 1·3)	−44·6 (−50·38 to −35·37)
Hepatitis C	2·3 (0·5 to 5·3)	3·5 (0·7 to 8·2)	51·0 (24·40 to 86·56)	0·1 (0·0 to 0·1)	0·1 (0·0 to 0·1)	−4·2 (−20·86 to 17·67)
Hepatitis E	52·1 (39·0 to 67·2)	49·7 (36·1 to 67·5)	−6·1 (−17·83 to 20·41)	1·0 (0·7 to 1·3)	0·7 (0·5 to 1·0)	−30·8 (−39·35 to −11·37)
Other infectious diseases	116·9 (94·0 to 144·3)	129·8 (89·6 to 164·9)	11·3 (−21·67 to 45·00)	2·4 (1·9 to 3·0)	2·0 (1·4 to 2·5)	−17·7 (−42·92 to 7·31)
Non-communicable diseases	**26 993·5 (26 298·1 to 27 639·1)**	**38 267·2 (37 202·2 to 39 417·6)**	**41·7 (36·86 to 47·00)**	**782·5 (765·5 to 798·2)**	**637·5 (620·4 to 655·7)**	**−18·6 (−21·08 to −15·78)**
Neoplasms	**5659·7 (5440·4 to 5826·6)**	**8235·7 (7941·4 to 8538·9)**	**45·6 (39·82 to 51·55)**	**157·0 (151·3 to 161·5)**	**133·8 (128·9 to 138·6)**	**−14·7 (−17·91 to −11·49)**
Oesophageal cancer	313·1 (275·0 to 351·5)	440·2 (389·2 to 516·8)	39·9 (26·42 to 56·36)	8·8 (7·8 to 9·9)	7·2 (6·3 to 8·4)	−19·3 (−27·13 to −9·94)
Stomach cancer	763·4 (725·6 to 803·2)	841·0 (791·6 to 894·1)	10·1 (3·94 to 17·43)	21·7 (20·6 to 22·9)	13·8 (13·0 to 14·7)	−36·3 (−39·82 to −32·14)
Liver cancer	510·1 (474·9 to 543·1)	818·0 (763·7 to 879·0)	60·3 (46·21 to 75·28)	13·7 (12·7 to 14·5)	13·0 (12·1 to 13·9)	−5·0 (−13·01 to 3·61)
Liver cancer secondary to hepatitis B	198·4 (181·7 to 215·4)	300·0 (272·0 to 329·2)	51·6 (33·51 to 72·02)	5·1 (4·7 to 5·5)	4·6 (4·2 to	−9·1 (−19·63 to

	All ages deaths (thousands)			Age-standardised death rate (per 100 000)		
	1990	2013	Median % change	1990	2013	Median % change
					5·1)	2·69)
Liver cancer secondary to hepatitis C	87·4 (79·5 to 94·7)	342·5 (317·1 to 375·3)	290·8 (251·46 to 342·52)	2·4 (2·2 to 2·6)	5·5 (5·1 to 6·0)	125·4 (103·82 to 154·85)
Liver cancer secondary to alcohol use	122·8 (113·8 to 132·5)	92·2 (84·8 to 100·3)	−25·2 (−31·20 to −17·09)	3·5 (3·2 to 3·7)	1·5 (1·4 to 1·6)	−56·4 (−59·87 to −51·82)
Other liver cancer	101·5 (92·8 to 110·0)	83·3 (75·1 to 92·2)	−17·5 (−28·57 to −7·02)	2·6 (2·4 to 2·9)	1·3 (1·2 to 1·4)	−50·5 (−56·97 to −44·23)
Larynx cancer	76·2 (62·7 to 88·1)	87·6 (74·3 to 106·2)	14·2 (7·25 to 27·55)	2·1 (1·7 to 2·4)	1·4 (1·2 to 1·7)	−33·4 (−37·26 to −26·29)
Tracheal, bronchus, and lung cancer	1050·0 (1010·6 to 1078·2)	1639·6 (1565·6 to 1706·0)	56·5 (47·83 to 62·84)	29·6 (28·5 to 30·4)	27·0 (25·7 to 28·1)	−8·7 (−13·62 to −5·16)
Breast cancer	327·3 (289·2 to 366·8)	471·0 (412·0 to 514·2)	44·2 (35·01 to 51·82)	9·0 (7·9 to 10·1)	7·4 (6·4 to 8·1)	−17·5 (−23·42 to −13·38)
Cervical cancer	196·3 (162·9 to 212·4)	235·7 (201·9 to 257·9)	20·1 (10·74 to 30·15)	5·2 (4·3 to 5·6)	3·6 (3·1 to 4·0)	−30·1 (−35·55 to −24·13)
Uterine cancer	45·6 (36·6 to 55·6)	67·7 (53·6 to 79·0)	48·6 (30·64 to 64·39)	1·3 (1·0 to 1·6)	1·1 (0·9 to 1·3)	−15·0 (−24·61 to −6·58)
Prostate cancer	157·1 (124·0 to 193·1)	292·7 (242·2 to 373·9)	82·8 (71·77 to 109·02)	5·1 (4·0 to 6·3)	5·2 (4·3 to 6·6)	−1·0 (−7·17 to 13·05)
Colon and rectum cancer	490·2 (476·1 to 504·5)	771·1 (741·5 to 799·2)	57·4 (51·89 to 62·64)	14·5 (14·1 to 14·9)	12·8 (12·4 to 13·3)	−11·1 (−14·40 to −8·17)
Lip and oral cavity cancer	83·9 (74·0 to 96·2)	135·0 (115·3 to 154·3)	59·7 (46·91 to 78·39)	2·3 (2·0 to 2·6)	2·1 (1·8 to 2·5)	−7·9 (−14·96 to 2·32)
Nasopharynx cancer	53·7 (47·7 to 63·5)	60·5 (54·0 to 69·5)	12·7 (1·19 to 24·74)	1·4 (1·2 to 1·6)	0·9 (0·8 to 1·1)	−32·5 (−39·31 to −25·55)
Other pharynx cancer	48·9 (43·7 to 53·5)	78·6 (67·0 to 86·3)	60·9 (43·26 to 76·41)	1·3 (1·2 to 1·4)	1·2 (1·0 to 1·3)	−7·1 (−16·97 to 2·04)
Gallbladder and biliary tract cancer	115·4 (100·6 to 130·4)	139·5 (120·0 to 155·0)	22·1 (6·85 to 32·36)	3·4 (3·0 to 3·9)	2·3 (2·0 to 2·6)	−31·2 (−39·96 to −25·22)
Pancreatic cancer	186·4 (181·3 to 191·8)	352·4 (339·4 to 364·8)	89·0 (82·43 to 95·46)	5·4 (5·3 to 5·6)	5·9 (5·6 to 6·1)	7·4 (3·63 to 11·04)
Malignant skin melanoma	38·7 (30·1 to 50·9)	56·9 (43·9 to 75·7)	47·6 (31·54 to 57·81)	1·1 (0·8 to 1·4)	0·9 (0·7 to 1·2)	−14·1 (−23·86 to −8·06)

	All ages deaths (thousands)			Age-standardised death rate (per 100 000)		
	1990	2013	Median % change	1990	2013	Median % change
Non-melanoma skin cancer	25·0 (20·2 to 30·0)	39·2 (32·8 to 48·7)	55·0 (43·30 to 76·59)	0·8 (0·6 to 0·9)	0·7 (0·6 to 0·8)	−12·9 (−20·00 to −0·93)
Ovarian cancer	98·9 (93·1 to 106·1)	157·8 (147·5 to 169·5)	59·6 (50·81 to 68·88)	2·7 (2·6 to 2·9)	2·5 (2·3 to 2·7)	−7·8 (−12·97 to −2·56)
Testicular cancer	7·0 (5·4 to 8·2)	8·3 (6·3 to 10·4)	18·4 (8·86 to 35·42)	0·2 (0·1 to 0·2)	0·1 (0·1 to 0·1)	−23·0 (−28·60 to −11·08)
Kidney cancer	77·9 (73·8 to 83·0)	133·8 (126·0 to 141·1)	71·8 (63·06 to 81·02)	2·1 (2·0 to 2·3)	2·2 (2·0 to 2·3)	1·6 (−3·95 to 8·11)
Bladder cancer	130·8 (116·6 to 140·9)	173·9 (156·8 to 192·5)	32·2 (27·35 to 43·06)	4·0 (3·5 to 4·3)	3·0 (2·7 to 3·3)	−25·6 (−28·36 to −20·14)
Brain and nervous system cancers	136·0 (116·6 to 155·2)	203·9 (169·5 to 234·8)	50·4 (34·04 to 60·33)	3·3 (2·8 to 3·8)	3·1 (2·6 to 3·6)	−4·6 (−13·99 to 0·96)
Thyroid cancer	23·8 (20·3 to 26·1)	33·7 (29·6 to 38·2)	41·1 (29·80 to 59·27)	0·7 (0·6 to 0·8)	0·6 (0·5 to 0·6)	−19·6 (−25·50 to −9·09)
Mesothelioma	17·0 (15·2 to 20·3)	33·7 (29·4 to 38·7)	100·5 (69·94 to 115·47)	0·5 (0·4 to 0·6)	0·5 (0·5 to 0·6)	16·2 (−2·42 to 24·92)
Hodgkin lymphoma	33·6 (24·1 to 38·0)	24·2 (22·0 to 31·6)	−33·0 (−40·41 to 15·35)	0·8 (0·5 to 0·8)	0·4 (0·3 to 0·5)	−54·9 (−58·93 to −24·34)
Non-Hodgkin lymphoma	133·6 (116·3 to 158·0)	225·5 (186·3 to 245·8)	72·0 (41·51 to 84·35)	3·5 (3·1 to 4·2)	3·6 (2·9 to 3·9)	6·1 (−14·56 to 13·42)
Multiple myeloma	45·3 (37·4 to 57·4)	79·4 (65·3 to 94·2)	77·1 (53·64 to 90·08)	1·3 (1·1 to 1·7)	1·3 (1·1 to 1·6)	0·4 (−13·32 to 8·27)
Leukaemia	223·8 (215·1 to 234·2)	265·1 (253·9 to 275·8)	18·7 (11·69 to 24·19)	5·2 (5·0 to 5·4)	4·1 (3·9 to 4·3)	−20·0 (−24·12 to −16·68)
Other neoplasms	250·6 (231·8 to 305·2)	369·6 (328·0 to 400·1)	51·3 (15·57 to 62·10)	6·2 (5·8 to 7·3)	5·8 (5·2 to 6·3)	−4·2 (−23·44 to 3·32)
Cardiovascular diseases	**12 279·6 (11 776·6 to 12 764·1)**	**17 297·5 (16 520·2 to 18 071·9)**	**40·8 (36·17 to 46·36)**	**375·5 (360·5 to 389·1)**	**293·2 (280·4 to 306·1)**	**−22·0 (−24·50 to −19·07)**
Rheumatic heart disease	373·5 (302·5 to 464·6)	275·1 (222·6 to 353·9)	−26·5 (−33·64 to −17·20)	9·8 (7·9 to 12·2)	4·4 (3·5 to 5·6)	−55·4 (−59·47 to −50·11)
Ischaemic heart disease	5737·5 (5254·9 to 6148·6)	8139·9 (7322·9 to 8758·5)	41·7 (35·96 to 48·44)	177·3 (161·8 to 190·2)	137·8 (123·9 to 148·2)	−22·3 (−25·48 to −18·68)
Cerebrovascular disease	4584·8 (4162·1 to 4968·1)	6446·9 (5963·0 to	40·2 (34·43 to 49·56)	141·6 (128·5 to	110·1 (101·8	−22·5 (−25·56 to

	All ages deaths (thousands)			Age-standardised death rate (per 100 000)		
	1990	2013	Median % change	1990	2013	Median % change
		7155·2)		153·9)	to 122·2)	−17·30)
Ischaemic stroke	21 82·9 (1923·3 to 2430·9)	3272·9 (2812·7 to 3592·6)	50·2 (41·02 to 59·27)	71·3 (63·0 to 79·3)	57·3 (49·3 to 62·9)	−19·6 (−24·52 to −14·97)
Haemorrhagic stroke	2401·9 (2109·4 to 2669·1)	3174·0 (2885·7 to 3719·7)	30·7 (22·23 to 49·07)	70·3 (61·2 to 77·9)	52·8 (48·0 to 62·3)	−25·9 (−30·64 to −14·73)
Hypertensive heart disease	622·1 (525·7 to 783·9)	1068·6 (849·8 to 1 242·2)	74·1 (47·34 to 93·73)	19·3 (16·4 to 24·4)	18·2 (14·5 to 21·3)	−4·5 (−18·86 to 6·41)
Cardiomyopathy and myocarditis	293·9 (243·5 to 346·3)	443·3 (370·1 to 512·0)	51·4 (37·27 to 61·45)	8·2 (6·9 to 9·6)	7·1 (6·0 to 8·3)	−12·6 (−19·98 to −7·68)
Atrial fibrillation and flutter	28·9 (26·0 to 32·4)	112·2 (97·7 to 126·7)	288·1 (246·32 to 335·03)	1·0 (0·9 to 1·1)	2·0 (1·8 to 2·3)	100·0 (77·55 to 124·90)
Aortic aneurysm	99·6 (82·4 to 118·5)	151·5 (124·2 to 180·0)	52·1 (43·75 to 60·91)	3·0 (2·5 to 3·6)	2·6 (2·1 to 3·1)	−15·3 (−20·06 to −10·50)
Peripheral vascular disease	15·9 (14·4 to 17·5)	40·5 (35·5 to 44·9)	155·3 (126·51 to 178·39)	0·5 (0·5 to 0·6)	0·7 (0·6 to 0·8)	34·1 (18·77 to 46·62)
Endocarditis	45·1 (35·6 to 58·6)	65·0 (48·6 to 79·4)	46·3 (23·88 to 65·52)	1·2 (1·0 to 1·6)	1·0 (0·8 to 1·3)	−12·7 (−25·81 to −2·80)
Other cardiovascular and circulatory diseases	478·3 (403·9 to 546·4)	554·6 (499·1 to 654·2)	15·2 (9·38 to 32·52)	13·6 (11·5 to 15·5)	9·3 (8·3 to 10·8)	−32·2 (−35·44 to −22·40)
Chronic respiratory diseases	**3490·2 (3280·4 to 3795·3)**	**4267·5 (3996·3 to 4694·2)**	**21·9 (14·95 to 31·48)**	**104·5 (98·5 to 113·3)**	**73·0 (68·4 to 80·2)**	**−30·4 (−34·19 to −25·05)**
Chronic obstructive pulmonary disease	2421·3 (2151·3 to 2632·4)	2931·2 (2626·3 to 3215·8)	21·0 (12·70 to 31·26)	74·8 (66·8 to 81·2)	50·7 (45·4 to 55·6)	−32·3 (−36·75 to −26·54)
Pneumoconiosis	251·2 (184·0 to 317·8)	259·7 (201·7 to 331·2)	1·9 (−15·21 to 40·27)	7·2 (5·3 to 9·0)	4·3 (3·3 to 5·5)	−40·5 (−50·81 to −19·84)
Silicosis	55·4 (36·7 to 77·1)	46·3 (32·1 to 64·8)	−16·0 (−32·85 to 6·14)	1·6 (1·0 to 2·2)	0·8 (0·5 to 1·1)	−50·7 (−61·18 to −38·06)
Asbestosis	21·0 (13·9 to 30·4)	24·1 (17·5 to 32·3)	14·2 (−10·20 to 54·87)	0·6 (0·4 to 0·9)	0·4 (0·3 to 0·5)	−32·6 (−47·35 to −9·61)
Coal workers pneumoconiosis	28·9 (18·2 to 43·9)	25·2 (19·0 to 35·6)	−13·7 (−30·65 to 23·06)	0·8 (0·5 to 1·2)	0·4 (0·3 to 0·6)	−50·2 (−60·26 to −29·13)
Other pneumoconiosis	145·9 (100·3 to 189·2)	164·1 (123·1 to 213·6)	10·9 (−13·48 to 61·23)	4·2 (2·9 to 5·5)	2·7 (2·0 to 3·6)	−35·3 (−50·19 to −6·77)

	All ages deaths (thousands)			Age-standardised death rate (per 100 000)		
	1990	2013	Median % change	1990	2013	Median % change
Asthma	504·3 (399·7 to 731·8)	489·0 (397·7 to 676·8)	−2·9 (−24·58 to 19·21)	13·7 (10·8 to 20·4)	8·0 (6·5 to 11·1)	−41·5 (−55·17 to −28·01)
Interstitial lung disease and pulmonary sarcoidosis	217·6 (128·7 to 299·4)	471·5 (372·3 to 606·8)	114·1 (53·25 to 214·86)	6·6 (3·9 to 8·9)	8·0 (6·3 to 10·3)	20·1 (−11·89 to 74·20)
Other chronic respiratory diseases	95·8 (78·3 to 113·8)	116·1 (99·2 to 136·9)	21·2 (7·78 to 40·66)	2·2 (1·8 to 2·7)	1·9 (1·6 to 2·3)	−15·1 (−24·22 to −3·39)
Cirrhosis of the liver	**838·0 (807·0 to 866·7)**	**1 221·1 (1 170·3 to 1 284·3)**	**45·6 (38·47 to 54·52)**	**21·8 (20·9 to 22·5)**	**18·8 (18·0 to 19·7)**	**−13·7 (−17·75 to −8·49)**
Cirrhosis of the liver secondary to hepatitis B	233·9 (220·8 to 250·0)	317·4 (292·3 to 344·6)	35·6 (22·66 to 49·58)	6·1 (5·7 to 6·5)	4·9 (4·5 to 5·3)	−19·3 (−26·86 to −11·11)
Cirrhosis of the liver secondary to hepatitis C	213·1 (200·4 to 226·7)	357·8 (334·3 to 386·1)	67·3 (54·60 to 83·86)	5·7 (5·4 to 6·0)	5·6 (5·2 to 6·0)	−2·4 (−9·58 to 7·48)
Cirrhosis of the liver secondary to alcohol use	292·2 (276·5 to 307·1)	383·8 (356·2 to 414·7)	31·2 (20·27 to 43·97)	7·8 (7·4 to 8·2)	5·9 (5·5 to 6·4)	−24·1 (−30·24 to −16·92)
Other cirrhosis of the liver	98·8 (92·1 to 106·0)	162·1 (145·5 to 182·9)	63·5 (47·65 to 86·21)	2·2 (2·0 to 2·3)	2·4 (2·1 to 2·7)	9·3 (−1·52 to 24·19)
Digestive diseases	**1053·2 (958·6 to 1 131·2)**	**1168·3 (1 064·4 to 1 275·5)**	**10·4 (2·11 to 22·38)**	**28·4 (25·8 to 30·5)**	**19·0 (17·4 to 20·7)**	**−33·5 (−38·30 to −26·51)**
Peptic ulcer disease	326·9 (288·8 to 388·7)	301·4 (249·8 to 350·5)	−7·6 (−21·26 to 5·52)	9·1 (8·0 to 10·7)	4·9 (4·1 to 5·7)	−45·8 (−53·37 to −38·53)
Gastritis and duodenitis	54·2 (32·1 to 76·3)	59·5 (42·2 to 90·1)	5·8 (−13·46 to 50·38)	1·4 (0·8 to 2·0)	1·0 (0·7 to 1·5)	−35·1 (−46·54 to −6·86)
Appendicitis	87·5 (70·8 to 105·9)	71·9 (51·4 to 89·5)	−17·8 (−34·66 to 2·68)	2·0 (1·6 to 2·4)	1·1 (0·8 to 1·4)	−45·7 (−56·37 to −33·27)
Paralytic ileus and intestinal obstruction	178·0 (116·3 to 228·5)	235·7 (175·6 to 327·0)	29·4 (11·32 to 68·61)	4·7 (3·1 to 6·1)	3·8 (2·8 to 5·3)	−20·3 (−31·07 to 1·80)
Inguinal, femoral, and abdominal hernia	50·5 (33·2 to 61·2)	32·5 (25·6 to 48·8)	−41·8 (−49·26 to −4·88)	1·4 (0·9 to 1·7)	0·5 (0·4 to 0·8)	−64·8 (−69·29 to −44·12)
Inflammatory bowel disease	54·9 (40·4 to 67·2)	51·2 (42·4 to 69·7)	−8·7 (−17·41 to 13·01)	1·4 (1·0 to 1·6)	0·8 (0·7 to 1·1)	−41·8 (−47·30 to −25·30)
Vascular intestinal disorders	52·6 (34·7 to 78·4)	79·5 (51·9 to 113·3)	51·8 (36·03 to 67·16)	1·6 (1·1 to 2·4)	1·4 (0·9 to 1·9)	−16·3 (−24·49 to −8·10)
Gallbladder and biliary diseases	80·5 (68·9 to 94·1)	105·9 (89·1 to 122·3)	32·2 (18·76 to 43·46)	2·4 (2·0 to 2·8)	1·8 (1·5 to	−24·5 (−31·76 to

	All ages deaths (thousands)			Age-standardised death rate (per 100 000)		
	1990	2013	Median % change	1990	2013	Median % change
					2·1)	−18·21)
Pancreatitis	83·0 (59·2 to 111·3)	122·6 (85·9 to 152·3)	49·1 (16·02 to 76·94)	2·1 (1·5 to 2·9)	1·9 (1·3 to 2·4)	−10·2 (−29·33 to 5·74)
Other digestive diseases	85·2 (73·3 to 99·5)	108·0 (90·4 to 124·2)	27·1 (14·25 to 39·04)	2·3 (2·0 to 2·6)	1·8 (1·5 to 2·0)	−21·9 (−29·04 to −15·13)
Neurological disorders	**1017·5 (965·0 to 1 072·3)**	**1976·8 (1875·0 to 2080·7)**	**94·0 (83·99 to 106·61)**	**34·2 (32·3 to 36·1)**	**35·0 (33·2 to 36·9)**	**2·3 (−3·27 to 9·08)**
Alzheimer's disease and other dementias	795·8 (747·9 to 844·3)	1655·1 (1563·5 to 1765·3)	107·2 (94·94 to 124·00)	28·9 (27·1 to 30·7)	29·9 (28·2 to 31·9)	3·2 (−3·01 to 11·61)
Parkinson's disease	43·7 (38·3 to 55·1)	102·5 (79·3 to 112·6)	139·8 (77·36 to 156·99)	1·5 (1·3 to 1·9)	1·8 (1·4 to 2·0)	28·2 (−6·42 to 37·83)
Epilepsy	111·0 (95·5 to 129·9)	115·8 (93·7 to 132·0)	4·7 (−12·05 to 24·00)	2·2 (1·9 to 2·5)	1·7 (1·3 to 1·9)	−22·4 (−33·73 to −10·21)
Multiple sclerosis	12·4 (9·2 to 19·0)	19·8 (12·8 to 25·5)	64·8 (3·60 to 87·09)	0·3 (0·2 to 0·5)	0·3 (0·2 to 0·4)	−1·1 (−38·78 to 11·91)
Other neurological disorders	54·6 (47·1 to 60·8)	83·7 (71·8 to 90·8)	54·2 (37·88 to 60·72)	1·4 (1·2 to 1·5)	1·3 (1·1 to 1·4)	−3·6 (−10·27 to 0·43)
Mental and substance use disorders	**188·3 (157·2 to 242·3)**	**282·4 (233·9 to 329·3)**	**51·5 (32·26 to 63·84)**	**4·3 (3·6 to 5·7)**	**4·0 (3·3 to 4·7)**	**−5·7 (−18·55 to 2·10)**
Schizophrenia	22·8 (14·7 to 28·3)	16·0 (13·7 to 22·8)	−35·5 (−46·52 to 29·94)	0·6 (0·4 to 0·7)	0·2 (0·2 to 0·3)	−59·7 (−66·47 to −20·07)
Alcohol use disorders	111·9 (84·0 to 165·3)	139·2 (90·2 to 178·5)	28·2 (1·78 to 35·66)	2·7 (2·0 to 3·9)	2·0 (1·3 to 2·6)	−22·0 (−38·53 to −17·54)
Drug use disorders	53·2 (47·8 to 64·1)	126·6 (110·8 to 135·5)	140·4 (101·60 to 159·88)	1·1 (1·0 to 1·3)	1·8 (1·6 to 1·9)	63·0 (36·10 to 74·81)
Opioid use disorders	18·0 (16·5 to 22·2)	50·7 (43·4 to 54·4)	187·3 (134·80 to 210·24)	0·4 (0·3 to 0·5)	0·7 (0·6 to 0·8)	92·7 (56·69 to 107·16)
Cocaine use disorders	2·4 (2·2 to 2·9)	4·3 (3·9 to 4·7)	77·2 (49·11 to 102·26)	0·1 (0·0 to 0·1)	0·1 (0·1 to 0·1)	20·9 (1·97 to 36·34)
Amphetamine use disorders	2·1 (1·9 to 2·5)	3·8 (3·4 to 4·1)	80·4 (52·49 to 106·70)	0·0 (0·0 to 0·1)	0·1 (0·0 to 0·1)	23·2 (4·70 to 40·49)
Other drug use disorders	30·7 (26·1 to 37·3)	67·7 (59·5 to 72·8)	122·8 (86·51 to 146·32)	0·6 (0·6 to 0·8)	1·0 (0·8 to 1·0)	51·6 (26·34 to 65·39)

	All ages deaths (thousands)			Age-standardised death rate (per 100 000)		
	1990	2013	Median % change	1990	2013	Median % change
Eating disorders	0·4 (0·3 to 0·4)	0·6 (0·5 to 0·7)	60·4 (41·17 to 84·68)	0·0 (0·0 to 0·0)	0·0 (0·0 to 0·0)	13·5 (−0·42 to 30·16)
Anorexia nervosa	0·4 (0·3 to 0·4)	0·6 (0·5 to 0·7)	60·4 (41·17 to 84·68)	0·0 (0·0 to 0·0)	0·0 (0·0 to 0·0)	13·5 (−0·42 to 30·16)
Diabetes, urogenital, blood, and endocrine diseases	**1569·4 (1456·7 to 1709·2)**	**2955·0 (2764·0 to 3171·1)**	**88·9 (76·44 to 99·49)**	**42·2 (39·5 to 44·7)**	**48·3 (45·1 to 51·4)**	**14·4 (9·53 to 20·14)**
Diabetes mellitus	684·3 (653·2 to 711·5)	1299·4 (1234·5 to 1374·8)	89·7 (81·77 to 99·94)	19·8 (18·9 to 20·6)	21·6 (20·6 to 22·9)	9·0 (4·59 to 14·69)
Acute glomerulonephritis	23·6 (13·7 to 33·4)	18·8 (14·3 to 22·8)	−21·4 (−36·96 to 14·96)	0·5 (0·3 to 0·8)	0·3 (0·2 to 0·3)	−45·8 (−55·70 to −21·57)
Chronic kidney disease	408·6 (363·8 to 433·4)	956·2 (812·9 to 1 034·5)	134·6 (115·70 to 150·20)	11·6 (10·4 to 12·3)	15·8 (13·5 to 17·1)	36·9 (25·43 to 46·11)
Chronic kidney disease due to diabetes mellitus	46·3 (34·8 to 54·8)	173·1 (139·3 to 208·8)	274·1 (243·06 to 309·05)	1·4 (1·0 to 1·6)	2·9 (2·3 to 3·5)	106·5 (89·67 to 127·74)
Chronic kidney disease due to hypertension	120·0 (91·6 to 144·8)	275·7 (196·9 to 336·5)	130·6 (106·28 to 151·38)	3·6 (2·8 to 4·4)	4·6 (3·3 to 5·6)	29·4 (15·20 to 40·43)
Chronic kidney disease due to glomerulonephritis	99·0 (84·5 to 114·7)	116·3 (92·9 to 144·0)	16·9 (1·69 to 35·32)	2·5 (2·1 to 2·9)	1·8 (1·5 to 2·3)	−26·8 (−35·84 to −15·66)
Chronic kidney diseases due to other causes	143·3 (115·3 to 168·0)	391·2 (297·0 to 452·3)	175·3 (140·05 to 202·16)	4·1 (3·3 to 4·8)	6·5 (4·9 to 7·5)	58·8 (37·59 to 74·71)
Urinary diseases and male infertility due to other causes	151·4 (129·1 to 161·1)	245·8 (205·5 to 264·7)	62·8 (49·74 to 72·37)	4·3 (3·7 to 4·6)	4·1 (3·4 to 4·4)	−3·7 (−12·86 to 1·66)
Interstitial nephritis and urinary tract infections	109·9 (92·9 to 118·1)	175·5 (144·6 to 192·0)	58·9 (48·57 to 74·08)	3·1 (2·7 to 3·4)	2·9 (2·4 to 3·2)	−6·3 (−14·36 to 2·19)
Urolithiasis	15·1 (11·1 to 18·7)	14·7 (12·4 to 20·1)	−5·9 (−16·02 to 44·87)	0·4 (0·3 to 0·5)	0·2 (0·2 to 0·3)	−45·3 (−50·97 to −14·32)
Other urinary diseases	26·3 (21·9 to 35·0)	55·5 (40·4 to 66·5)	122·4 (69·54 to 151·57)	0·7 (0·6 to 1·0)	0·9 (0·7 to 1·1)	32·5 (2·75 to 50·04)
Gynaecological diseases	5·3 (3·9 to 7·0)	3·4 (2·9 to 4·8)	−36·7 (−47·76 to −14·33)	0·1 (0·1 to 0·2)	0·1 (0·0 to 0·1)	−59·5 (−67·15 to −45·56)
Uterine fibroids	1·2 (0·9 to 1·7)	0·9 (0·7 to 1·2)	−29·7 (−43·96 to −6·20)	0·0 (0·0 to 0·0)	0·0 (0·0 to 0·0)	−57·8 (−66·54 to −43·72)
Polycystic ovarian syndrome	0·2 (0·1 to 0·3)	0·1 (0·1 to 0·2)	−56·2 (−63·48 to −29·90)	0·0 (0·0 to 0·0)	0·0 (0·0 to	−68·5 (−73·81 to

	All ages deaths (thousands)			Age-standardised death rate (per 100 000)		
	1990	2013	Median % change	1990	2013	Median % change
					0·0)	−49·56)
Endometriosis	0·5 (0·4 to 0·6)	0·2 (0·2 to 0·4)	−54·7 (−62·11 to −29·37)	0·0 (0·0 to 0·0)	0·0 (0·0 to 0·0)	−68·9 (−74·05 to −51·25)
Genital prolapse	0·9 (0·7 to 1·2)	0·6 (0·5 to 0·9)	−29·9 (−44·02 to −8·28)	0·0 (0·0 to 0·0)	0·0 (0·0 to 0·0)	−55·7 (−65·45 to −42·31)
Other gynaecological diseases	2·5 (1·8 to 3·2)	1·6 (1·3 to 2·2)	−37·4 (−48·19 to −15·38)	0·1 (0·0 to 0·1)	0·0 (0·0 to 0·0)	−59·7 (−67·23 to −46·18)
Haemoglobinopathies and haemolytic anaemias	182·7 (91·5 to 302·5)	240·4 (106·0 to 456·1)	20·6 (−1·35 to 92·91)	3·1 (1·6 to 5·0)	3·4 (1·5 to 6·3)	0·4 (−19·05 to 51·95)
Thalassaemias	36·2 (21·2 to 49·4)	24·8 (16·9 to 32·1)	−36·4 (−46·90 to 14·05)	0·6 (0·3 to 0·8)	0·3 (0·2 to 0·4)	−43·7 (−52·63 to −2·83)
Sickle cell disorders	112·9 (39·4 to 222·6)	176·2 (56·3 to 385·7)	45·3 (14·30 to 131·19)	1·8 (0·6 to 3·4)	2·4 (0·8 to 5·3)	28·8 (1·53 to 94·35)
G6PD deficiency	3·4 (2·0 to 4·6)	4·1 (2·6 to 5·6)	12·7 (−7·12 to 91·90)	0·1 (0·0 to 0·1)	0·1 (0·0 to 0·1)	−8·2 (−23·19 to 45·12)
Other haemoglobinopathies and haemolytic anaemias	30·3 (19·8 to 38·6)	35·4 (24·3 to 44·9)	15·1 (3·42 to 46·66)	0·8 (0·5 to 1·0)	0·6 (0·4 to 0·7)	−25·8 (−31·66 to −9·80)
Endocrine, metabolic, blood, and immune disorders	113·5 (90·6 to 134·4)	191·0 (150·5 to 218·5)	69·5 (49·11 to 85·62)	2·7 (2·2 to 3·2)	3·0 (2·4 to 3·4)	11·6 (0·55 to 20·87)
Musculoskeletal disorders	**65·9 (55·0 to 73·4)**	**116·3 (100·4 to 137·7)**	**77·1 (54·42 to 105·22)**	**1·7 (1·5 to 1·9)**	**1·9 (1·6 to 2·2)**	**8·5 (−4·62 to 23·48)**
Rheumatoid arthritis	27·8 (23·8 to 31·7)	38·1 (33·0 to 46·9)	35·6 (16·43 to 64·74)	0·8 (0·7 to 0·9)	0·6 (0·5 to 0·8)	−20·5 (−31·22 to −4·53)
Other musculoskeletal disorders	38·1 (30·3 to 44·1)	78·2 (65·2 to 90·3)	107·2 (76·94 to 145·59)	0·9 (0·8 to 1·1)	1·2 (1·0 to 1·4)	32·7 (14·17 to 51·37)
Other non-communicable diseases	**831·7 (690·7 to 1 061·0)**	**746·6 (674·1 to 846·2)**	**−7·6 (−25·31 to 4·05)**	**12·9 (10·9 to 16·1)**	**10·5 (9·5 to 11·9)**	**−16·4 (−30·83 to −7·20)**
Congenital anomalies	750·6 (611·8 to 969·7)	632·1 (561·3 to 730·3)	−13·5 (−30·40 to −0·80)	11·0 (9·0 to 14·1)	8·7 (7·7 to 10·0)	−18·9 (−34·07 to −7·54)
Neural tube defects	151·3 (109·1 to 256·3)	68·9 (40·9 to 124·4)	−54·8 (−65·35 to −42·39)	2·1 (1·5 to 3·6)	0·9 (0·6 to 1·7)	−56·6 (−66·71 to −44·61)
Congenital heart anomalies	366·2 (293·0 to 485·2)	323·4 (288·3 to 372·6)	−9·8 (−29·83 to 7·37)	5·4 (4·4 to 7·0)	4·5 (4·0 to 5·1)	−15·8 (−33·64 to −0·61)

	All ages deaths (thousands)			Age-standardised death rate (per 100 000)		
	1990	2013	Median % change	1990	2013	Median % change
Orofacial clefts	7·6 (4·2 to 11·5)	3·3 (1·9 to 5·2)	−57·8 (−68·83 to −33·93)	0·1 (0·1 to 0·2)	0·0 (0·0 to 0·1)	−58·5 (−69·40 to −35·04)
Down's syndrome	42·5 (16·4 to 73·0)	36·4 (20·4 to 52·4)	−12·9 (−39·13 to 40·14)	0·7 (0·3 to 1·1)	0·5 (0·3 to 0·7)	−22·6 (−45·11 to 19·89)
Chromosomal unbalanced rearrangements	19·1 (8·5 to 41·2)	17·3 (10·6 to 26·8)	5·5 (−40·18 to 35·89)	0·3 (0·1 to 0·6)	0·2 (0·1 to 0·4)	−3·0 (−43·13 to 25·13)
Other congenital anomalies	163·9 (119·9 to 301·9)	182·8 (150·2 to 261·9)	18·0 (−16·45 to 40·74)	2·4 (1·8 to 4·4)	2·5 (2·1 to 3·6)	8·5 (−20·90 to 29·30)
Skin and subcutaneous diseases	59·1 (54·1 to 63·1)	99·4 (89·9 to 107·3)	68·3 (51·36 to 86·44)	1·6 (1·5 to 1·7)	1·6 (1·5 to 1·8)	2·5 (−7·66 to 10·83)
Cellulitis	27·0 (19·0 to 34·1)	29·5 (22·5 to 39·3)	8·0 (−5·23 to 30·03)	0·7 (0·5 to 0·8)	0·5 (0·4 to 0·6)	−29·8 (−38·47 to −16·25)
Pyoderma	16·7 (11·6 to 23·1)	37·7 (30·2 to 42·9)	129·9 (71·83 to 186·99)	0·4 (0·3 to 0·6)	0·6 (0·5 to 0·7)	44·0 (14·02 to 75·43)
Decubitus ulcer	13·7 (11·5 to 16·9)	28·5 (24·4 to 33·0)	109·6 (82·53 to 132·42)	0·5 (0·4 to 0·6)	0·5 (0·4 to 0·6)	8·3 (−4·81 to 19·09)
Other skin and subcutaneous diseases	1·7 (1·2 to 2·2)	3·8 (3·0 to 4·9)	138·4 (74·18 to 201·77)	0·0 (0·0 to 0·1)	0·1 (0·0 to 0·1)	35·9 (4·37 to 69·36)
Sudden infant death syndrome	22·0 (12·7 to 40·2)	15·1 (9·6 to 21·4)	−29·5 (−54·51 to −4·22)	0·3 (0·2 to 0·6)	0·2 (0·1 to 0·3)	−31·0 (−55·52 to −6·34)
Injuries	**4325·8 (4095·7 to 4524·0)**	**4786·9 (4507·9 to 5072·8)**	**10·4 (4·23 to 18·04)**	**88·5 (84·5 to 93·0)**	**70·0 (65·9 to 74·2)**	**−21·0 (−25·27 to −15·85)**
Transport injuries	**1150·0 (1092·9 to 1253·9)**	**1482·7 (1364·8 to 1588·8)**	**29·3 (17·11 to 38·66)**	**23·2 (22·1 to 25·1)**	**21·2 (19·5 to 22·7)**	**−8·4 (−16·54 to −2·02)**
Road injuries	1058·4 (1005·0 to 1167·2)	1395·8 (1286·1 to 1492·7)	32·4 (19·21 to 41·84)	21·3 (20·3 to 23·4)	20·0 (18·4 to 21·3)	−6·1 (−15·12 to 0·28)
Pedestrian road injuries	389·7 (339·6 to 472·0)	543·8 (452·0 to 629·1)	40·2 (17·55 to 58·63)	8·0 (7·0 to 9·6)	8·0 (6·7 to 9·2)	0·1 (−15·84 to 12·51)
Cyclist road injuries	68·6 (58·5 to 83·3)	90·6 (74·2 to 106·6)	32·0 (13·51 to 51·06)	1·4 (1·2 to 1·7)	1·3 (1·1 to 1·6)	−7·5 (−20·14 to 5·51)
Motorcyclist road injuries	202·0 (169·3 to 236·4)	248·5 (200·9 to 294·4)	22·8 (7·72 to 40·45)	3·9 (3·2 to 4·5)	3·4 (2·8 to 4·0)	−12·2 (−22·77 to 0·56)
Motor vehicle road injuries	364·4 (324·4 to 409·1)	492·7 (431·0 to 555·1)	35·5 (24·24 to 46·49)	7·3 (6·5 to 8·2)	6·9 (6·1 to	−4·9 (−12·90 to

	All ages deaths (thousands)			Age-standardised death rate (per 100 000)		
	1990	2013	Median % change	1990	2013	Median % change
					7·8)	2·69)
Other road injuries	33·8 (21·9 to 44·1)	20·2 (14·4 to 25·5)	−40·7 (−54·01 to −7·44)	0·7 (0·4 to 0·9)	0·3 (0·2 to 0·4)	−57·3 (−67·23 to −34·33)
Other transport injuries	91·6 (77·4 to 102·0)	86·9 (72·0 to 97·2)	−5·3 (−18·27 to 10·72)	1·9 (1·6 to 2·1)	1·2 (1·0 to 1·4)	−33·6 (−42·61 to −22·72)
Unintentional injuries other than transport injuries	**2017·2 (1848·6 to 2 165·7)**	**2006·7 (1857·1 to 2 183·1)**	**−1·0 (−8·96 to 10·95)**	**40·8 (38·2 to 43·8)**	**30·4 (28·0 to 32·9)**	**−25·7 (−31·89 to −18·23)**
Falls	340·5 (311·7 to 411·5)	556·4 (448·5 to 610·7)	66·7 (21·25 to 82·98)	9·0 (8·2 to 10·8)	9·1 (7·3 to 9·9)	3·4 (−23·97 to 11·61)
Drowning	544·9 (409·2 to 635·8)	368·1 (311·0 to 515·4)	−35·0 (−43·35 to 17·98)	9·4 (7·2 to 10·8)	5·2 (4·4 to 7·3)	−46·3 (−52·33 to −6·00)
Fire, heat, and hot substances	299·6 (262·7 to 352·9)	237·5 (199·3 to 282·9)	−21·2 (−33·96 to −1·98)	5·9 (5·2 to 7·0)	3·5 (2·9 to 4·1)	−41·9 (−50·85 to −29·74)
Poisonings	120·2 (104·1 to 168·5)	98·0 (70·2 to 110·8)	−12·7 (−44·83 to −0·08)	2·4 (2·1 to 3·3)	1·4 (1·0 to 1·6)	−36·0 (−58·97 to −27·57)
Exposure to mechanical forces	232·7 (186·3 to 273·9)	196·8 (177·9 to 244·6)	−15·6 (−31·65 to 18·68)	4·1 (3·4 to 4·8)	2·8 (2·5 to 3·5)	−32·6 (−43·48 to −9·05)
Unintentional firearm injuries	51·4 (44·5 to 60·0)	47·3 (41·0 to 55·7)	−7·6 (−26·30 to 13·15)	1·0 (0·9 to 1·2)	0·7 (0·6 to 0·8)	−32·8 (−46·94 to −18·02)
Unintentional suffocation	84·0 (26·9 to 124·6)	37·6 (29·1 to 80·7)	−58·3 (−74·65 to 90·29)	1·2 (0·4 to 1·8)	0·5 (0·4 to 1·1)	−59·7 (−75·13 to 71·19)
Other exposure to mechanical forces	97·2 (88·8 to 119·9)	111·9 (95·5 to 122·4)	16·6 (−13·64 to 30·93)	1·9 (1·7 to 2·3)	1·6 (1·4 to 1·7)	−14·7 (−36·50 to −5·26)
Adverse effects of medical treatment	93·5 (77·2 to 110·2)	141·7 (107·5 to 165·9)	53·2 (27·88 to 73·38)	2·1 (1·8 to 2·6)	2·2 (1·7 to 2·6)	4·6 (−11·30 to 16·34)
Animal contact	95·5 (59·8 to 126·6)	79·6 (62·3 to 138·7)	−22·0 (−35·47 to 34·57)	1·9 (1·2 to 2·5)	1·2 (0·9 to 2·0)	−43·0 (−52·23 to −2·49)
Venomous animal contact	76·3 (47·5 to 104·7)	57·2 (44·1 to 102·5)	−30·1 (−43·14 to 28·05)	1·5 (0·9 to 2·0)	0·8 (0·6 to 1·5)	−49·3 (−58·49 to −6·80)
Non-venomous animal contact	19·2 (11·5 to 26·3)	22·4 (16·4 to 36·8)	11·2 (−9·33 to 73·85)	0·4 (0·2 to 0·5)	0·3 (0·2 to 0·6)	−16·9 (−31·27 to 25·18)
Foreign body	142·2 (99·5 to 211·6)	165·7 (114·8 to 219·1)	16·2 (−10·22 to 45·91)	2·9 (2·1 to 4·3)	2·6 (1·8 to 3·4)	−10·2 (−29·81 to 5·96)

	All ages deaths (thousands)			Age-standardised death rate (per 100 000)		
	1990	2013	Median % change	1990	2013	Median % change
Pulmonary aspiration and foreign body in airway	139·8 (97·2 to 209·7)	162·1 (109·8 to 214·7)	15·5 (−11·10 to 45·78)	2·9 (2·0 to 4·2)	2·5 (1·7 to 3·4)	−10·6 (−30·35 to 5·87)
Foreign body in other body part	2·5 (1·6 to 3·5)	3·6 (2·7 to 5·4)	51·5 (−3·11 to 84·33)	0·1 (0·0 to 0·1)	0·1 (0·0 to 0·1)	6·8 (−25·59 to 31·38)
Other unintentional injuries	148·1 (119·9 to 162·8)	162·8 (143·9 to 180·3)	9·3 (−4·23 to 33·11)	3·1 (2·5 to 3·4)	2·4 (2·1 to 2·7)	−21·1 (−30·53 to −4·99)
Self-harm and interpersonal violence	**1052·8 (929·3 to 1152·0)**	**1247·1 (1067·2 to 1390·9)**	**18·2 (8·38 to 29·00)**	**22·4 (19·8 to 24·6)**	**17·8 (15·3 to 19·8)**	**−20·8 (−27·32 to −13·83)**
Self-harm	712·0 (630·6 to 784·7)	842·4 (718·1 to 939·0)	17·8 (6·04 to 32·20)	15·8 (13·9 to 17·3)	12·2 (10·4 to 13·6)	−23·1 (−30·45 to −13·97)
Interpersonal violence	340·7 (253·9 to 415·1)	404·7 (298·7 to 496·6)	18·4 (10·24 to 29·34)	6·6 (4·9 to 8·1)	5·6 (4·1 to 6·9)	−16·0 (−21·65 to −8·41)
Assault by firearm	127·6 (89·9 to 165·1)	180·4 (120·5 to 231·3)	41·3 (26·05 to 55·53)	2·5 (1·7 to 3·2)	2·5 (1·6 to 3·2)	0·0 (−10·58 to 10·11)
Assault by sharp object	94·0 (65·1 to 127·8)	114·3 (77·1 to 163·2)	21·0 (6·27 to 40·68)	1·8 (1·3 to 2·5)	1·6 (1·1 to 2·2)	−15·2 (−25·63 to −1·29)
Assault by other means	119·1 (84·4 to 142·9)	110·0 (78·7 to 142·1)	−8·5 (−16·48 to 7·97)	2·3 (1·6 to 2·8)	1·5 (1·1 to 2·0)	−33·9 (−39·44 to −22·31)
Forces of nature, war, and legal intervention	**105·8 (77·2 to 170·7)**	**50·4 (34·4 to 88·8)**	**−53·1 (−58·41 to −46·15)**	**2·2 (1·5 to 3·6)**	**0·7 (0·5 to 1·3)**	**−66·2 (−70·18 to −61·18)**
Exposure to forces of nature	33·4 (19·4 to 63·5)	19·2 (13·5 to 32·0)	−43·9 (−58·70 to −6·92)	0·7 (0·4 to 1·4)	0·3 (0·2 to 0·5)	−60·4 (−71·50 to −33·98)
Collective violence and legal intervention	72·4 (54·7 to 106·5)	31·2 (20·3 to 57·0)	−57·9 (−66·76 to −45·85)	1·5 (1·1 to 2·2)	0·5 (0·3 to 0·8)	−69·3 (−75·76 to −61·23)

Data in parentheses are 95% uncertainty intervals.

Table 3.

Selected causes of global child deaths in 1990 and 2013

	Neonates age <1 month			Children age 1–59 months		
	1990 (thousands)	2013 (thousands)	Median % change	1990 (thousands)	2013 (thousands)	Median % change
All causes	**4506·8 (4394·5 to 4612·8)**	**2614·3 (2506·4 to 2723·2)**	**−42·0 (−44·5 to −39·5)**	**7608·5 (7447·7 to 7757·3)**	**3665·7 (3449·4 to 3905·8)**	**−52·0 (−54·7 to −48·6)**
Communicable, maternal, neonatal, and nutritional diseases	**4063·8 (3935·0 to 4181·4)**	**2275·5 (2163·6 to 2374·6)**	**−44·0 (−46·6 to −41·4)**	**6012·6 (5724·0 to 6256·5)**	**2766·2 (2528·6 to 3010·5)**	**−54·0 (−57·5 to −50·4)**
HIV/AIDS	..	..	..	35·2 (32·3 to 38·3)	63·8 (58·5 to 71·6)	81·1 (64·5 to 99·9)
Diarrhoeal diseases	124·8 (110·5 to 140·5)	44·8 (36·8 to 53·3)	−64·2 (−70·6 to −56·7)	1482·4 (1339·7 to 1633·3)	474·9 (398·1 to 545·0)	−68·0 (−72·8 to −62·5)
Intestinal infectious diseases	..	..	..	82·0 (46·7 to 135·2)	62·4 (33·0 to 103·6)	−24·2 (−37·2 to −8·1)
Lower respiratory infections	399·3 (362·2 to 436·9)	196·5 (169·3 to 224·5)	−50·9 (−57·3 to −43·7)	1768·8 (1597·7 to 1926·6)	708·6 (628·6 to 791·4)	−59·9 (−64·8 to −54·5)
Meningitis	35·6 (27·7 to 47·0)	20·6 (14·9 to 26·8)	−42·6 (−52·7 to −28·4)	262·5 (212·1 to 346·3)	121·4 (90·2 to 157·0)	−54·0 (−63·4 to −41·5)
Whooping cough	..	..	..	129·8 (49·9 to 280·7)	56·4 (20·7 to 127·0)	−57·1 (−83·9 to 12·7)
Tetanus	216·9 (174·8 to 370·5)	26·0 (12·3 to 38·9)	−87·0 (−95·8 to −80·1)	65·4 (48·2 to 121·6)	5·5 (3·9 to 7·7)	−91·2 (−95·5 to −86·9)
Measles	..	..	..	472·4 (265·3 to 749·9)	82·1 (41·7 to 145·0)	−83·1 (−90·3 to −68·5)
Malaria	18·1 (13·4 to 23·5)	16·8 (11·0 to 26·4)	−9·6 (−42·6 to 52·8)	566·3 (470·8 to 662·0)	570·0 (437·5 to 733·2)	−1·3 (−27·7 to 40·9)
Preterm birth complications	1452·1 (1190·6 to 1677·3)	693·0 (553·6 to 853·9)	−52·5 (−58·6 to −45·0)	118·4 (80·1 to 157·3)	49·4 (34·5 to 69·8)	−58·3 (−69·4 to −41·3)
Neonatal encephalopathy (birth asphyxia/trauma)	820·8 (651·3 to 993·1)	611·5 (491·9 to 724·0)	−25·3 (−38·1 to −9·8)	53·3 (35·5 to 72·6)	32·3 (21·4 to 48·7)	−40·6 (−58·2 to −9·0)

	Neonates age <1 month			Children age 1–59 months		
	1990 (thousands)	**2013 (thousands)**	**Median % change**	**1990 (thousands)**	**2013 (thousands)**	**Median % change**
Neonatal sepsis and other neonatal infections	328·3 (186·3 to 462·1)	342·2 (214·9 to 479·3)	4·6 (−17·3 to 38·5)	18·1 (9·2 to 28·3)	23·8 (13·3 to 38·0)	30·3 (−15·9 to 114·6)
Other neonatal disorders	489·9 (381·6 to 654·9)	238·2 (187·7 to 297·0)	−51·3 (−62·5 to −35·0)	87·7 (58·5 to 123·5)	38·1 (25·0 to 59·8)	−57·4 (−73·9 to −27·8)
Nutritional deficiencies	..	..	..	451·6 (376·5 to 560·5)	260·7 (197·9 to 316·6)	−42·3 (−52·4 to −30·1)
Syphilis	122·6 (68·9 to 194·3)	63·7 (37·0 to 98·4)	−47·9 (−58·6 to −35·5)	100·9 (56·9 to 157·6)	56·9 (32·5 to 90·9)	−43·3 (−56·8 to −28·5)
Other communicable diseases	55·3 (37·9 to 79·1)	22·4 (16·4 to 30·7)	−59·0 (−70·6 to −44·7)	317·7 (283·8 to 355·0)	159·9 (134·5 to 192·6)	−49·7 (−58·7 to −39·8)
Non-communicable diseases	**366·4 (316·1 to 443·9)**	**292·3 (258·4 to 349·7)**	**−19·8 (−32·4 to 4·3)**	**906·4 (766·4 to 1138·2)**	**578·8 (462·6 to 739·5)**	**−36·6 (−43·4 to −23·6)**
Congenital anomalies	303·6 (256·8 to 375·4)	246·6 (219·0 to 280·0)	−17·6 (−33·1 to −0·1)	343·6 (255·5 to 493·5)	248·7 (198·8 to 322·9)	−25·7 (−40·6 to −13·7)
Sudden infant death syndrome	3·0 (1·2 to 6·1)	2·4 (1·1 to 4·5)	−13·8 (−60·1 to 54·0)	19·1 (11·2 to 34·3)	12·7 (8·4 to 18·4)	−32·2 (−55·5 to −4·9)
Other non-communicable diseases	59·8 (52·3 to 70·5)	43·3 (32·4 to 76·9)	−31·3 (−43·3 to 18·7)	543·7 (469·1 to 642·8)	317·4 (244·2 to 422·8)	−42·8 (−52·6 to −23·3)
Injuries	**76·6 (58·5 to 95·1)**	**46·4 (37·5 to 63·5)**	**−41·7 (−53·4 to −2·9)**	**689·5 (567·1 to 776·3)**	**320·7 (277·8 to 371·5)**	**−54·6 (−61·1 to −41·9)**
Road injuries	4·1 (3·3 to 5·1)	3·8 (2·6 to 5·3)	−6·6 (−30·8 to 30·5)	105·2 (88·7 to 128·2)	64·5 (51·3 to 79·5)	−38·3 (−52·6 to −23·7)
Drowning	2·7 (1·9 to 3·5)	1·8 (1·1 to 2·8)	−38·2 (−56·7 to 16·9)	212·3 (132·4 to 275·1)	80·1 (61·7 to 111·4)	−63·3 (−74·1 to −20·4)
Other injuries	69·9 (52·2 to 88·2)	40·8 (32·1 to 58·0)	−44·1 (−55·9 to −1·0)	372·0 (280·9 to 424·3)	176·2 (153·1 to 203·7)	−53·7 (−60·8 to −37·6)

Data in parentheses are 95% uncertainty intervals. Shows major causes of death within each level 1 group that accounted for deaths in children.

Table 4.

Counterfactual deaths and population attributable fractions for diarrhoea and lower respiratory infection pathogens for 1990 and 2013

	Children younger than age 5 years				All ages				
	1990		2013		1990		2013		Rate of change for deaths 1990–2013 (%)
	Deaths (thousands)	Population attributable fractions (%)	Deaths (thousands)	Population attributable fractions (%)	Deaths (thousands)	Population attributable fractions (%)	Deaths (thousands)	Population attributable fractions (%)	
Diarrhoea									
Adenovirus	63·0 (44·4 to 89·9)	3·9 (2·7 to 5·5)	18·3 (11·8 to 25·5)	3·5 (2·4 to 4·9)	81·3 (55·9 to 115·9)	3·2 (2·1 to 4·4)	31·8 (21·5 to 44·7)	2·5 (1·7 to 3·6)	−61·2%(−67·8 to −52·5)
Aeromonas	12·3 (6·4 to 21·4)	0·8 (0·4 to 1·3)	5·5 (2·6 to 10·1)	1·1 (0·5 to 1·9)	28·0 (16·7 to 44·9)	1·1 (0·7 to 1·7)	13·0 (7·3 to 22·0)	1·0 (0·6 to 1·7)	−53·6%(−66·1 to −37·8)
Amoebiasis	5·8 (2·6 to 10·0)	0·4 (0·2 to 0·6)	1·3 (0·6 to 2·3)	0·2 (0·1 to 0·5)	18·3 (8·9 to 30·6)	0·7 (0·3 to 1·2)	11·3 (5·0 to 19·7)	0·9 (0·4 to 1·6)	−39·1%(−57 to −17·5)
Campylobacter enteritis	20·8 (11·0 to 31·9)	1·3 (0·7 to 2·0)	9·5 (3·7 to 15·7)	1·8 (0·7 to 3·0)	28·4 (16·4 to 42·8)	1·1 (0·6 to 1·6)	14·1 (6·9 to 22·4)	1·1 (0·5 to 1·8)	−50·7%(−63·7 to −37·5)
Cholera	81·7 (39·1 to 117·0)	5·1 (2·5 to 7·2)	45·2 (23·4 to 67·6)	8·7 (4·5 to 12·7)	125·3 (61·1 to 173·4)	4·9 (2·4 to 6·7)	69·9 (37·7 to 97·0)	5·5 (3·0 to 7·7)	−44·3%(−56·8 to −26·6)
Clostridium difficile	2·1 (2·0 to 2·3)	0·1 (0·1 to 0·1)	2·5 (2·4 to 2·7)	0·5 (0·4 to 0·6)	20·8 (19·9 to 21·9)	0·8 (0·7 to 0·9)	41·5 (39·1 to 43·9)	3·3 (3·0 to 3·6)	99·4%(84·3 to 114·3)
Cryptosporidiosis	92·4 (68·7 to 125·1)	5·8 (4·3 to 7·8)	35·2 (25·9 to 48·2)	6·8 (5·1 to 9·3)	98·8 (72·8 to 132·7)	3·8 (2·8 to 5·2)	41·9 (30·0 to 58·4)	3·3 (2·4 to 4·7)	−57·8%(−64·8 to −49·6)
Enteropathogenic *Escherichia coli* infection	4·3 (1·3 to 7·8)	0·3 (0·1 to 0·5)	1·8 (0·7 to 3·4)	0·3 (0·1 to 0·7)	4·3 (1·3 to 7·8)	0·2 (0·1 to 0·3)	1·8 (0·7 to 3·4)	0·1 (0·1 to 0·3)	−57·5%(−76·5 to −32)
Enterotoxigenic *Escherichia coli* infection	86·0 (61·3 to 114·1)	5·4 (3·8 to 7·2)	23·1 (17·0 to 30·4)	4·4 (3·4 to 5·9)	134·7 (97·5 to 178·2)	5·2 (3·8 to 6·8)	59·2 (44·2 to 77·7)	4·7 (3·5 to 6·1)	−56·0%(−63·0 to −46·9)
Norovirus	7·3 (2·7 to 11·8)	0·5 (0·2 to 0·7)	1·8 (0·7 to 3·1)	0·3 (0·1 to 0·6)	7·3 (2·7 to 11·8)	0·3 (0·1 to 0·5)	1·8 (0·7 to 3·2)	0·1 (0·1 to 0·2)	−75·8%(−85·1 to −61·6)
Other *Salmonella*	19·2 (11·1 to	1·2 (0·7 to 1·8)	3·8 (1·6 to	0·7 (0·3 to 1·2)	58·9 (42·4 to	2·3 (1·6 to 3·0)	24·3 (16·0 to	1·9 (1·3 to 2·6)	−58·9%(−65·4 to

	Children younger than age 5 years				All ages				
	1990		2013		1990		2013		Rate of change for deaths 1990–2013 (%)
	Deaths (thousands)	Population attributable fractions (%)	Deaths (thousands)	Population attributable fractions (%)	Deaths (thousands)	Population attributable fractions (%)	Deaths (thousands)	Population attributable fractions (%)	
infections	29·1)		6·7)		77·8)		33·3)		−51·1)
Rotaviral enteritis	398·9 (334·5 to 464·2)	24·8 (21·4 to 28·2)	122·4 (96·6 to 152·1)	23·5 (20·1 to 27·2)	477·5 (397·9 to 555·1)	18·5 (15·8 to 21·2)	176·6 (140·4 to 218·4)	14·0 (11·4 to 16·6)	−63·2%(−68·5 to −57·1)
Shigellosis	161·0 (130·0 to 200·3)	10·0 (8·2 to 12·2)	33·4 (24·9 to 43·5)	6·4 (5·1 to 7·9)	254·2 (207·9 to 311·7)	9·9 (8·2 to 11·9)	73·9 (58·9 to 93·8)	5·8 (4·7 to 7·3)	−70·9%(−74·4 to −67·3)
No identified aetiology[*]	652·4 (542·4 to 783·1)	40·6 (35·3 to 46·8)	215·9 (169·6 to 265·2)	41·5 (35·7 to 48·1)	1240·9 (1096·8 to 1421·5)	48·1 (43·5 to 53·5)	702·9 (619·2 to 796)	55·6 (51·4 to 60·3)	−43·2%(−49·3 to −36·1)
Lower respiratory infections									
Haemophilus influenzae type B pneumonia	427·1 (−39·8 to 853·4)	19·7 (−1·8 to 39·1)	108·7 (−9·9 to 226·9)	12·0 (−1·1 to 25·5)	427·1 (−39·8 to 853·4)	12·5 (−1·2 to 24·8)	108·7 (−9·9 to 226·9)	4·1 (−0·4 to 8·8)	−75·1%(−79·1 to −71·2)
Influenza	36·3 (14·2 to 73·5)	1·7 (0·7 to 3·3)	15·1 (5·7 to 30·4)	1·7 (0·6 to 3·3)	85·1 (36·1 to 156·2)	2·5 (1·1 to 4·5)	105·4 (45·3 to 188·1)	4·0 (1·7 to 7·3)	24·0%(3·4 to 47·7)
Pneumococcal pneumonia	652·4 (402·6 to 879·4)	30·1 (19·0 to 40·2)	264·0 (155·7 to 365·8)	29·2 (18·0 to 39·2)	919·5 (553·1 to 1320·5)	26·9 (16·3 to 38·4)	594·4 (295·6 to 970·2)	22·4 (11·4 to 35·9)	−36·1%(−52·7 to −19·8)
Respiratory syncytial virus pneumonia	145·1 (82·7 to 228·0)	6·7 (3·8 to 10·5)	41·1 (23·0 to 65·5)	4·5 (2·6 to 7·1)	185·5 (114·4 to 268·6)	5·4 (3·5 to 7·9)	81·5 (53·6 to 109·9)	3·1 (2·0 to 4·2)	−55·7%(−63 to −47·2)
No identified aetiology[*]	907·2 (407·3 to 1451·3)	41·9 (19·0 to 66·7)	476·2 (313·3 to 651·6)	52·6 (35·2 to 70·2)	1803·4 (1211·8 to 2452·5)	52·7 (35·4 to 71·1)	1762·6 (1385·3 to 2134·1)	66·5 (52·8 to 79·9)	−0·8%(−19·8 to 22·9)

Table 5.

Comparison of GBD and CHERG estimated child deaths for select causes in 2010

	CHERG	GBD 2013
Neonates aged 0–27 days		
Congenital abnormalities	270 (207–366)	251 (221–291)
Diarrhoea	50 (17–151)	52 (44–61)
Pneumonia	325 (209–470)	213 (186–242)
Intrapartum-related complications*	717 (610–876)	657 (532–770)
Sepsis or meningitis	393 (252–552)	369 (237–504)
Tetanus	58 (20–276)	34 (16–48)
Other neonatal disorders	181 (115–284)	470 (411–557)
All causes	3072†	2807 (2719–2898)
Children aged 1–59 months		
Injury	354 (274–429)	350 (310–394)
Diarrhoea	751 (538–1031)	536 (461–607)
AIDS	159 (131–185)	102 (95–111)
Pneumonia	1071 (977–1176)	772 (693–850)
Malaria	564 (432–709)	699 (576–855)
Measles	114 (92–176)	95 (52–166)
Meningitis	180 (136–237)	129 (98–163)
Other disorders	1356 (1112–1581)	1355 (1211–1524)
All causes	4550†	4039 (3883–4207)

Data are thousands of deaths (95% uncertainty interval). GBD=Global Burden of Disease Study. CHERG=Child Health Epidemiology Reference Group.

*Compares GBD cause “Neonatal encephalopathy (birth asphyxia/trauma)” with CHERG cause “intrapartum-related complications”.
†CHERG did not report uncertainty estimates for all-cause mortality in children.