

**Численность и здоровье населения
в прогнозах проекта
Global burden of disease**

Василий Власов, Высшая школа экономики

Trends Population pyramid

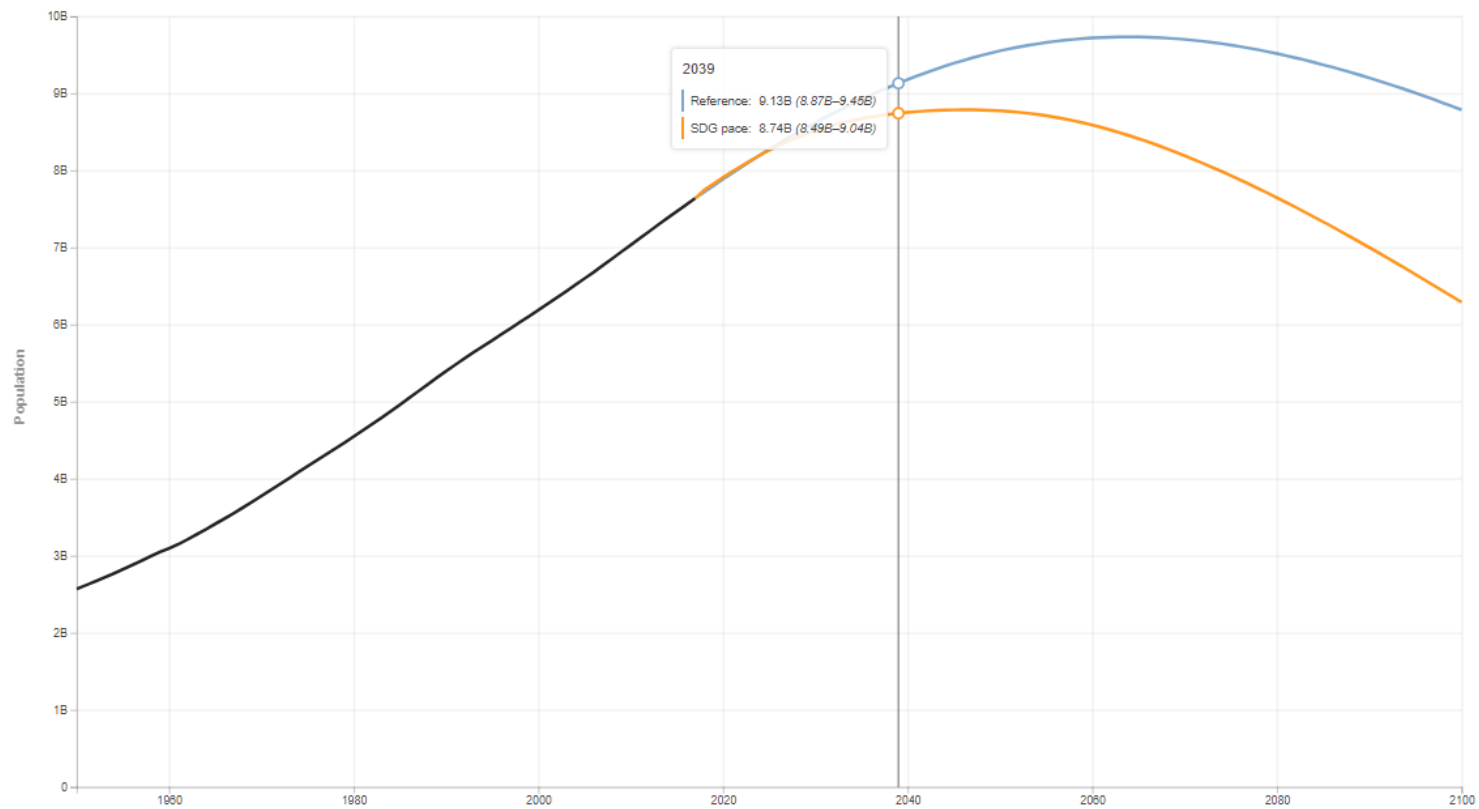
Population Fertility

Location Global

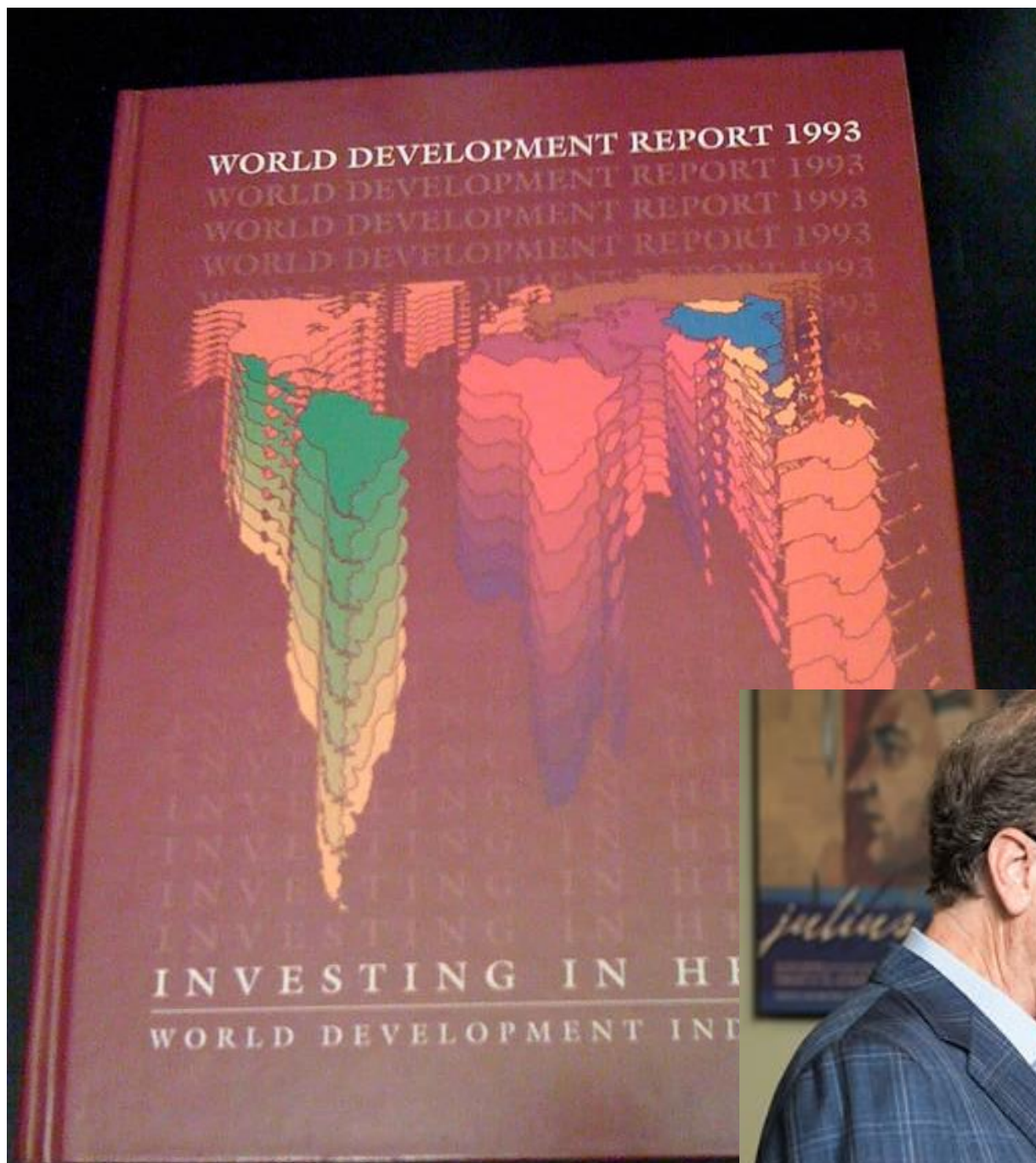
Sex Male Female Both

Age group All ages

Population, Global, Both sexes, All ages, 1950–2100



- Past
- Forecasted scenarios
 - Reference
 - SDG pace
 - Slower progress
 - Faster progress
 - Fastest progress



- Christopher Murray



HIV/AIDS Both sexes, All ages



- High-income North America X
- Western Europe X
- Russian Federation X

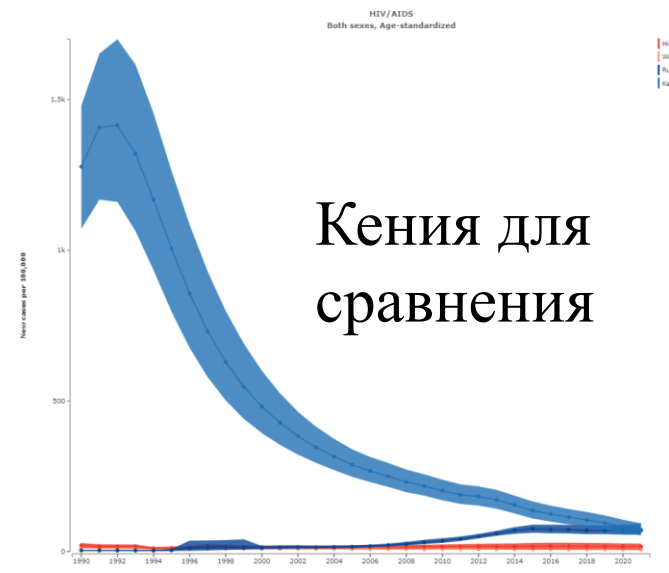
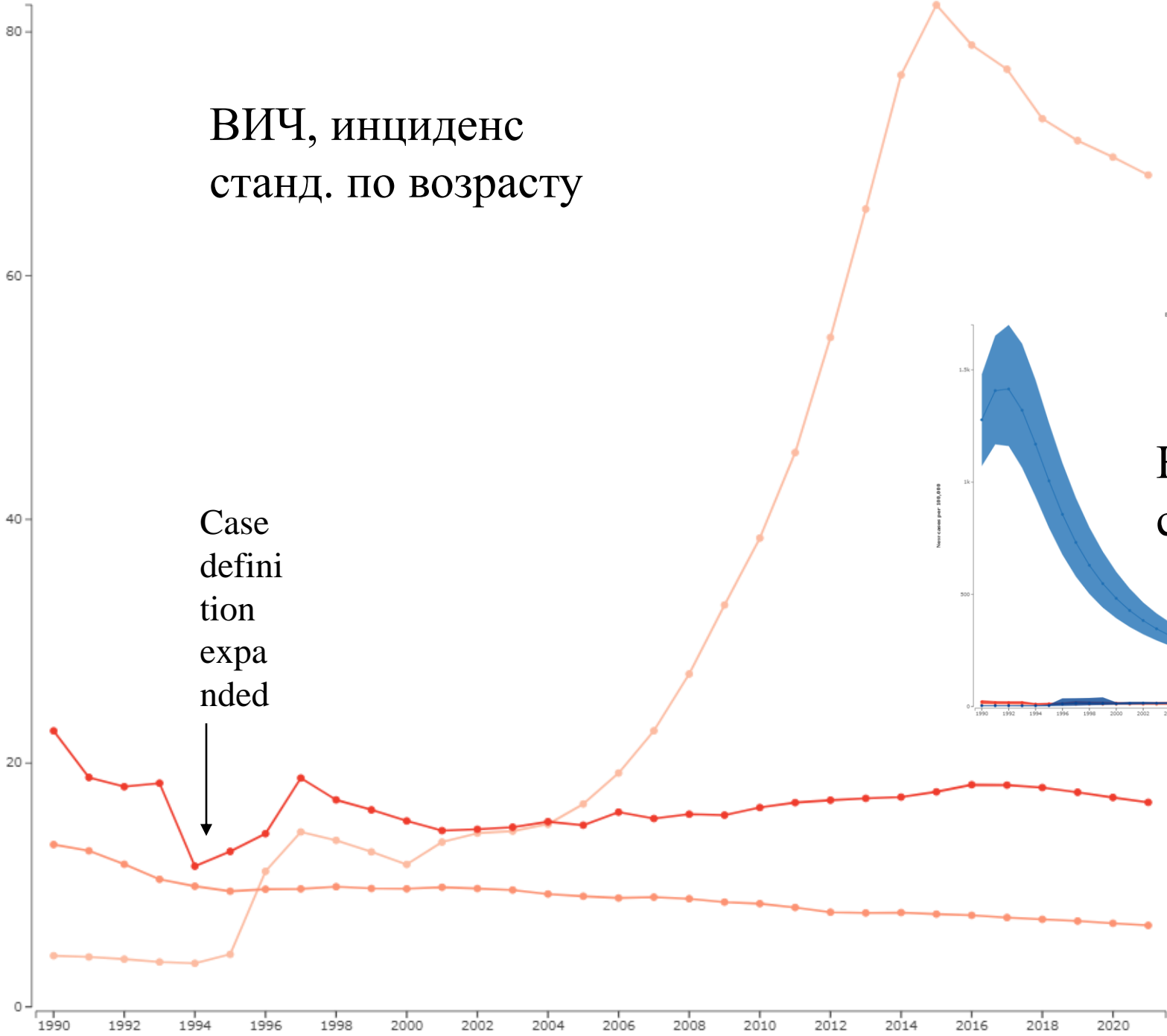
ВИЧ, инцидентс
станд. по возрасту

Case defini
tion
expa
nded



Кения для
сравнения

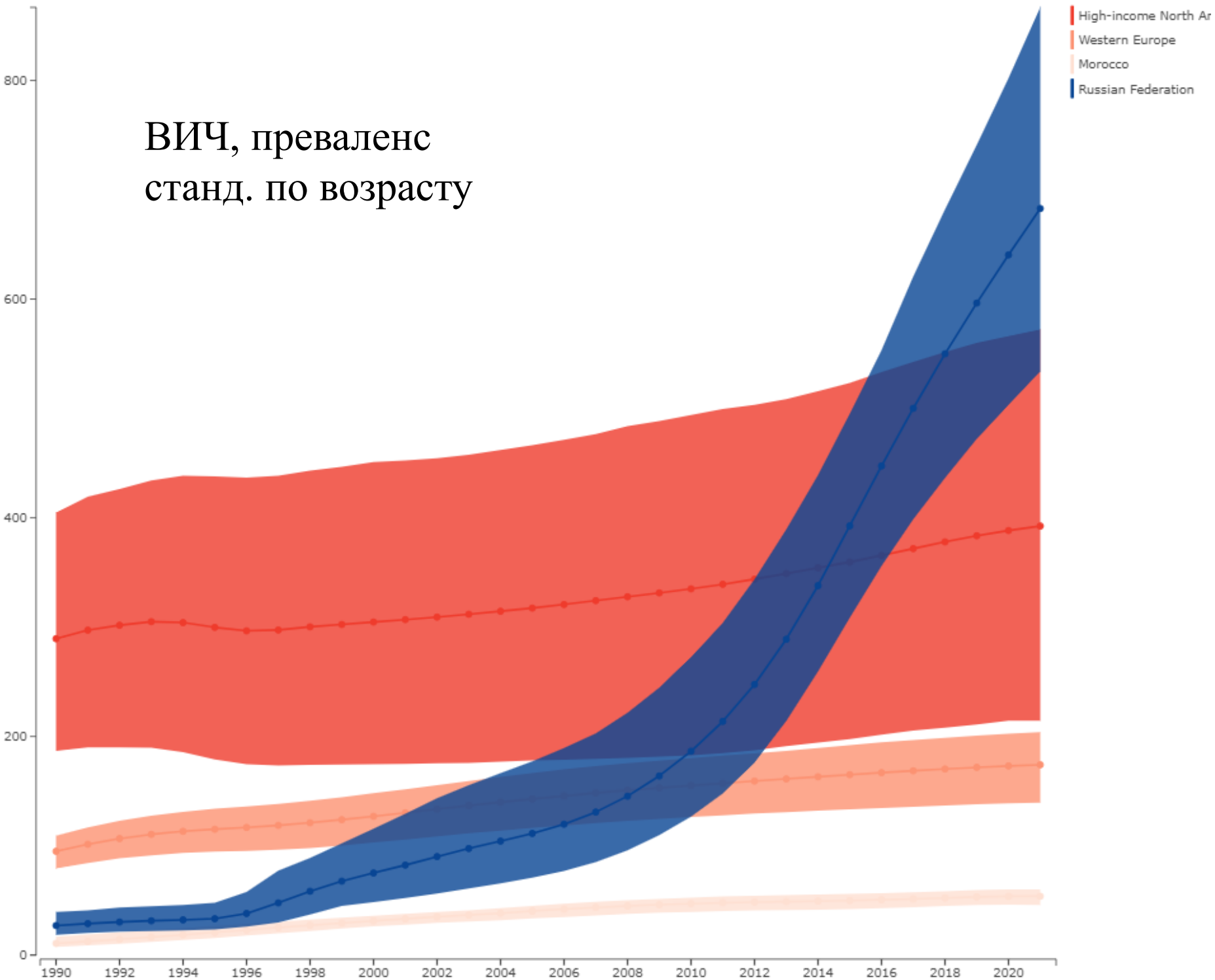
New cases per 100,000



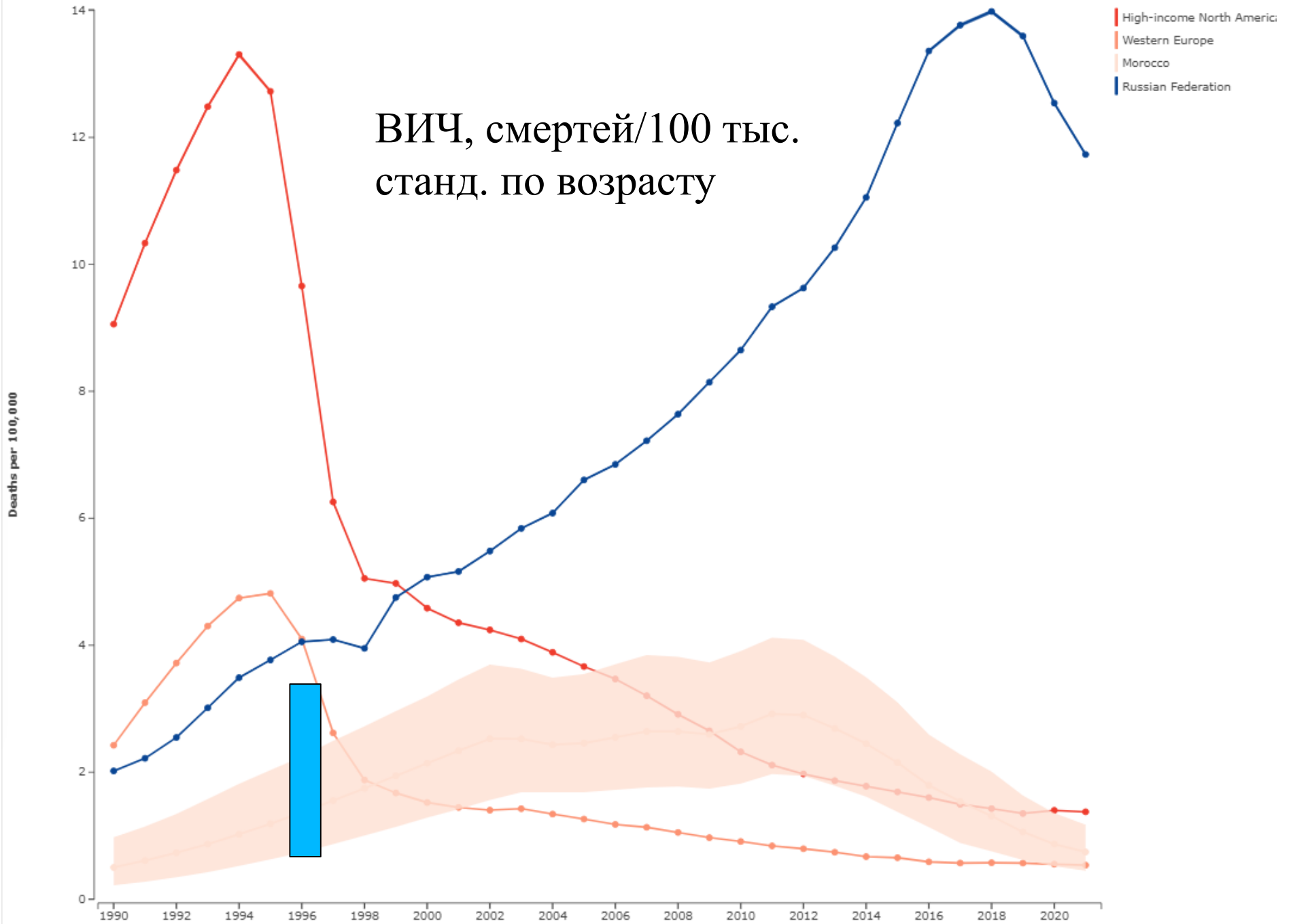
HIV/AIDS
Both sexes, Age-standardized

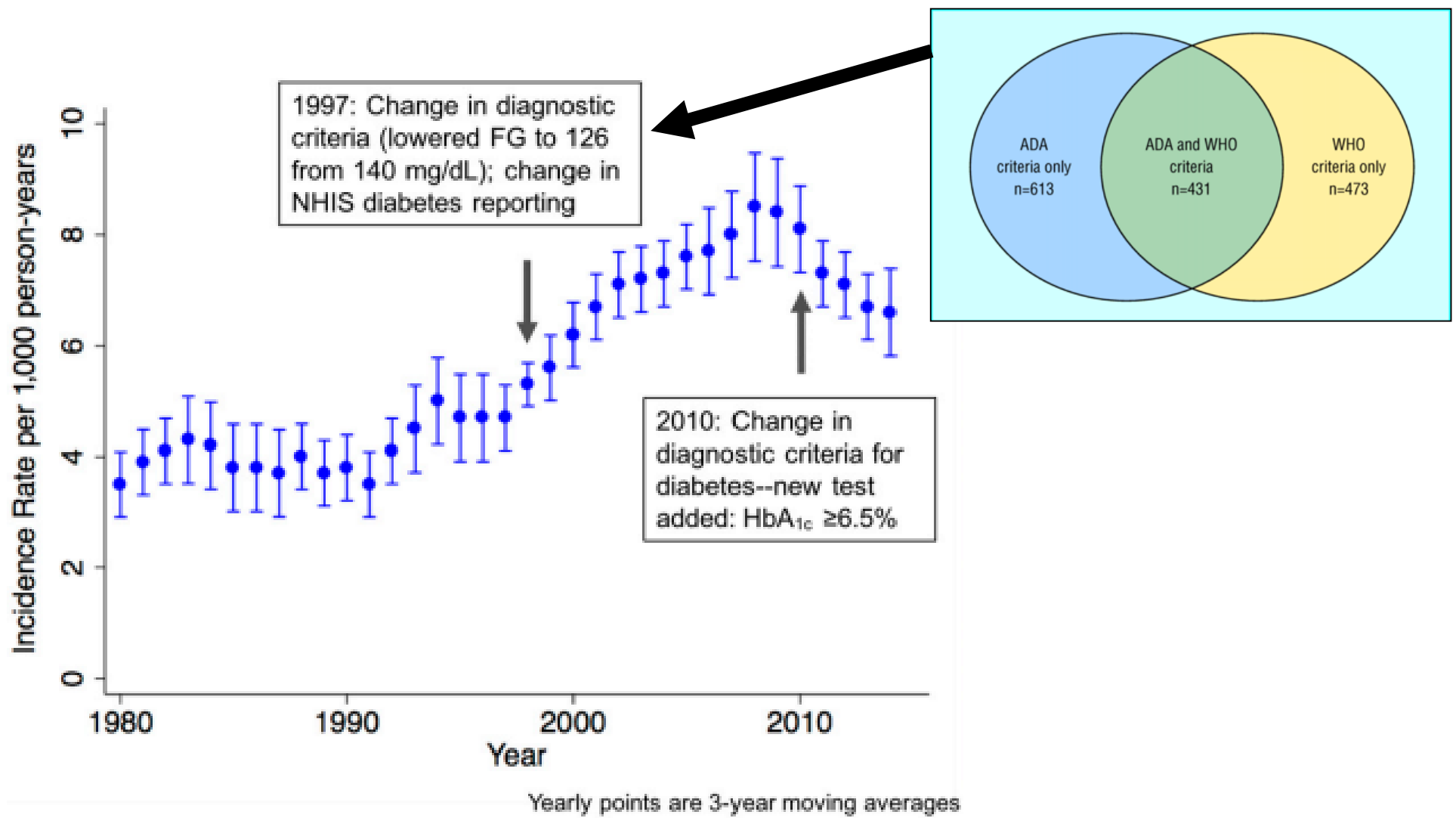
ВИЧ, преваленс
станд. по возрасту

Prevalent cases per 100,000



HIV/AIDS
Both sexes, Age-standardized

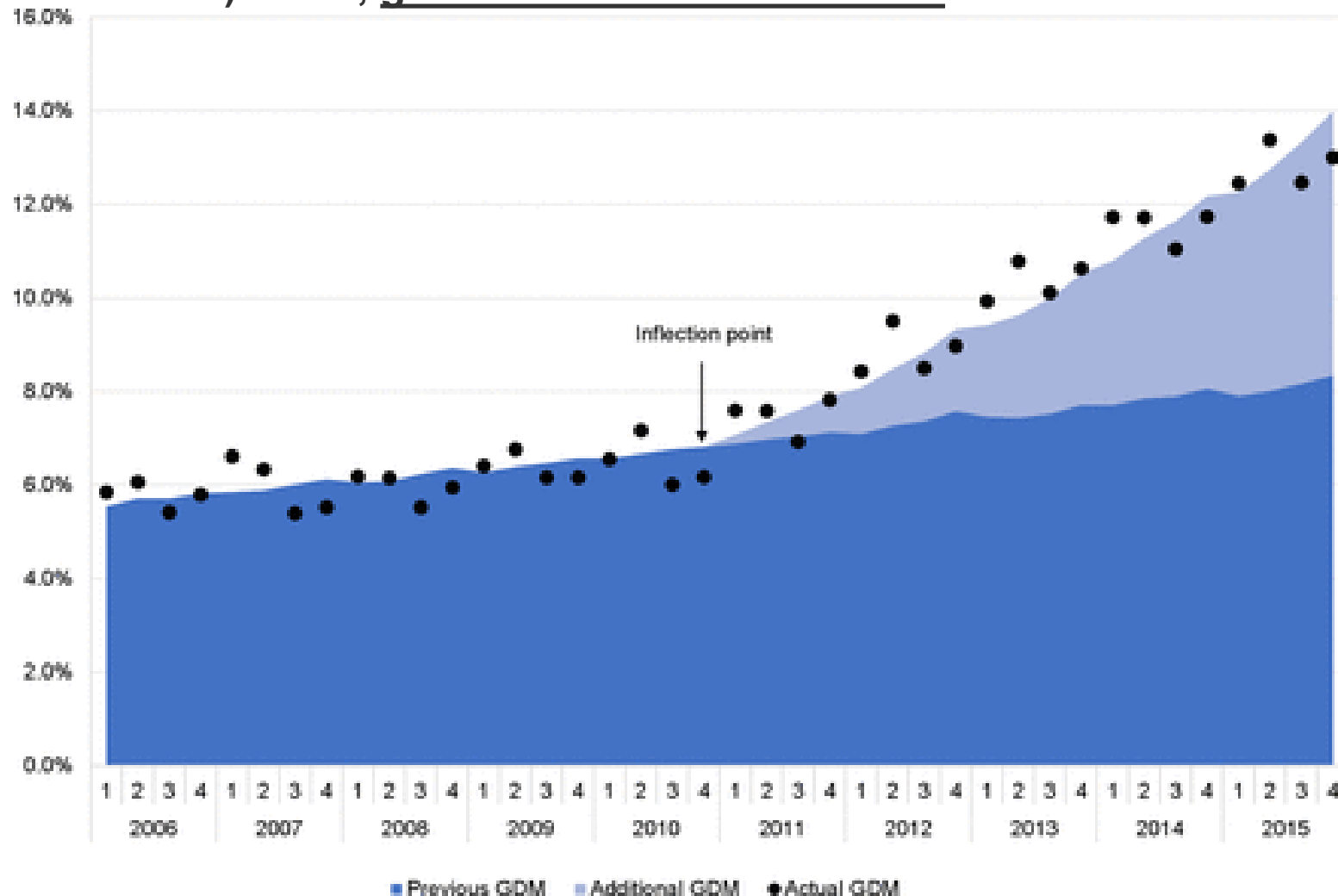




Age-adjusted diabetes incidence rate and 95% CIs, 1980–2014, NHIS. FG, fasting glucose. Source data:

<http://www.cdc.gov/diabetes/statistics/incidence/fig2.htm>

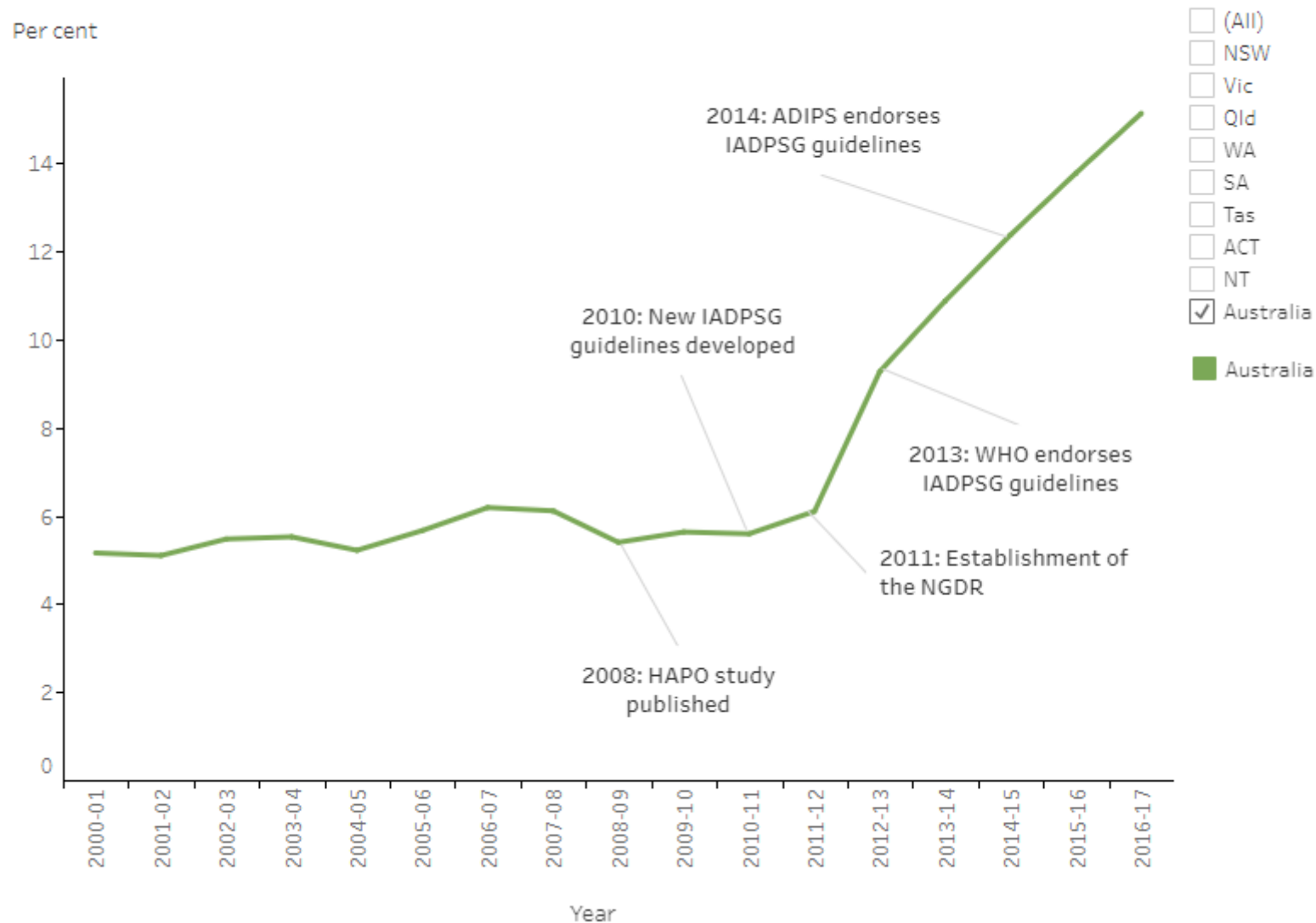
Predicted incidence of GDM by quarter assuming no change in diagnostic criteria ('previous GDM') and estimated additional GDM cases since the criteria change ('additional GDM'). GDM, gestational diabetes mellitus



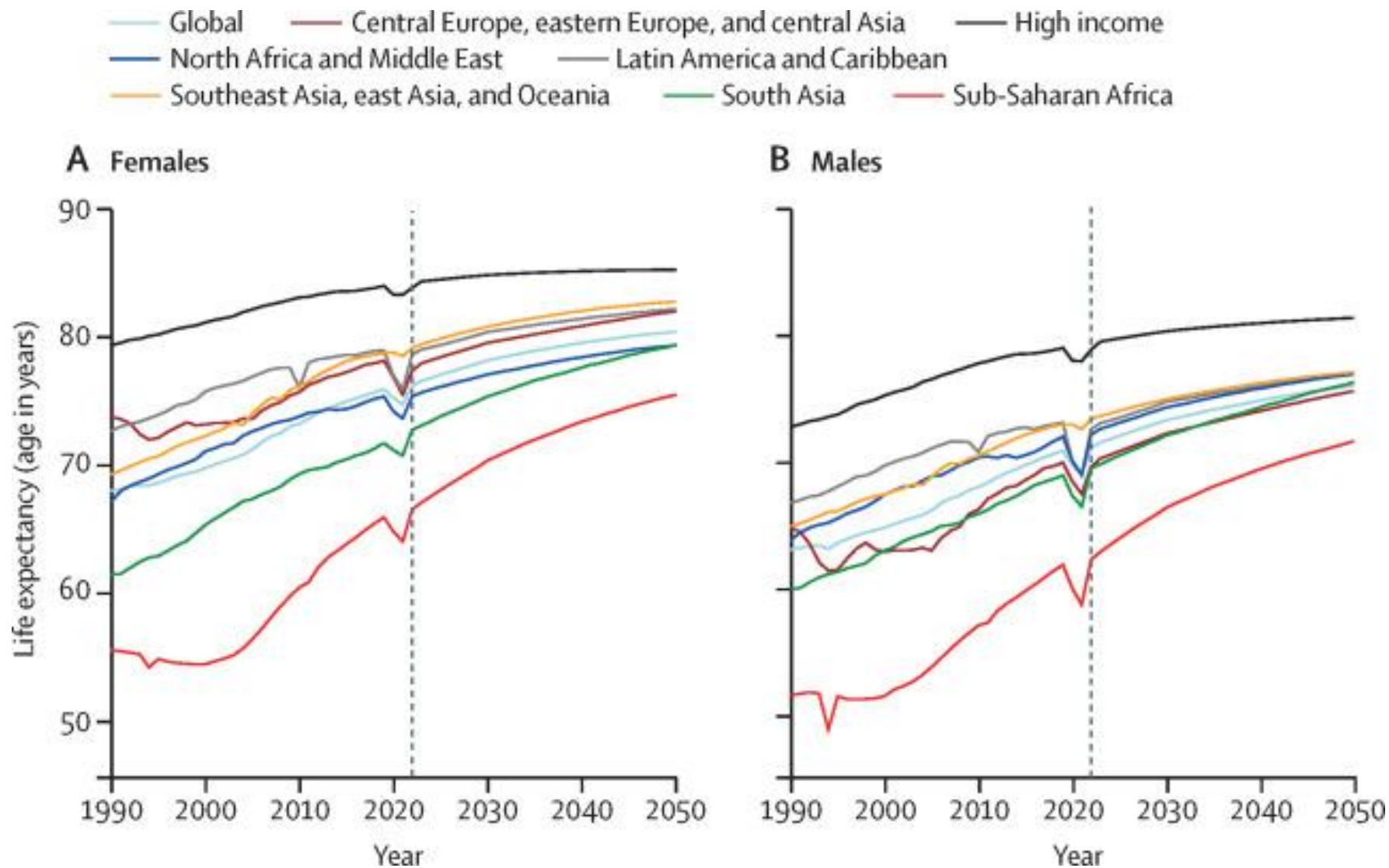
Deborah A Randall et al. BMJ Open Diab Res Care
2021;9:e002277



Figure 3: Incidence of gestational diabetes, 2000–01 to 2016–17



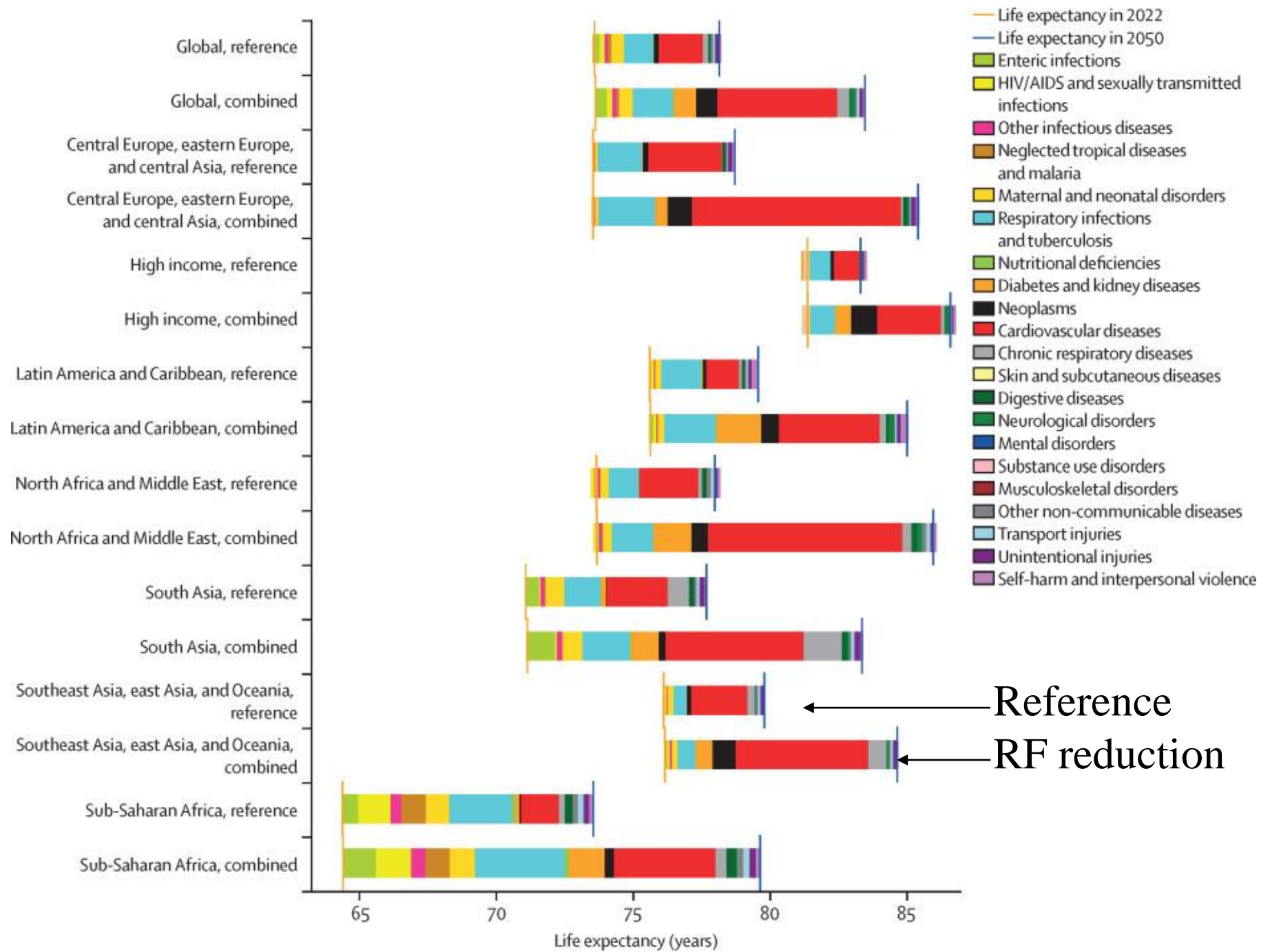
<https://www.aihw.gov.au/reports/diabetes/incidence-of-gestational-diabetes-in-australia/contents/changing-trends?generatedpdf=true&jobid=83298&jobtoken=a6f9fcc809614cc3aab51634b16b86a6>



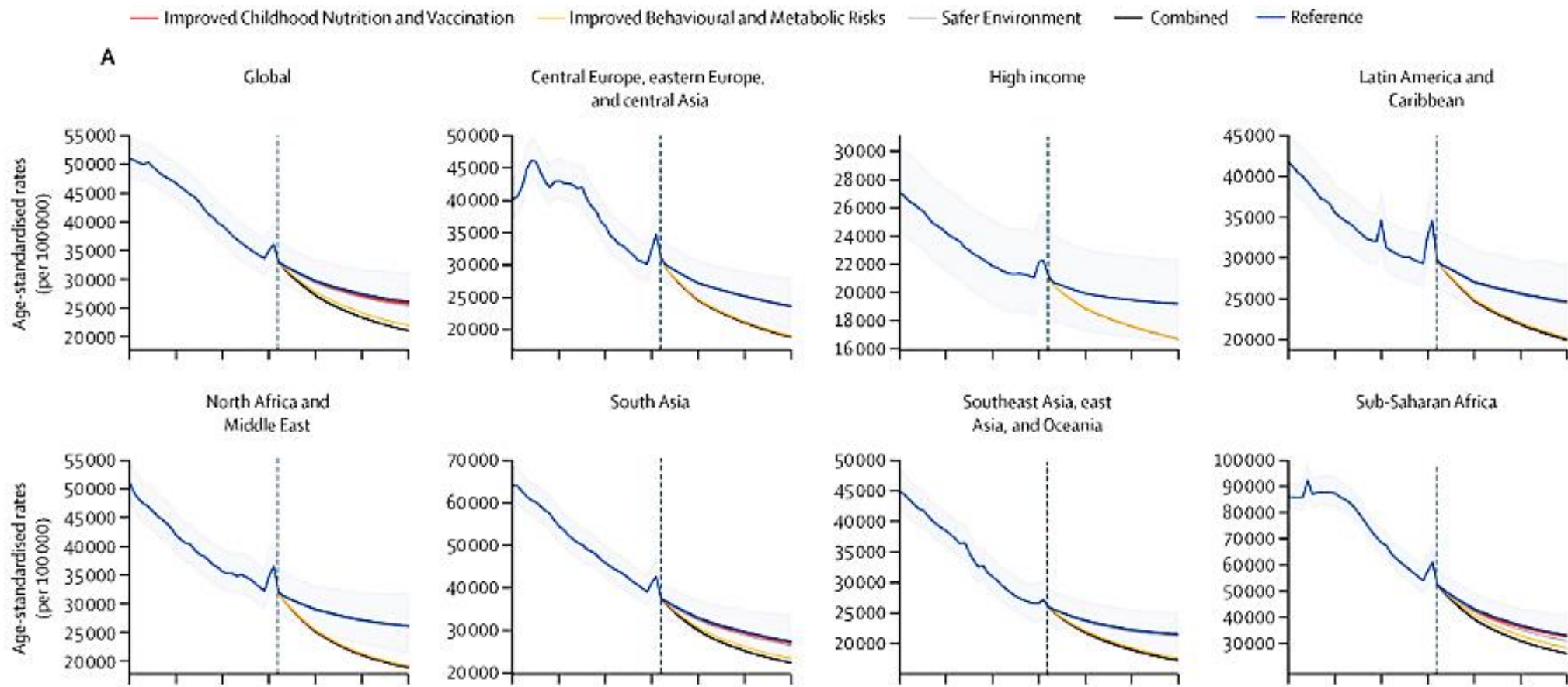
Global and super-regional life expectancy, 1990-2050

Burden of disease scenarios for 204 countries and territories, 2022-2050: a forecasting analysis for the Global Burden of Disease Study 2021

The Lancet, 2024, Volume 403, Issue 10440, 2204 - 2256



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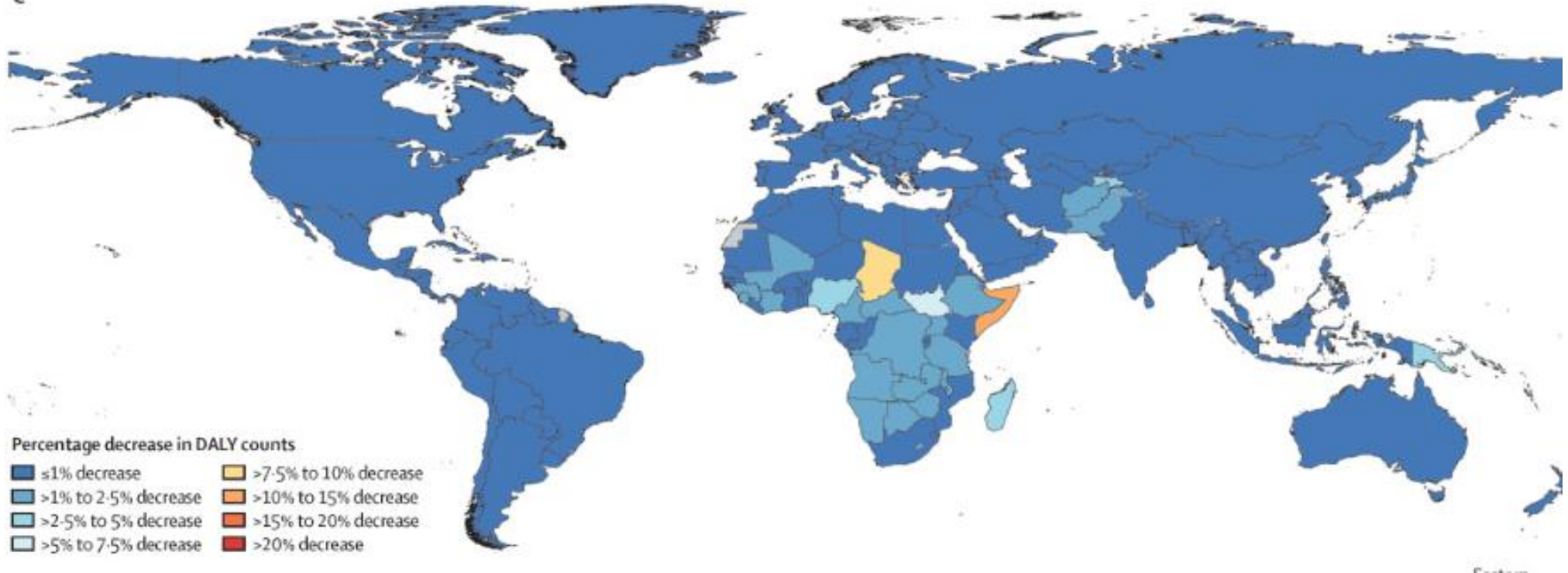


Global and super-regional all-cause age-standardised DALY rates

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% decrease in DALY counts in 2050 between the reference scenarios and Improved Childhood Nutrition and Vaccination Scenario

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Leading causes 2022

1 Ischaemic heart disease
2 Neonatal disorders
3 Stroke
4 Lower respiratory infections
5 Diabetes
6 COPD
7 COVID-19
8 Low back pain
9 Road injuries

Leading causes 2050

1 Ischaemic heart disease
2 Stroke
3 Diabetes
4 COPD
5 Neonatal disorders
6 Other musculoskeletal
7 Low back pain
8 Alzheimer's disease
9 Lower respiratory infections

Mean percentage change in number of DALYs

1·61 (-28·3 to 44·6)
12·9 (-4·67 to 34)
97·5 (82·1 to 114)
72·8 (39·6 to 113)
-37·2 (-48·4 to -23)
109 (97·2 to 119)
34·1 (28·1 to 40·4)
142 (106 to 173)
-14·6 (-25 to -4·23)

Leading 20 Level 3 causes of global DALYs

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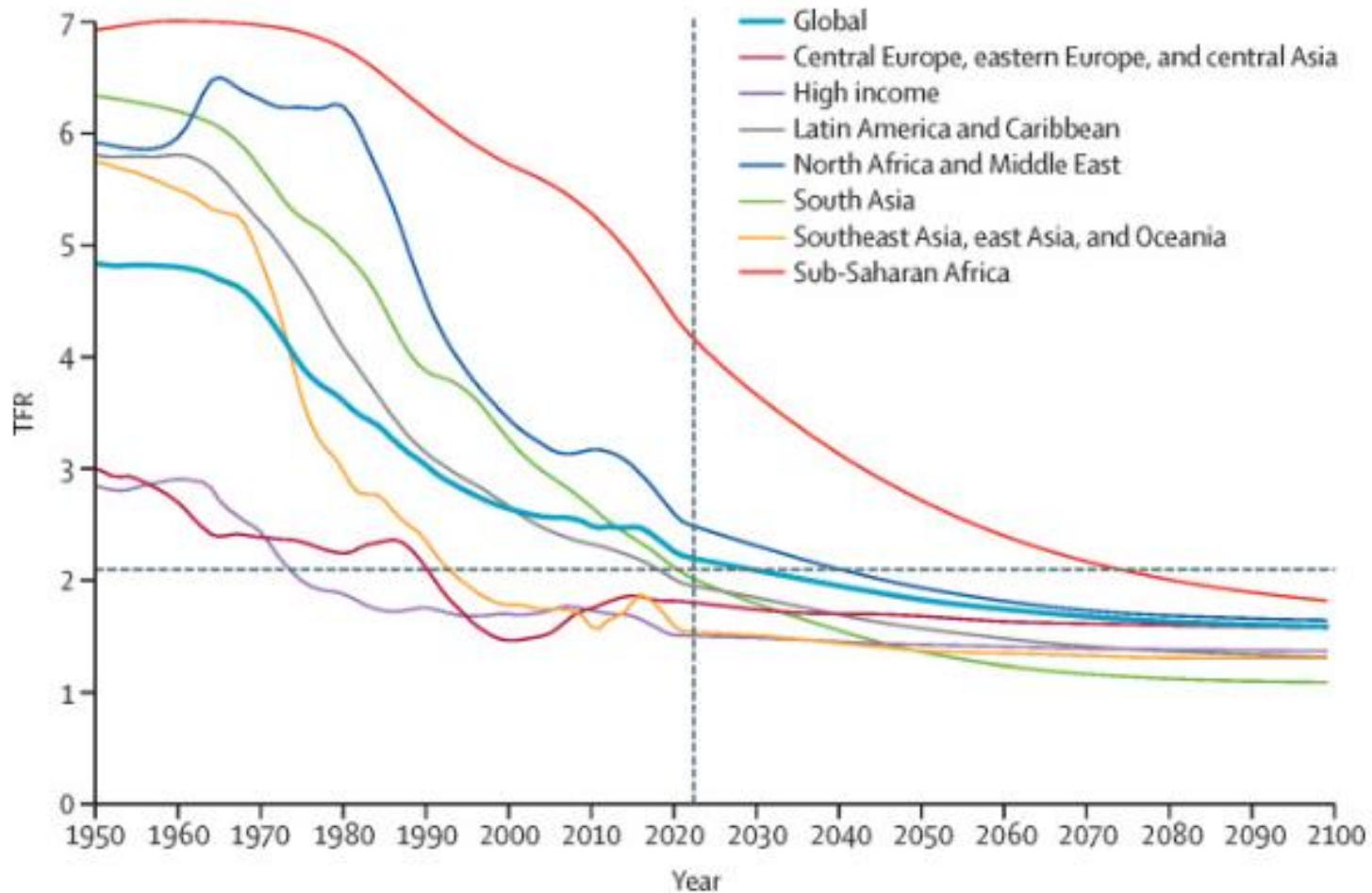
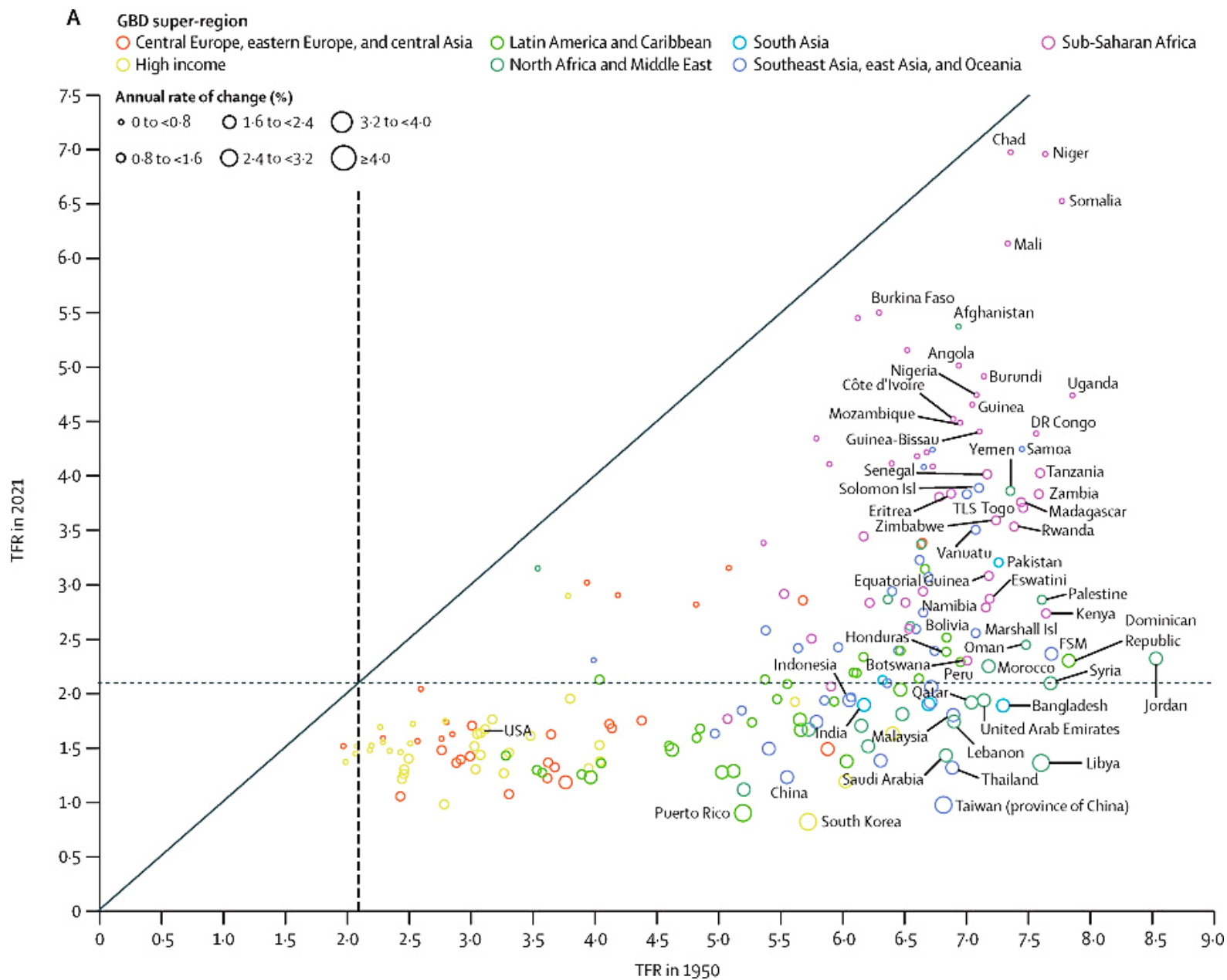
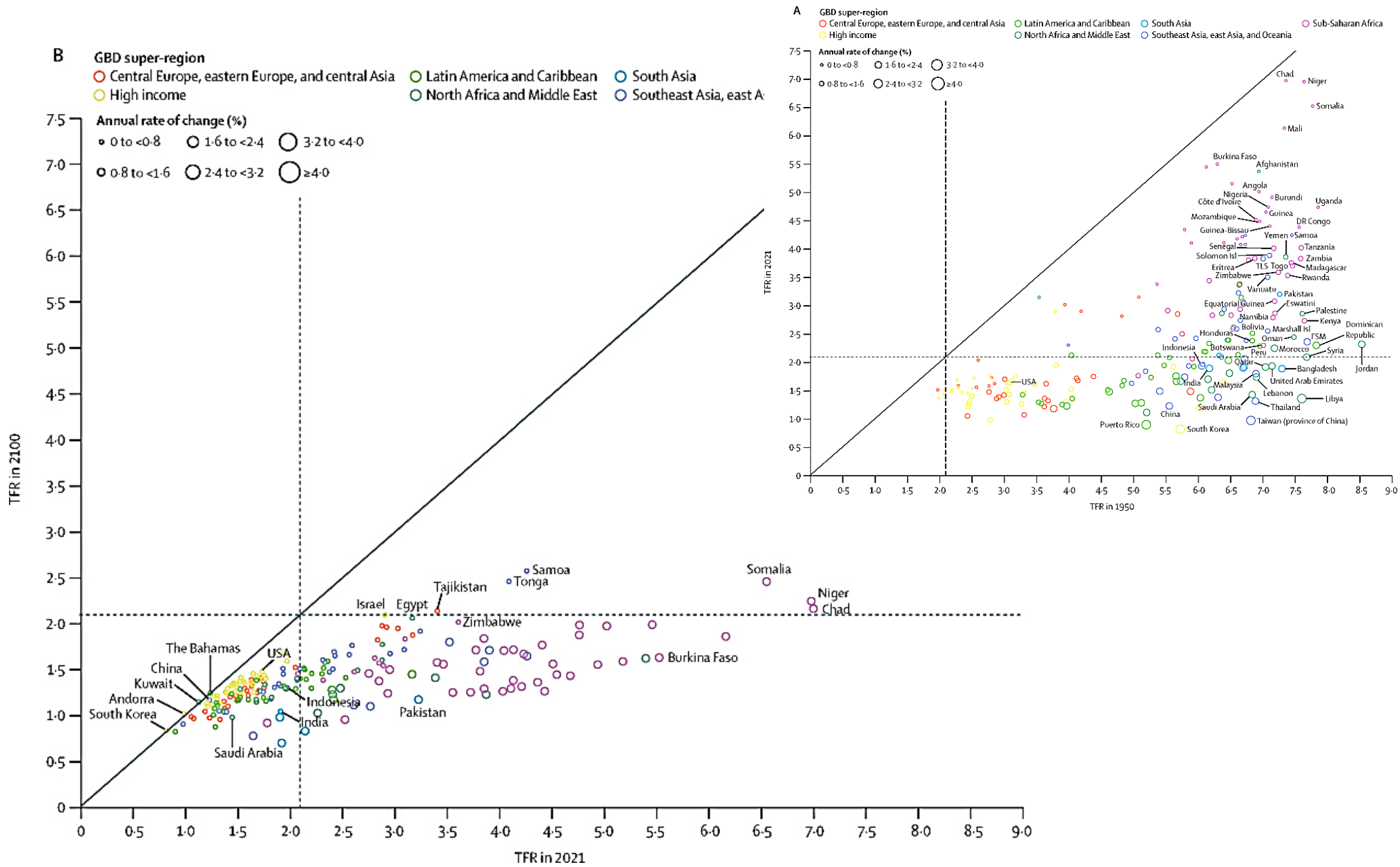


Figure 1 TFR, globally and by GBD super-region, 1950–2100

Global fertility in 204 countries and territories, 1950–2021, with forecasts to 2100: a comprehensive demographic analysis for the Global Burden of Disease Study 2021
 The Lancet, Volume 403, Issue 10440, 2024, 2057 – 2099



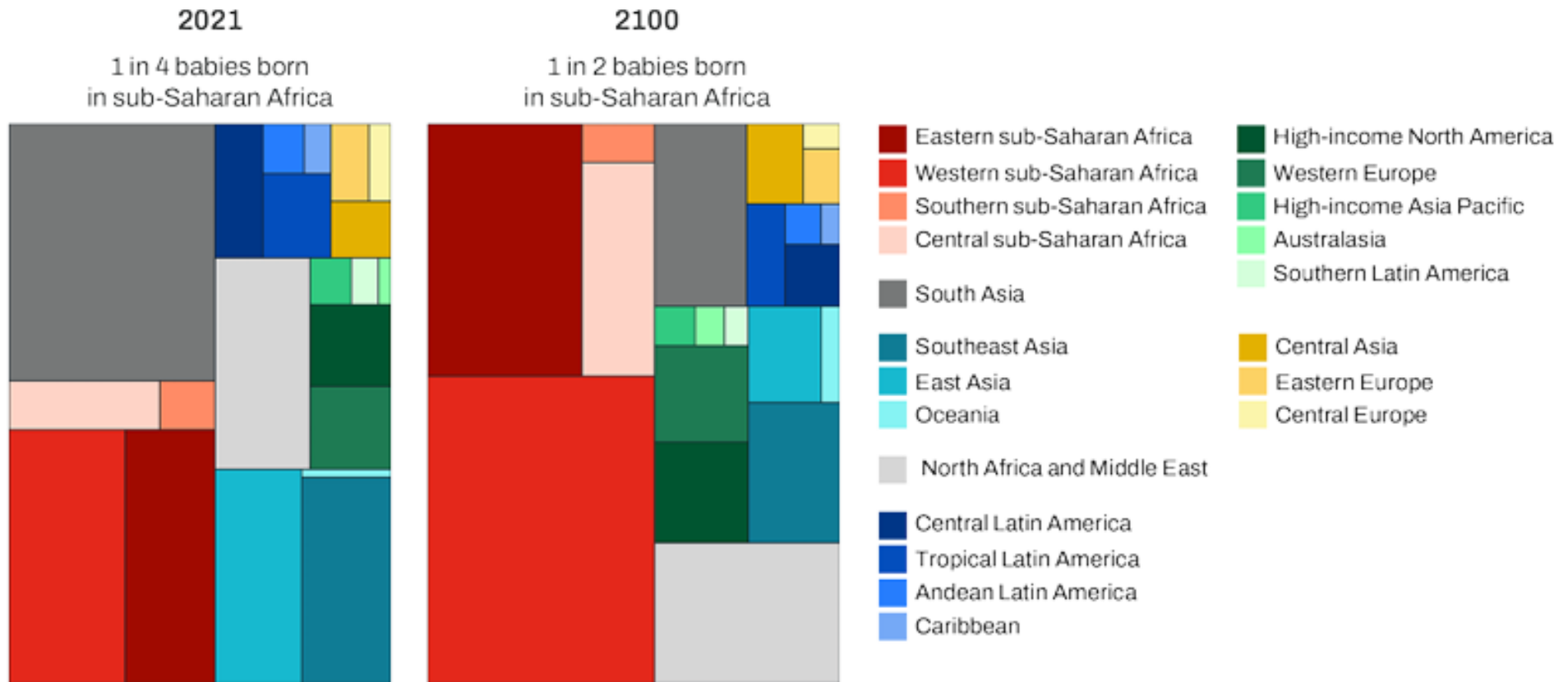
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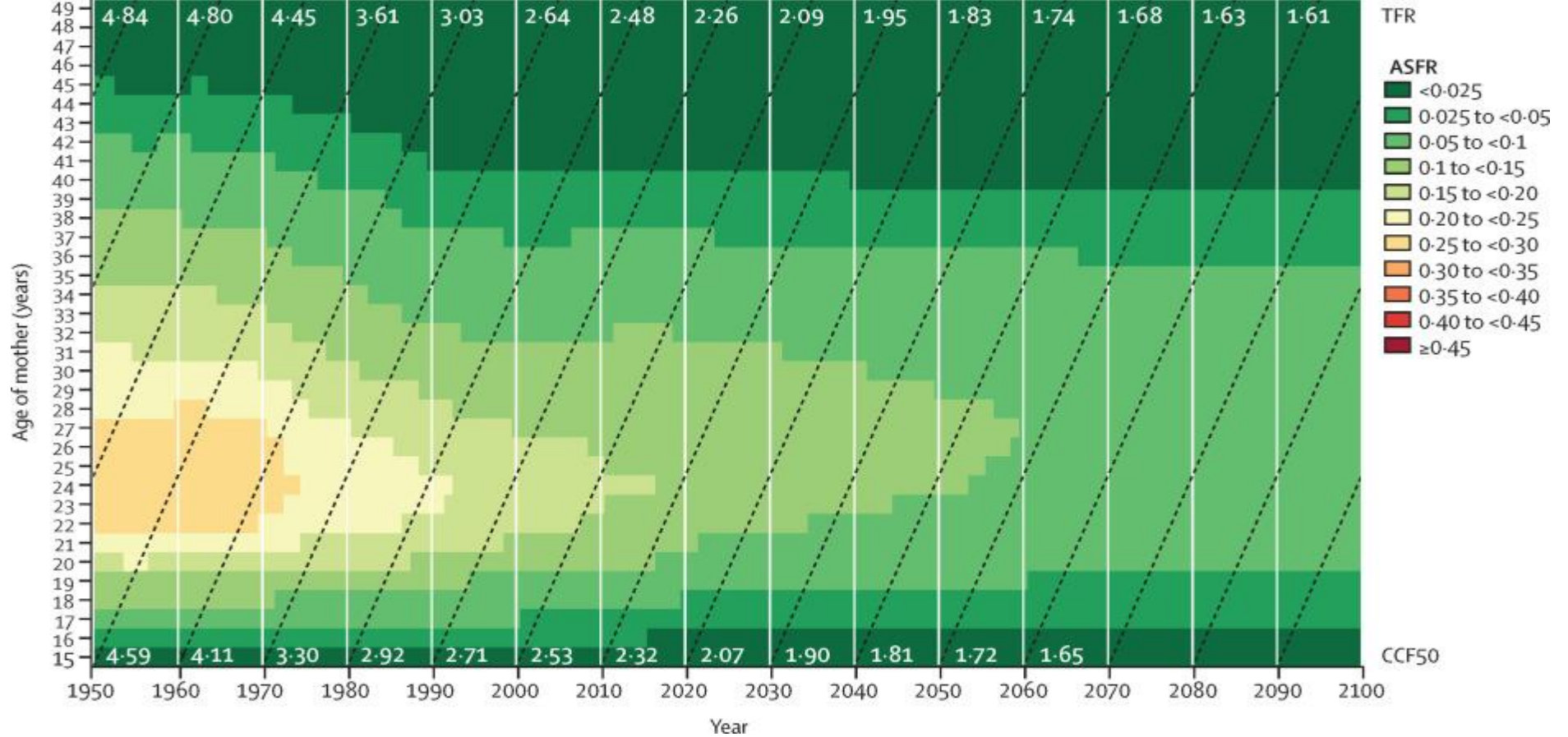
By 2100, more than half of all babies will be born in sub-Saharan Africa, primarily in Western and Eastern sub-Saharan Africa.

Proportion of births by GBD region in 2021 and 2100



Global fertility in 204 countries and territories, 1950–2021, with forecasts to 2100: a comprehensive demographic analysis for the Global Burden of Disease Study 2021

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single-year ASFR (colour fill), TFR (numbers at the top), and CCF50 estimates (white numbers at the bottom)...the vertical axis indicates age of mother.

CCF50 estimates – for each 10-y birth cohort. CCF50 is the sum of ASFR cells on the diagonal (ie, representing birth cohort), whereas TFR is the sum of ASFR cells vertically (ie, ASFR values from the same calendar year by age of mother). CCF50 is a cohort measure and years labelled on the x-axis are in period space. CCF50 values correspond to those entering their reproductive age (15–49 y) at that year (i.e. the birth cohort 15 y earlier). The vertical white lines indicate each decade, and the diagonal black dashed lines assist with visualising cohort space. ASFR=age-specific fertility rate. CCF50=completed cohort fertility at age 50 years. TFR=total fertility rate.

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