# State of Obesity Globally

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The National Academy of Sciences Building October 9, 2018



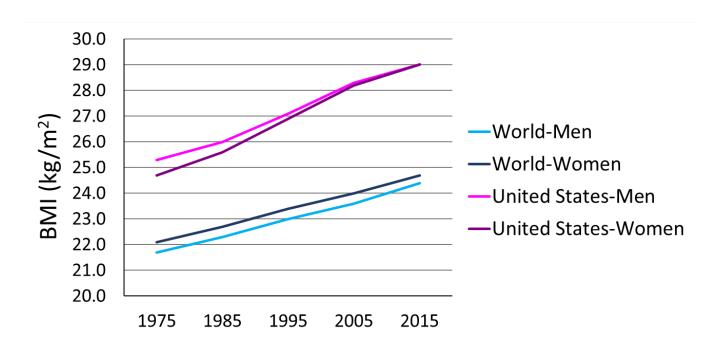
The God of Wealth, 2<sup>nd</sup> Century AD, National Museum of India, Delhi



#### **Outline**

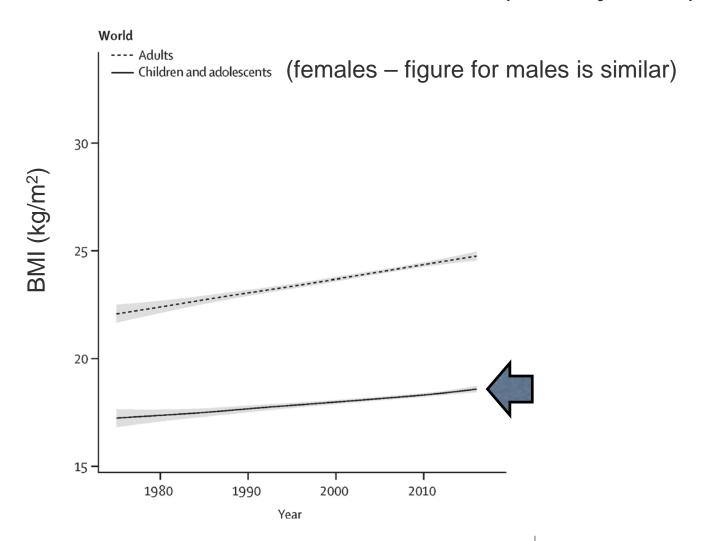
- Global trends in BMI and obesity
  - Adults vs. children & adolescents
  - Geographic differences
  - SES differences
- Consequences of an unabated epidemic

## Global Trends in Adult Body Mass Index (BMI)



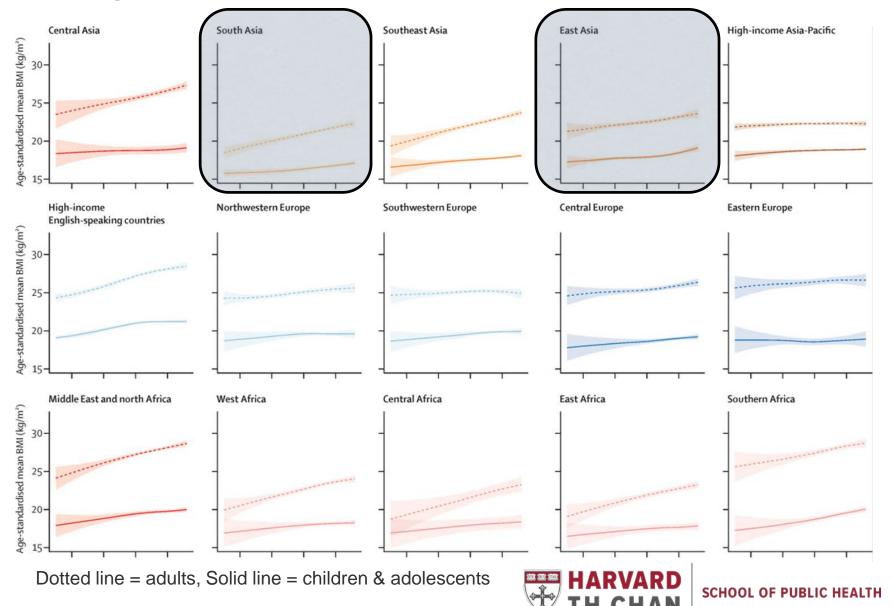


#### Trends in Children & Adolescent BMI (5-19 years)

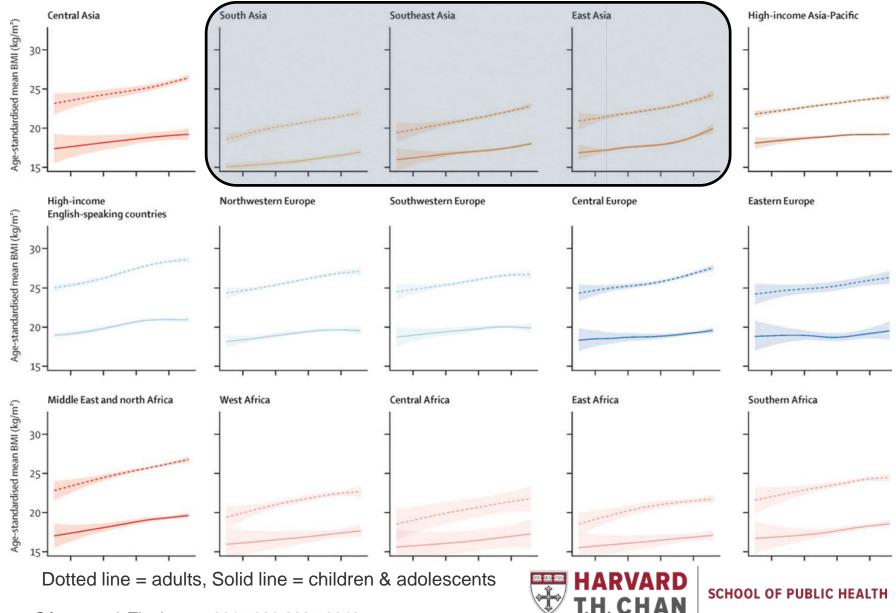




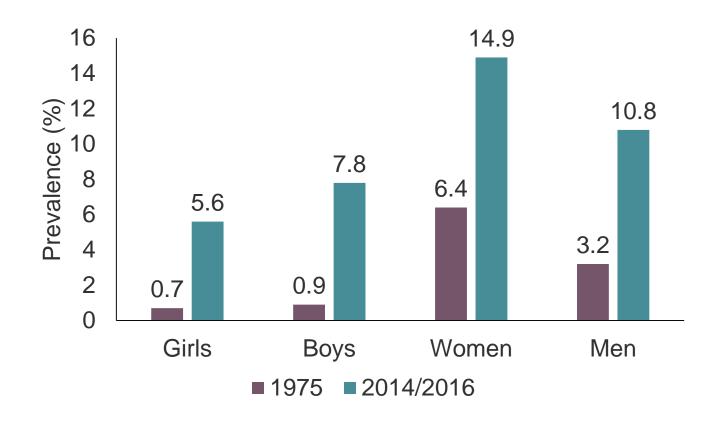
#### Regional Differences in BMI - Females



#### Regional Differences in BMI - Males

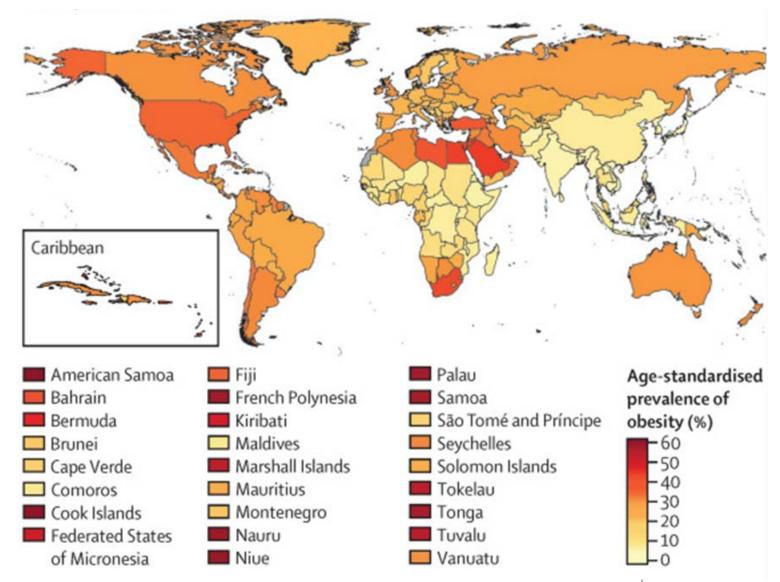


#### Trends in Global Prevalence of Obesity



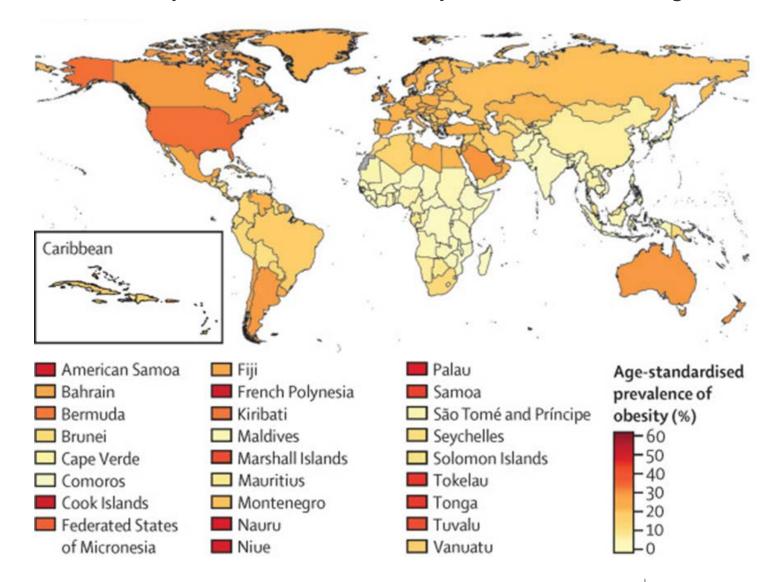


#### Between-Country Differences in Obesity Prevalence Among Women, 2014



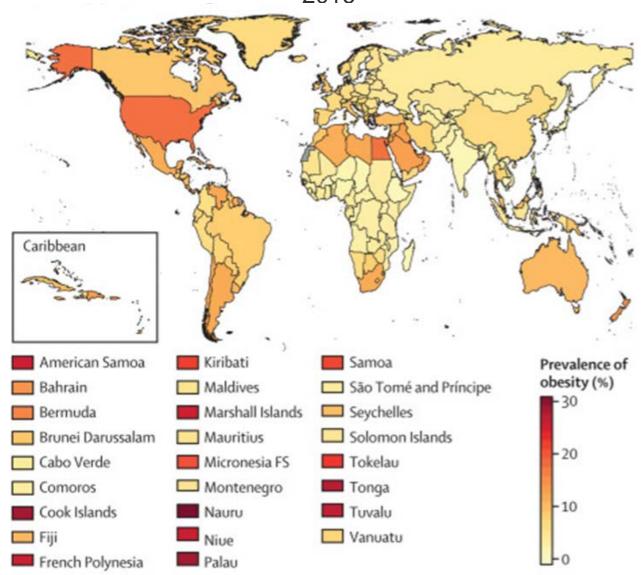


#### Between-Country Differences in Obesity Prevalence Among Men, 2014



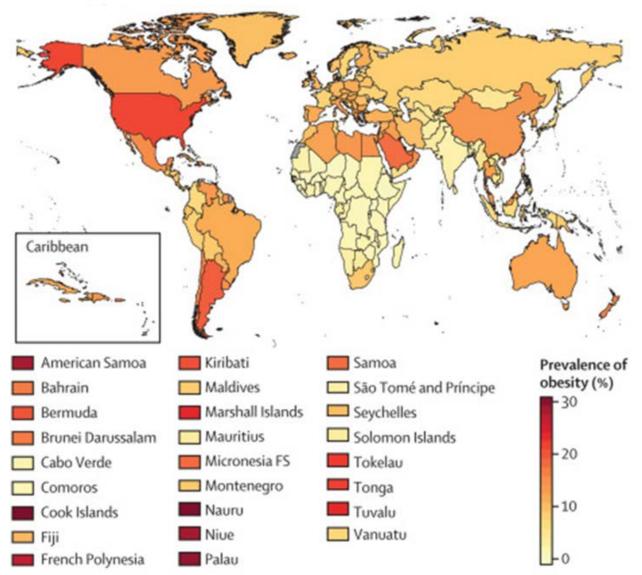


#### Between-Country Differences in Obesity Prevalence Among Girls (5-19 years), 2016



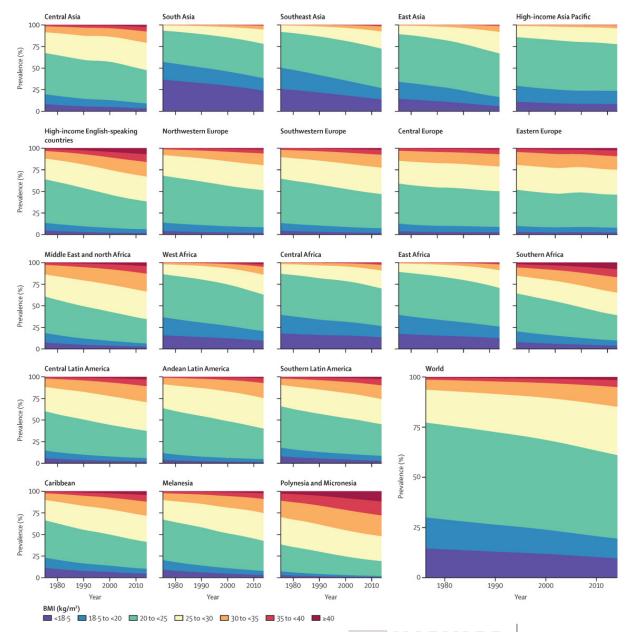


### Between-Country Differences in Obesity Prevalence Among Boys (5-19 years), 2016



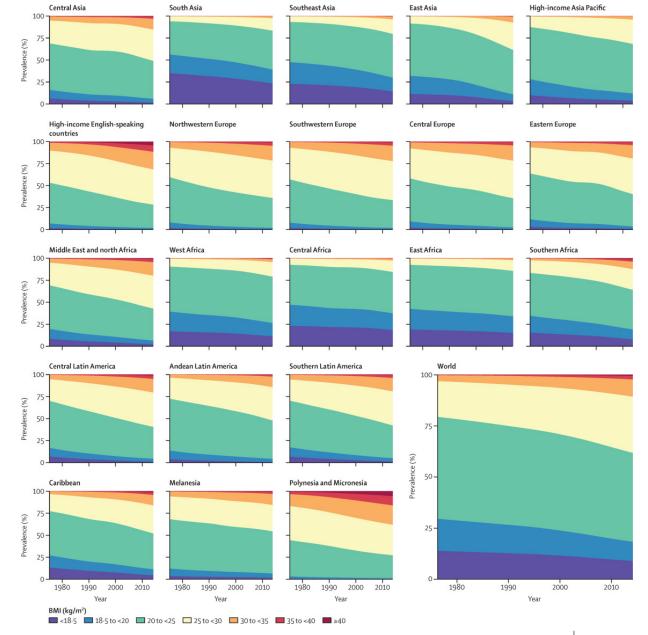


#### Women



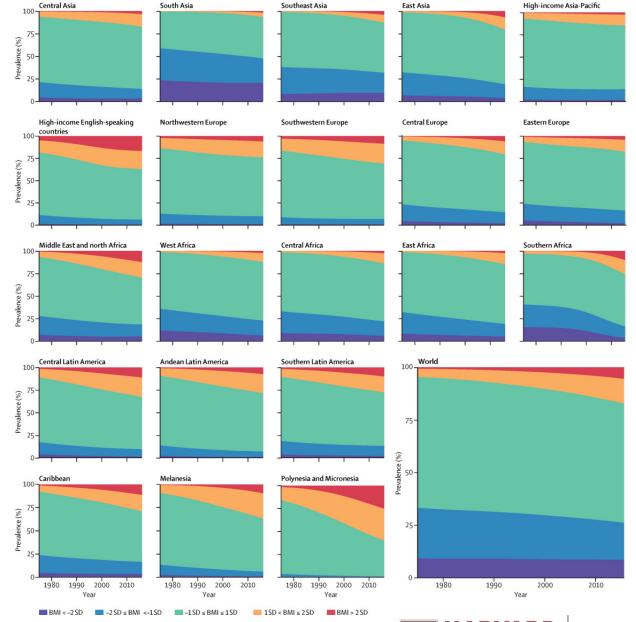


#### Men



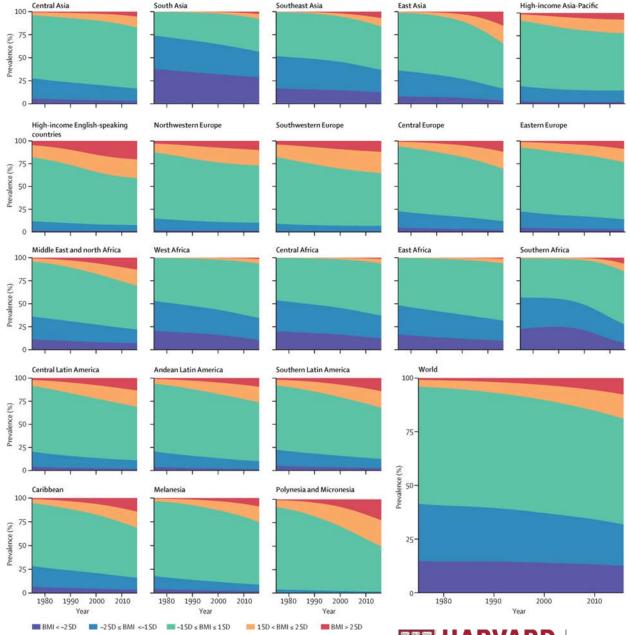


#### Girls



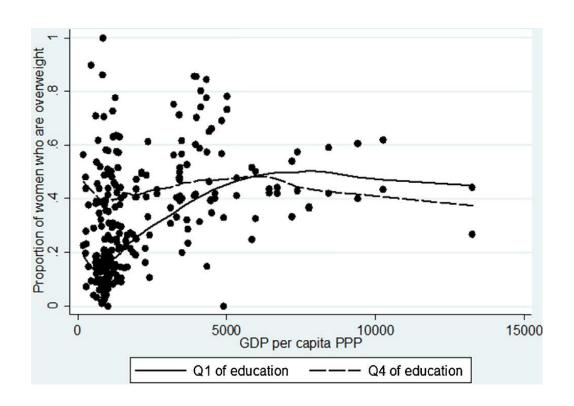


Boys



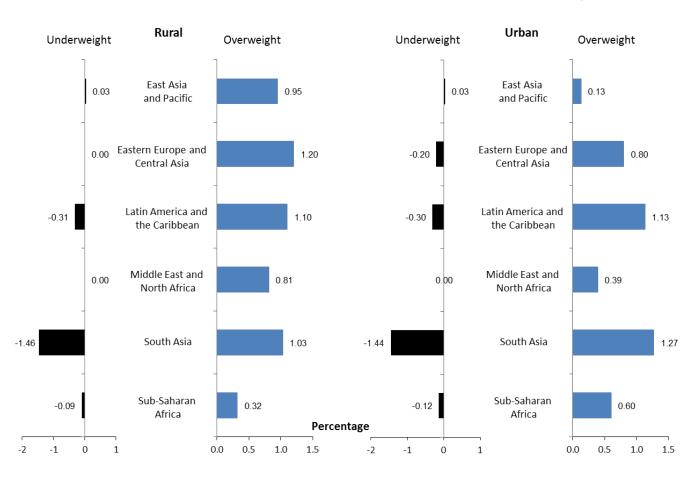


## Socioeconomic Moderators: Education and the GDP-BMI Curve





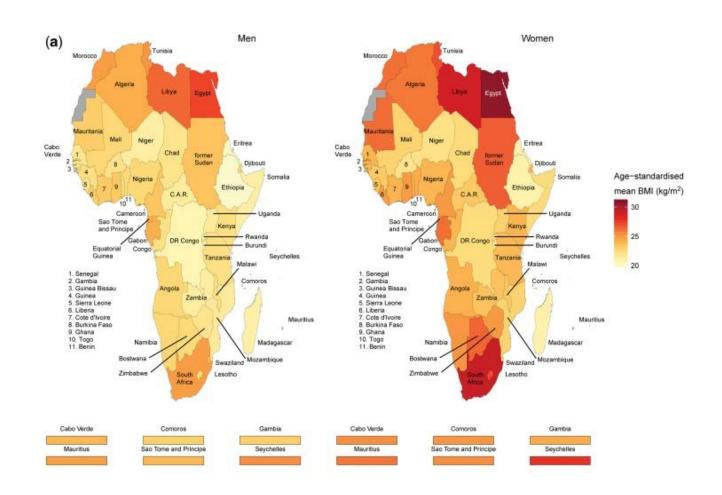
#### Rural Areas Are Catching Up



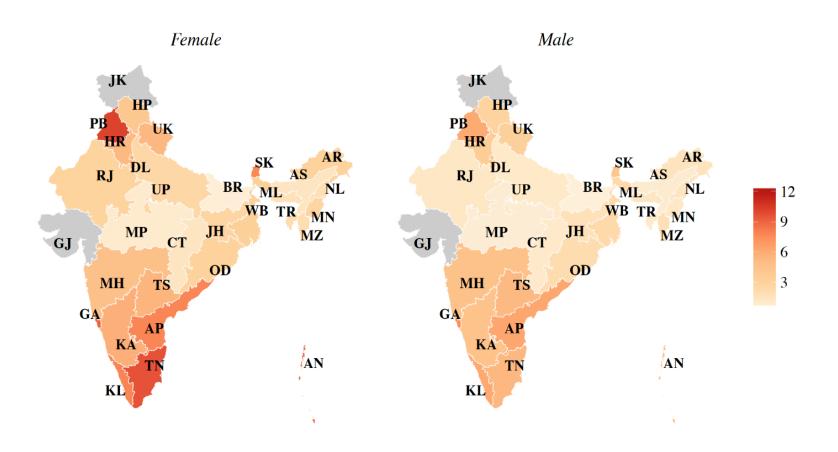
Change in Prevalence Among Women (19-49 years) in 33 LMICs



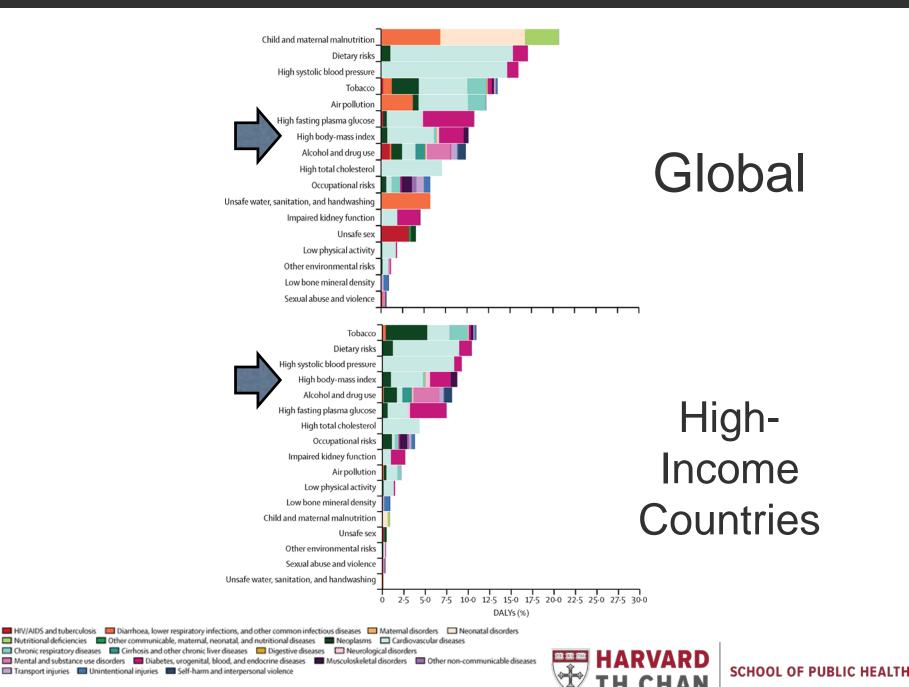
#### Variation in Mean BMI Within Africa



#### Variation in BMI ≥30 kg/m<sup>2</sup> Within India







# Loss of Disease-Free Years Between 40-75 years of age

	Men	Women
Underweight (<18.5 kg/m <sup>2</sup> )	1.8 years	0.0 years
Normal weight (18.5-<25 kg/m <sup>2</sup> )	Ref	Ref
Overweight (25-<30 kg/m <sup>2</sup> )	1.1 years	1.1 years
Class I obesity (30-<35 kg/m <sup>2</sup> )	3.9 years	2.7 years
Class II-III obesity (≥35 kg/m²)	8.5 years	7.3 years

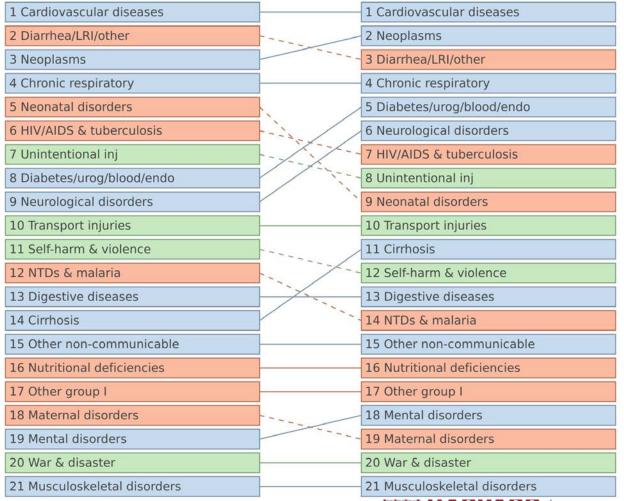


#### **Diabetes Mortality Has Jumped**

1990

2016

Deaths per 100,000



#### Summary

- 50 million girls and 74 million boys estimated to have obesity in 2016
- 390 million women and 281 million men estimated to have obesity in 2016
- Obesity is increasing in every region of the world
  - Greatest increases among children & adolescents in east Asia, the Middle East and north Africa, south Asia and high-income English-speaking region