





Shabir A. Madhi

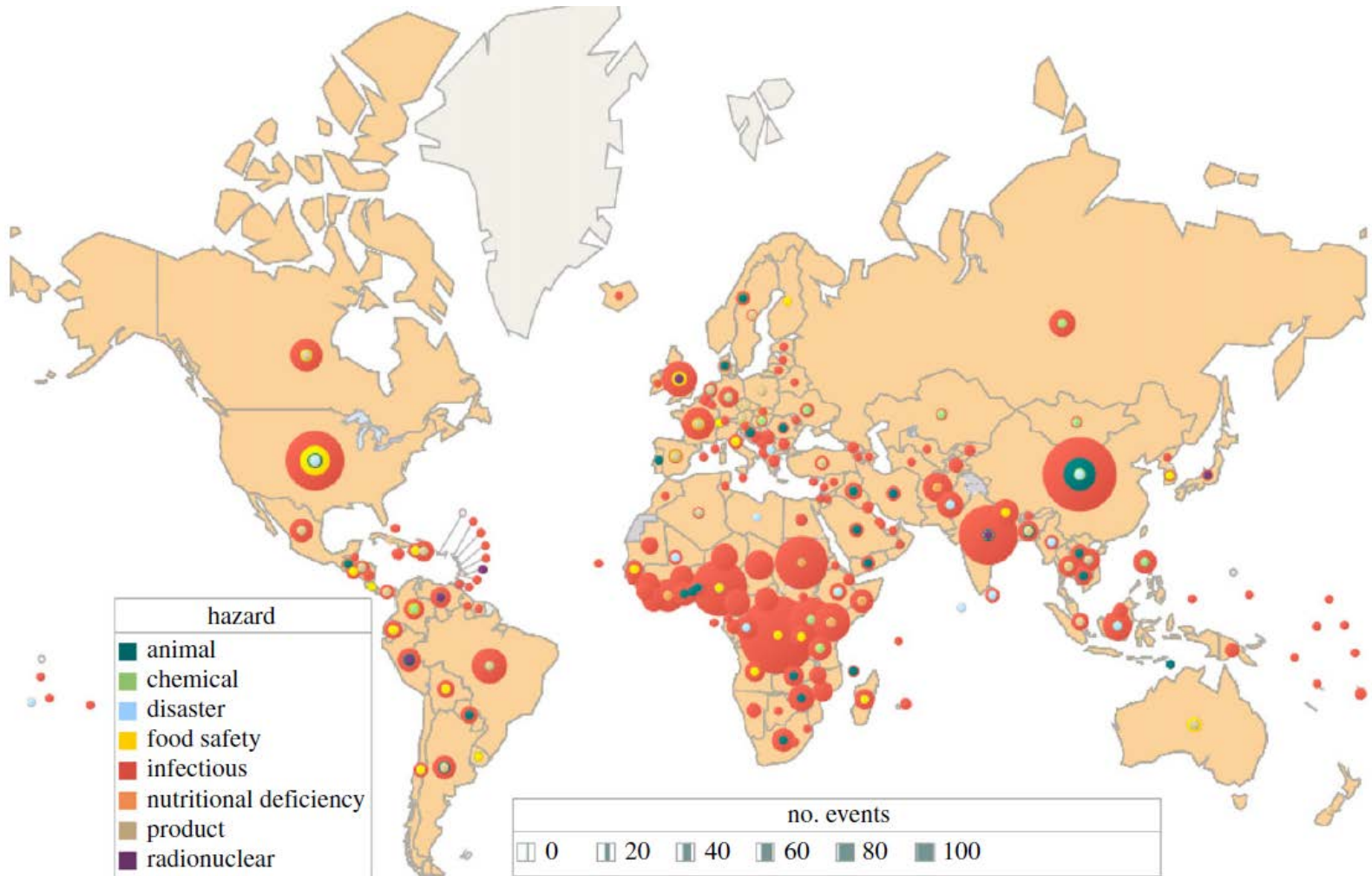
**Health inequalities and
communicable diseases**



**National Institute for Communicable Diseases &
University of Witwatersrand, South Africa
Respiratory and Meningeal Pathogens Research Unit,
& DST/NRF: Vaccine Preventable Diseases**



Eighty-four percent of 2797 International Health Hazards Between 2001 to 2013 Were Due to Infectious Diseases

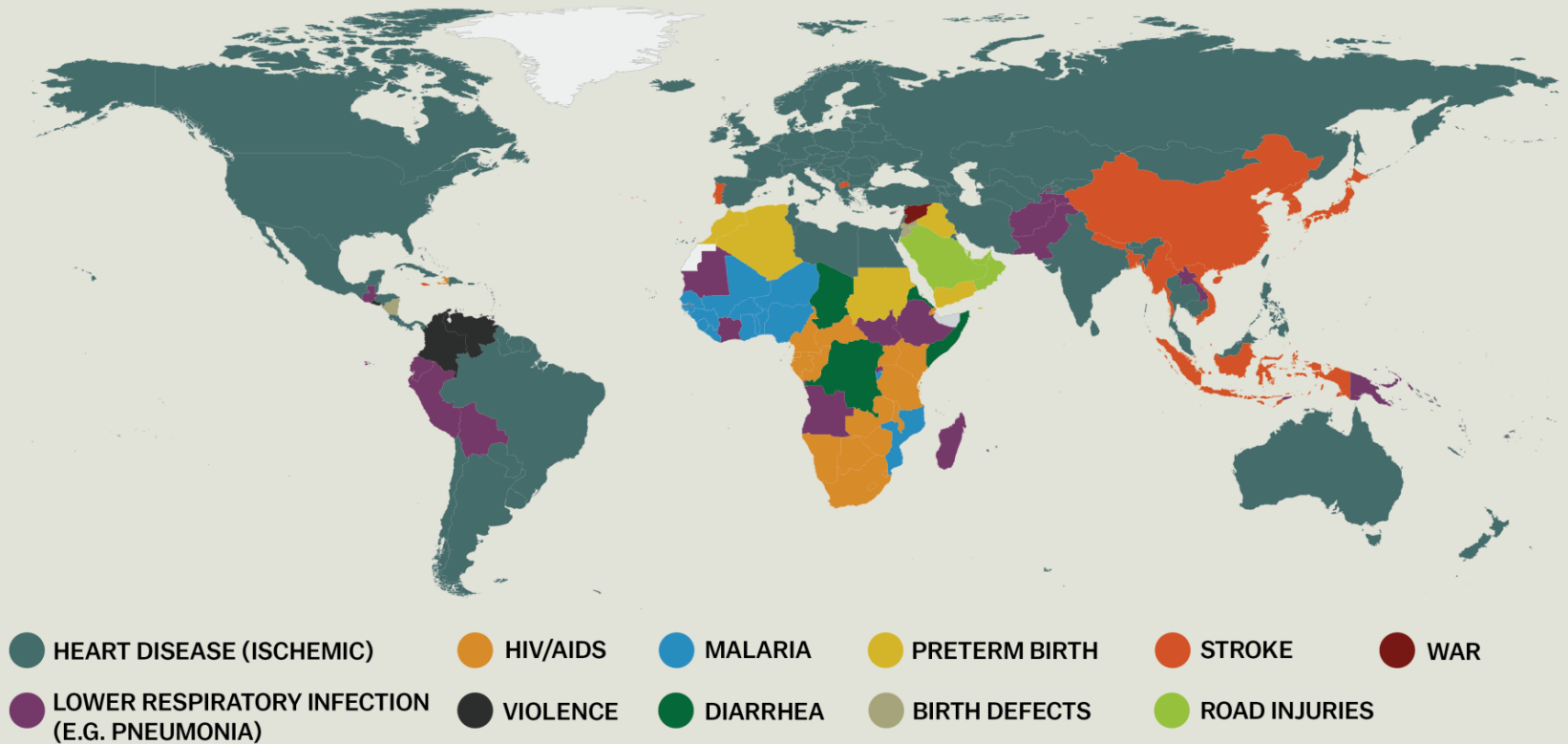


Infectious Diseases Dominate as Leading Cause of Death in Africa

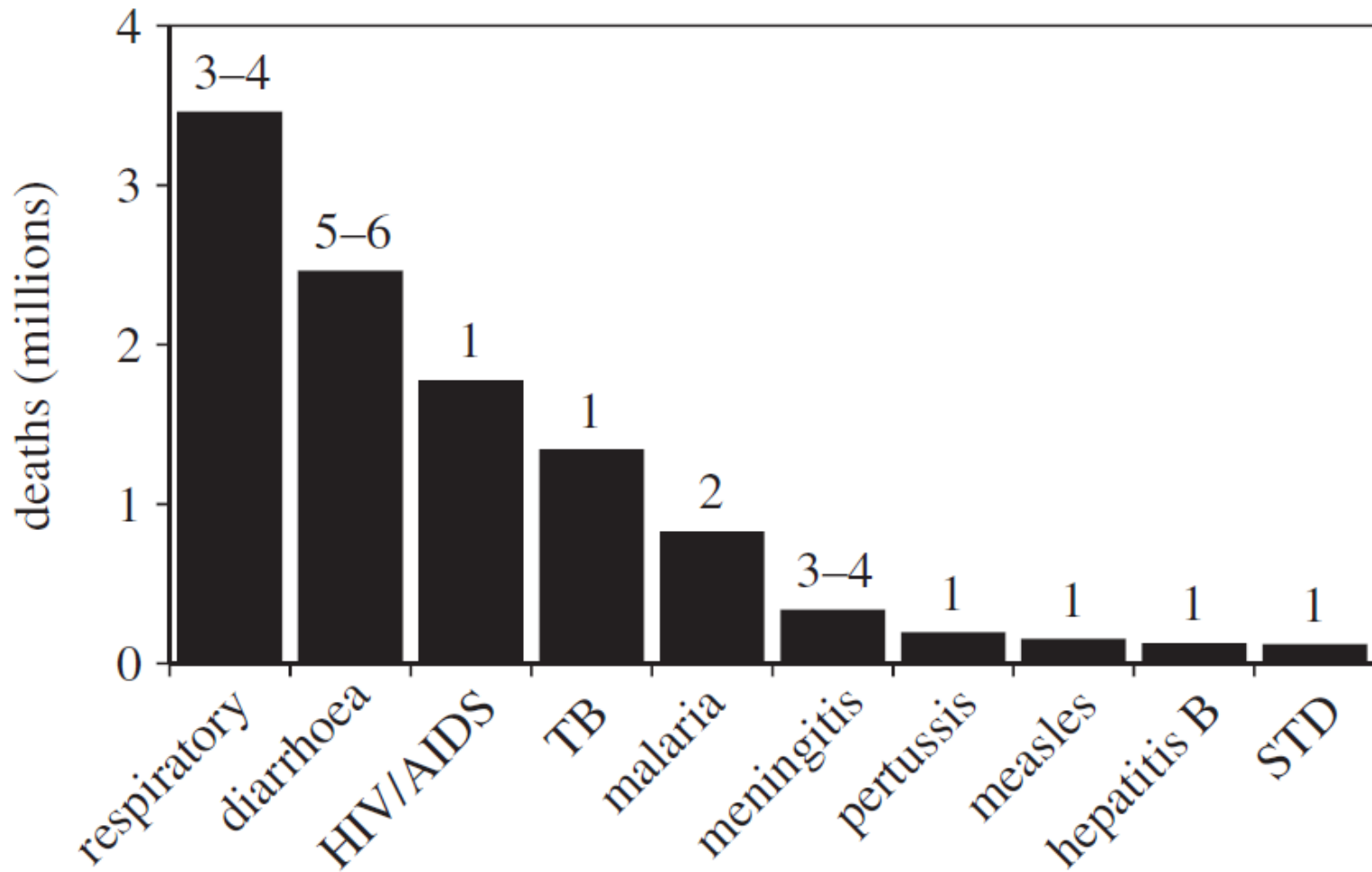


Leading causes of lost years of life in 2013

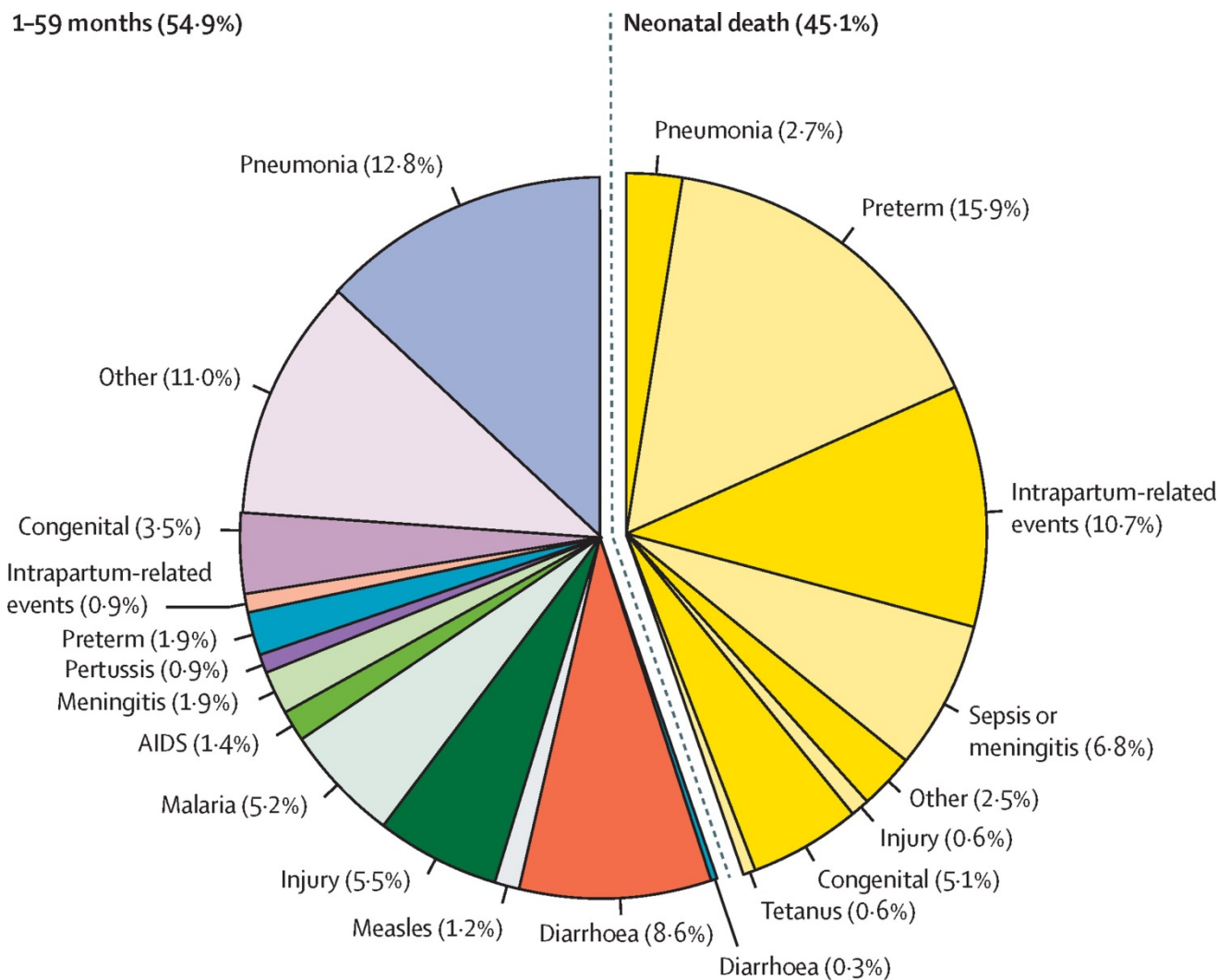
GLOBAL BURDEN OF DISEASE STUDY & *THE LANCET*, 2014



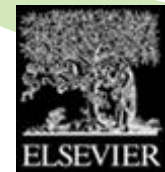
Leading Infectious Disease Causes of Death, 2010



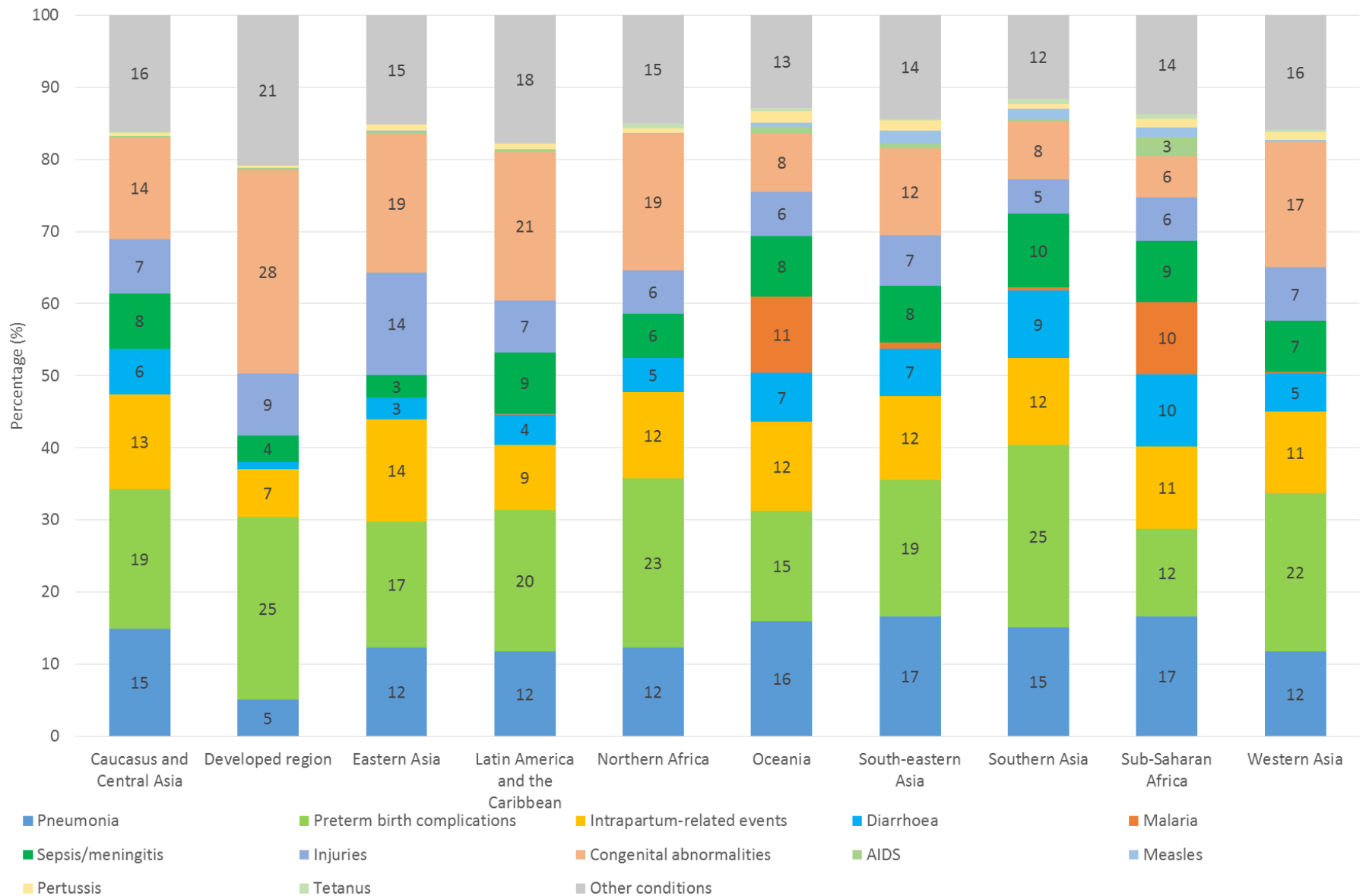
Global Causes of Under-5 Mortality, n=5.8 million in 2015



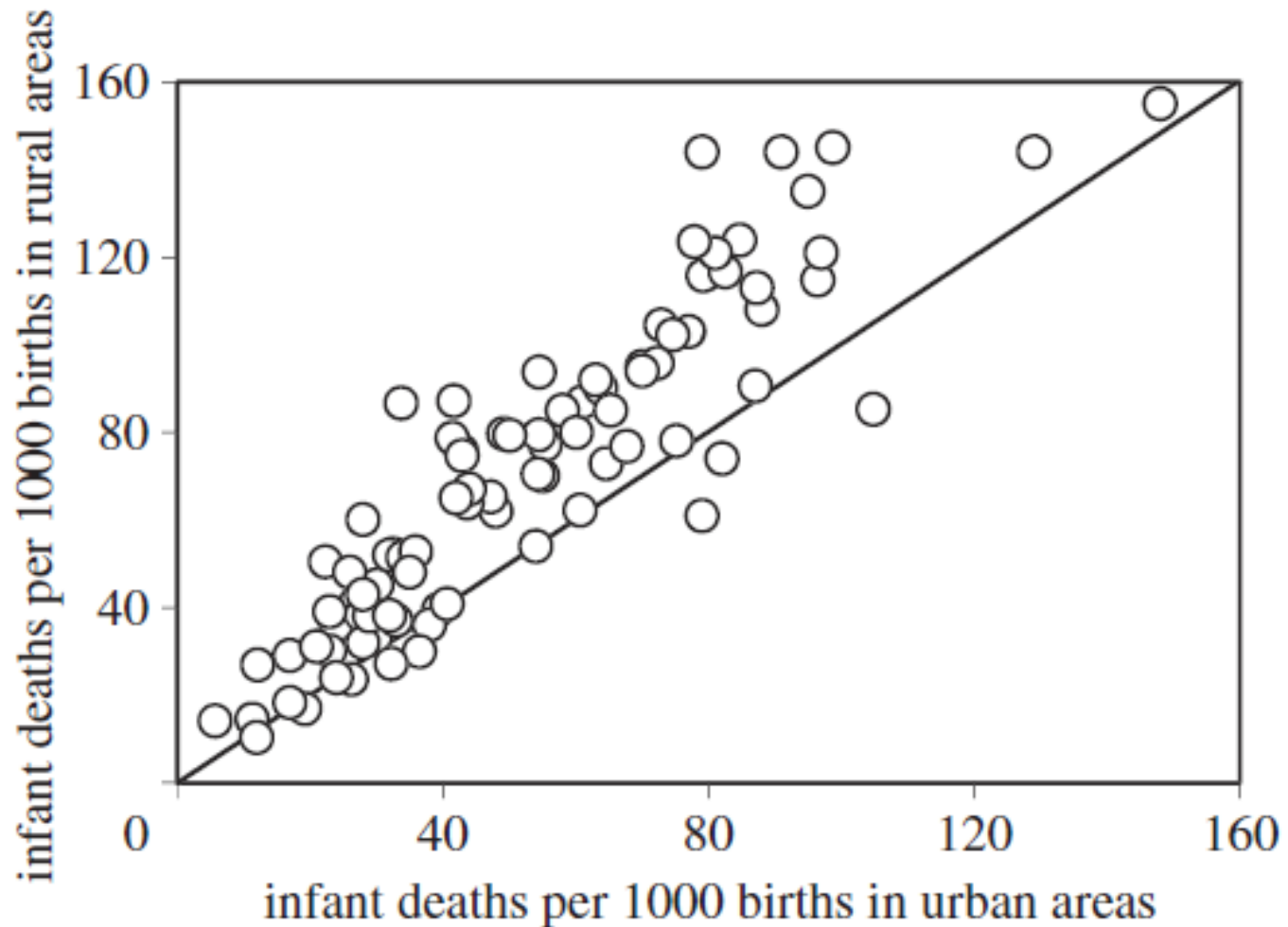
The Lancet 2016 388, 3027-3035 DOI: (10.1016/S0140-6736(16)31593-8)



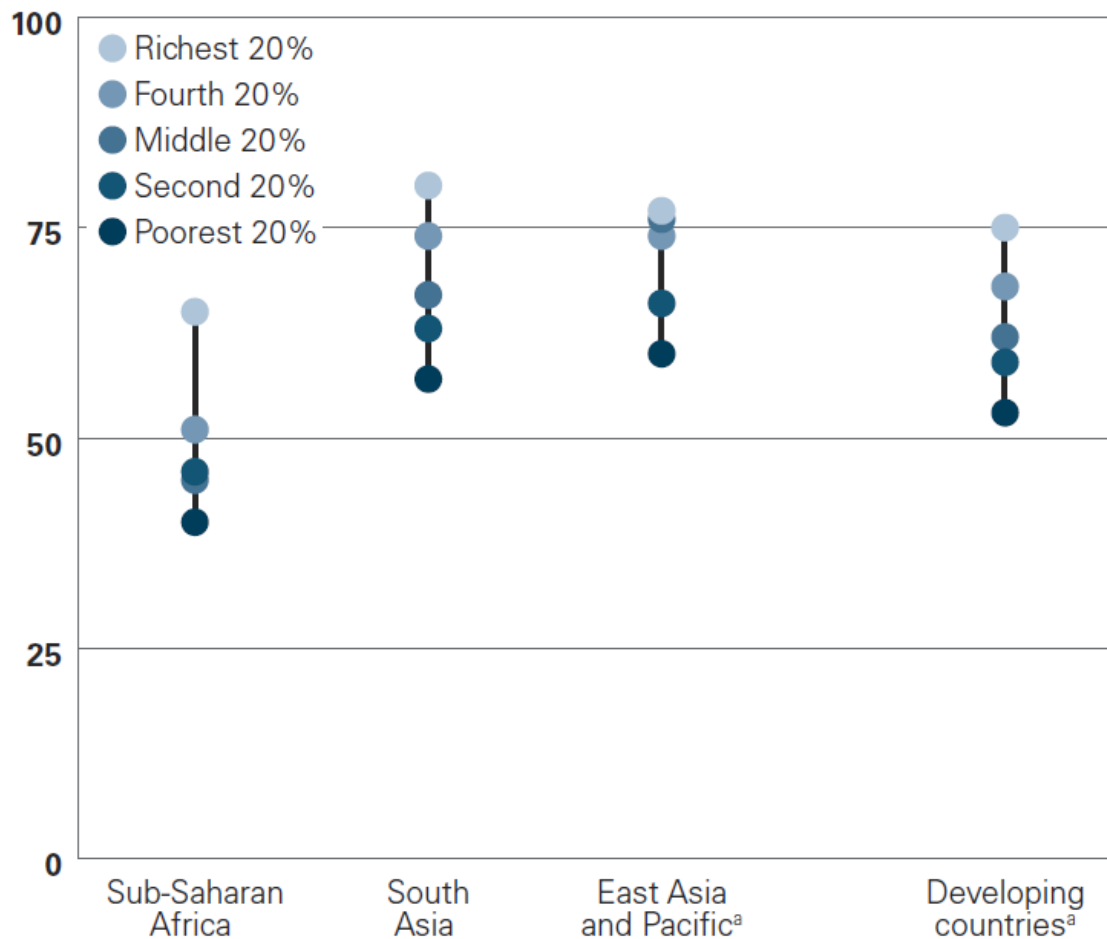
Causes of Under-5 Mortality by MDG Region in 2015



Infant Mortality Rates Higher in Rural Than Urban Areas in Majority of 90 Countries



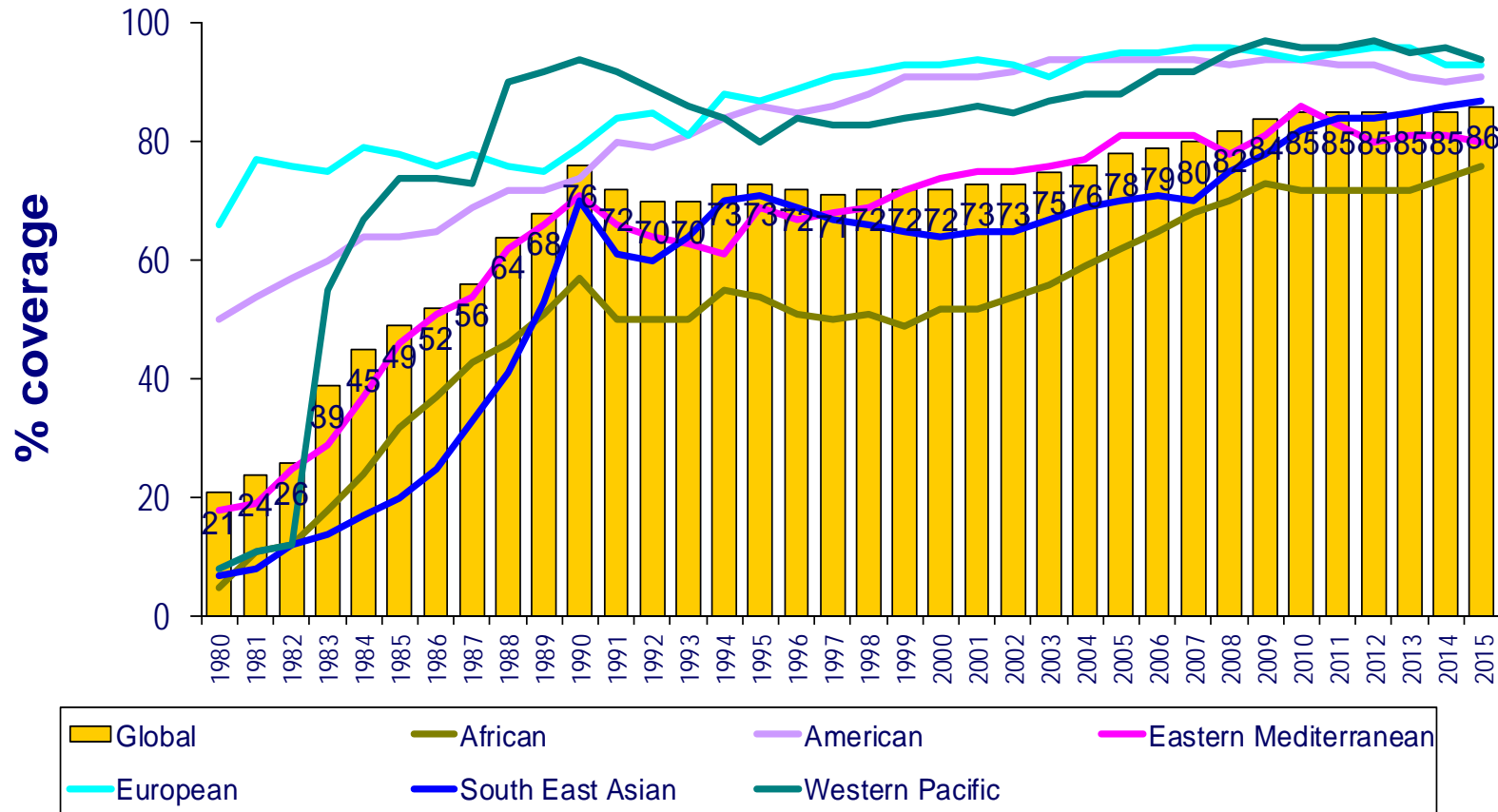
Proportion of Children Under-5 with Suspected Pneumonia taken to Appropriate Healthcare Provider, by Wealth quintile and Region



a. Excludes China.

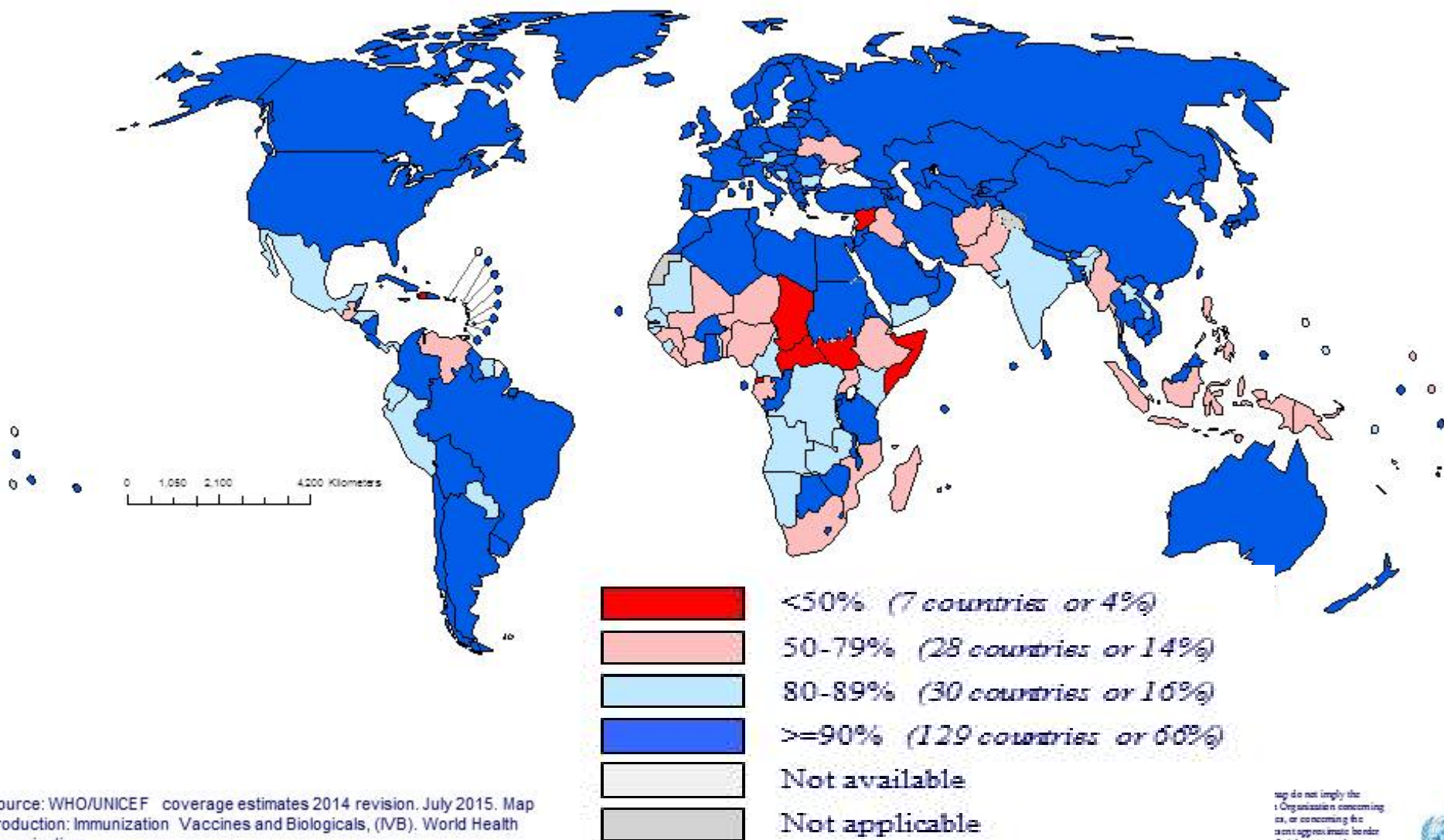
Global Immunization 1980-2015, DTP3 Coverage

Global Coverage at 86% in 2015



Source: WHO/UNICEF coverage estimates 2015 revision. July 2016
 Immunization Vaccines and Biologicals, (IVB), World Health Organization.
 194 WHO Member States. Date of slide: 16 July 2016.

Immunization Coverage with DTP 3 vaccines in Infants; 2014

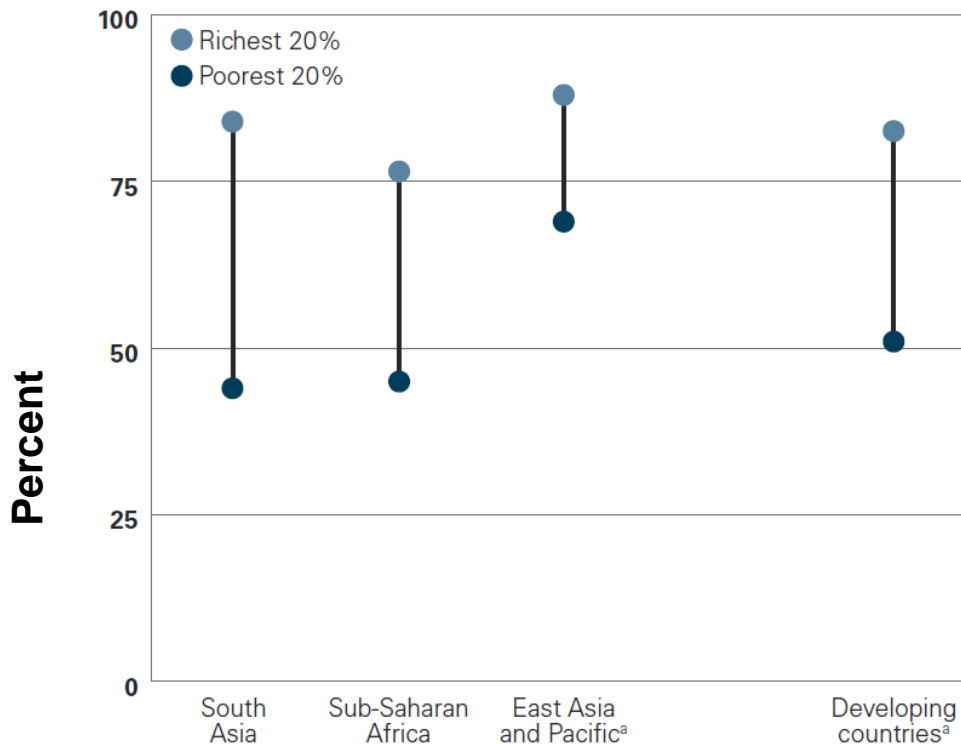


Source: WHO/UNICEF coverage estimates 2014 revision. July 2015. Map production: Immunization Vaccines and Biologicals, (IVB). World Health Organization
Date of slide: 16 July 2015

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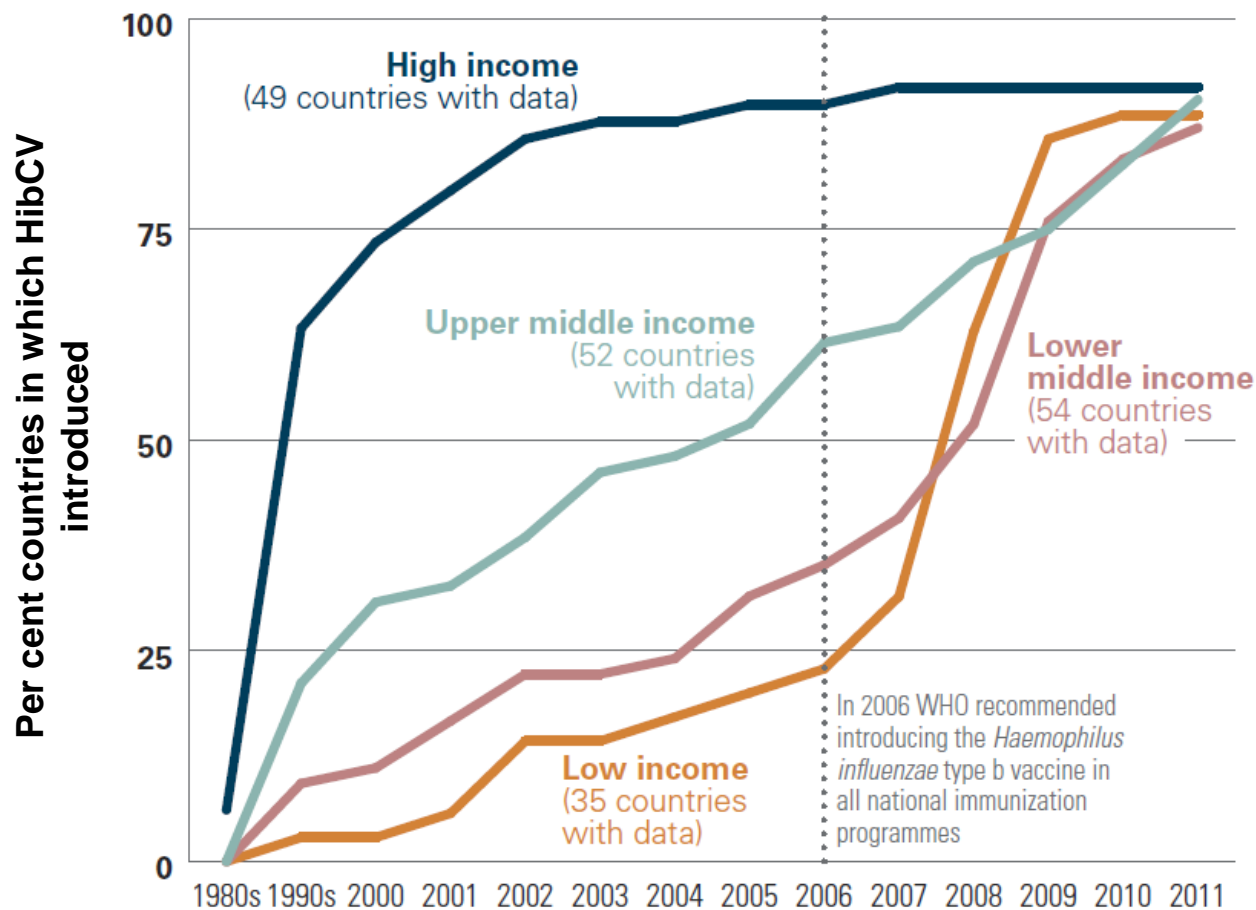
Percentage of Children Under One Year Age who Received Measles Vaccine, by Household Wealth Quintile and Region



a. Excludes China.

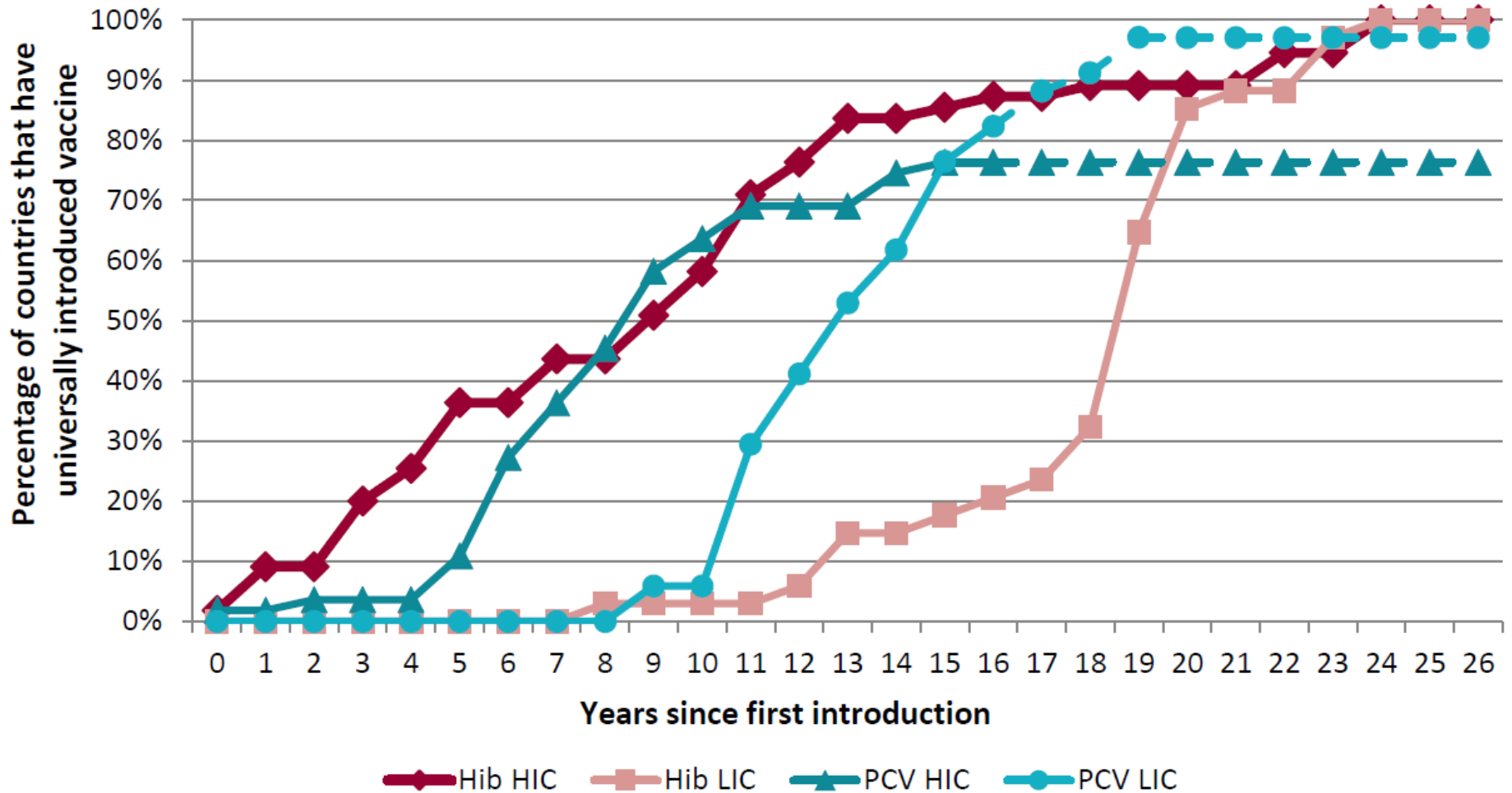
- **Need to focus immunization efforts on reaching out to the poorest quintile, who are also disadvantaged to access to curative health services**

Proportion of Countries, by income-group, that Have Introduced Hib conjugate Vaccine into Immunization Programs



Source: UNICEF. Pneumonia and Diarrhoea. June 2012. Available: www.childinfo.org/publications

PCV and HibCV Vaccine Introduction by Income Group





INSIDE SA'S HIDDEN CHOLERA CRISIS

In death's shadow

- Thousands forced to drink from infected river
- Tents in parking ground as hospital overflows
- Health officials won't answer questions



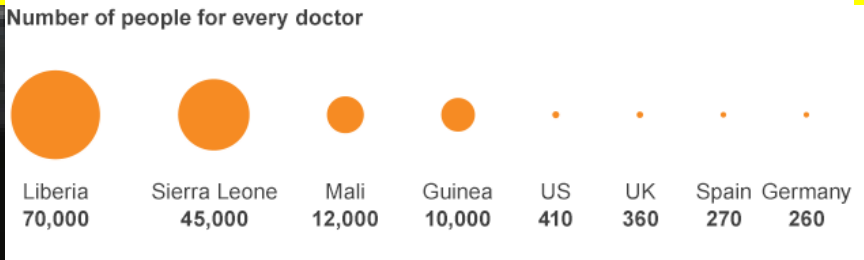
February 2017
210 cholera cases in Mozambique in wake of cyclone Dineo



Workers at the Redemption Hospital abandoned the hospital for fear of more deaths from Ebola



**Ebola outbreak 2013-2016
Guinea, Liberia, Sierra Leone
28 638 cases, 11 316 deaths**



Source: World Bank

Ebola — Underscoring the Global Disparities in Health Care Resources

Anthony S. Fauci, M.D.

NEJM 2014

South Sudan: Fighting a measles outbreak in Yida refugee camp

13 February 2015

Hepatitis E Outbreak in Sudanese Refugee Camps Leaves 16 Dead

Sep 17, 2012 | Steven Purcell | Outbreak News



Children queue for water in the Jamam refugee camp by Robert Stansfield/Department for International Development 2012 via Flickr

Efforts to contain polio outbreak intensify around Kenyan refugee camp

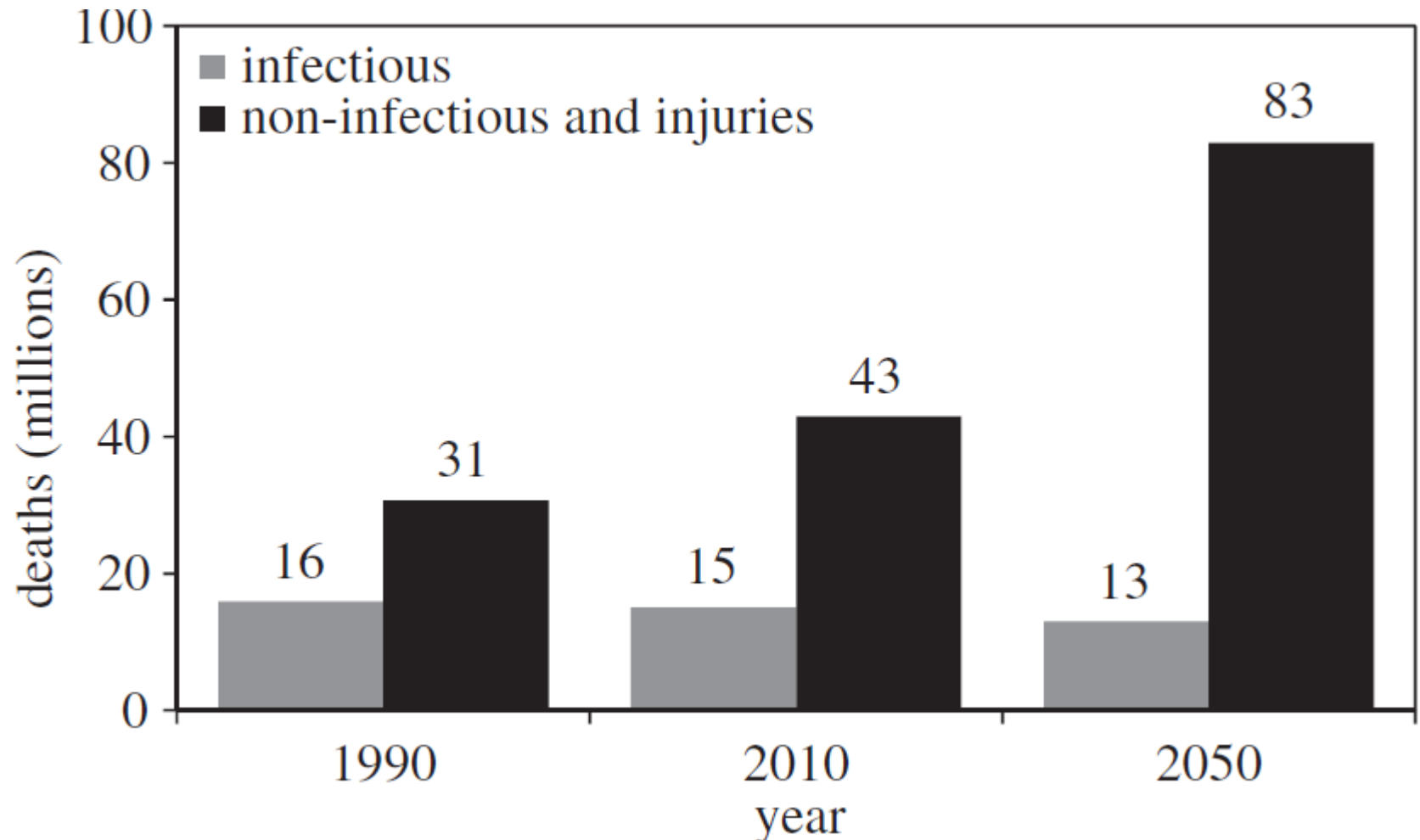


Learn more about Fatuma's story, and about the immunization campaigns underway to try to reach children in Kenya who have not been immunized against polio. [Watch in RealPlayer](#)

DIARRHEA OUTBREAK, POST-EARTHQUAKE - NEPAL: (CENTRAL REGION), 28 Apr 2015.ProMED



Trends in Causes of Death, 1990 to Projected 2050



- **Infectious diseases remain dominant cause of death in Africa, including South Africa.**
- **Under-5 childhood mortality strongly associated with inequitable access to preventative and primary level curative health care.**
- **Wealth inequities predispose to infectious disease morbidity and mortality.**
- **Low resource settings remain vulnerable to major communicable disease outbreaks.**