
From Pandemics to Preparedness: Global Health in the 21st Century

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Today's Outline

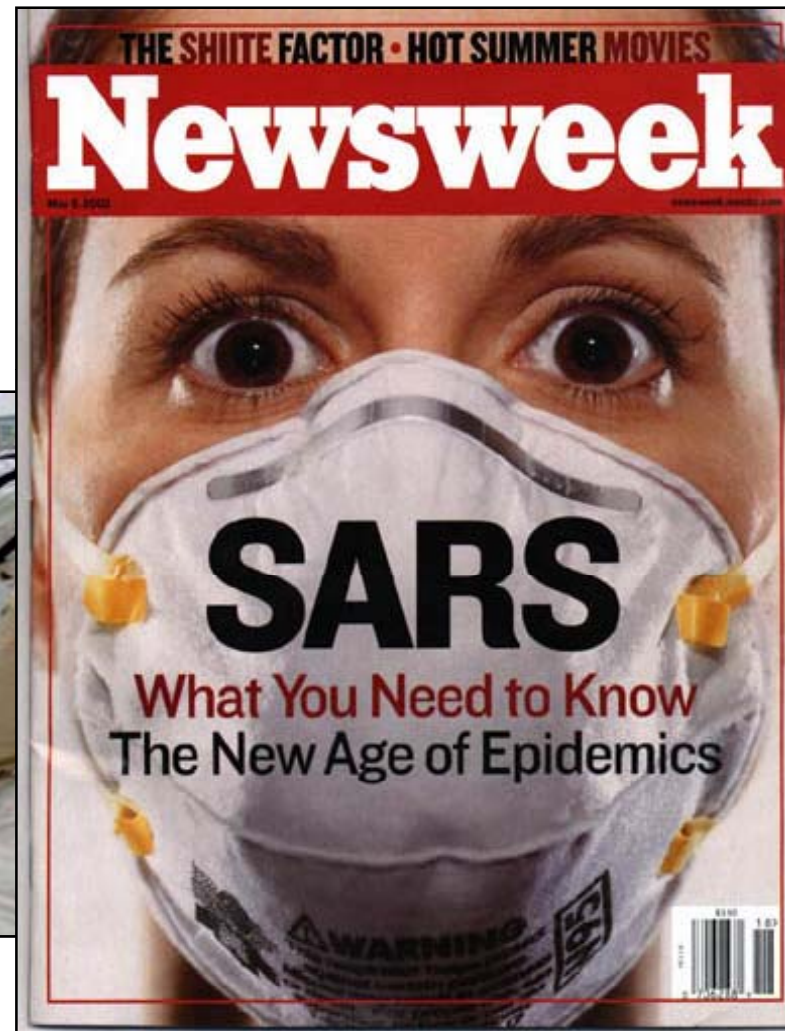
- **Welcome**
 - **Introductions**
 - **Syllabus**
 - **Carmen <https://carmen.osu.edu>**
 - **Overview of Global Health**
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Importance of Global Health Issues: Life Expectancy

Afghanistan	42 yrs	(M/F)
Ethiopia	49/52 yrs	(M/F)
Bolivia	63/66 yrs	(M/F)
Philippines	65/72 yrs	(M/F)
USA	75/80 yrs	(M/F)
Singapore	77/82 yrs	(M/F)

Importance of Global Health Issues

- Globalization



Importance of Global Health Issues

- Globalization



Definition of Health

‘Health is a state of complete physical, mental and social well-being and not merely the absence of disease’

(World Health Organization, 1948)

Definition of Public Health

‘science and art of preventing disease, prolonging life, and promoting physical health and mental health and efficiency through organized community efforts toward a sanitary environment; the control of community infections; the education of the individual in principles of personal hygiene; the organization of medical and nursing service for the early diagnosis and treatment of disease; and the development of social machinery to ensure to every individual in the community a standard of living adequate for the maintenance of health’

(C.E.A. Wilson, 1923)

Definitions of Global Health

‘Health problems, issues and concerns that transcend national boundaries and may best be addressed by cooperative actions’

(U.S. Institute of Medicine, 1998)

‘Application of the principles of public health to health problems and challenges that transcend national boundaries and to the complex array of global and local forces that affect them’

(Merson, Black, Mills, 2001)

Definition of Global Health

Global health is an area for study, research, and practice that places a priority on improving health and achieving equity in health for all people worldwide. Global health emphasizes transnational health issues, determinants and solutions; involves many disciplines within and beyond the health sciences and promotes interdisciplinary collaboration; and is a synthesis of population-based prevention with individual-level clinical care.

Lancet 2009; 373: 1993–95

Millennium Goals

- UN Millennium Summit, September 2000
 - The Millennium Development Goals (MDGs)
 - Internationally agreed framework of 8 goals and 18 targets
 - Adopted by a consensus of experts from the United Nations, IMF, OECD and the World Bank.
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Millennium Goals



ERADICATE EXTREME HUNGER AND POVERTY

- **Target 1.** Halve, between 1990 and 2015, the proportion of people whose income is less than \$1 a day
 - **Target 2.** Halve, between 1990 and 2015, the proportion of people who suffer from hunger
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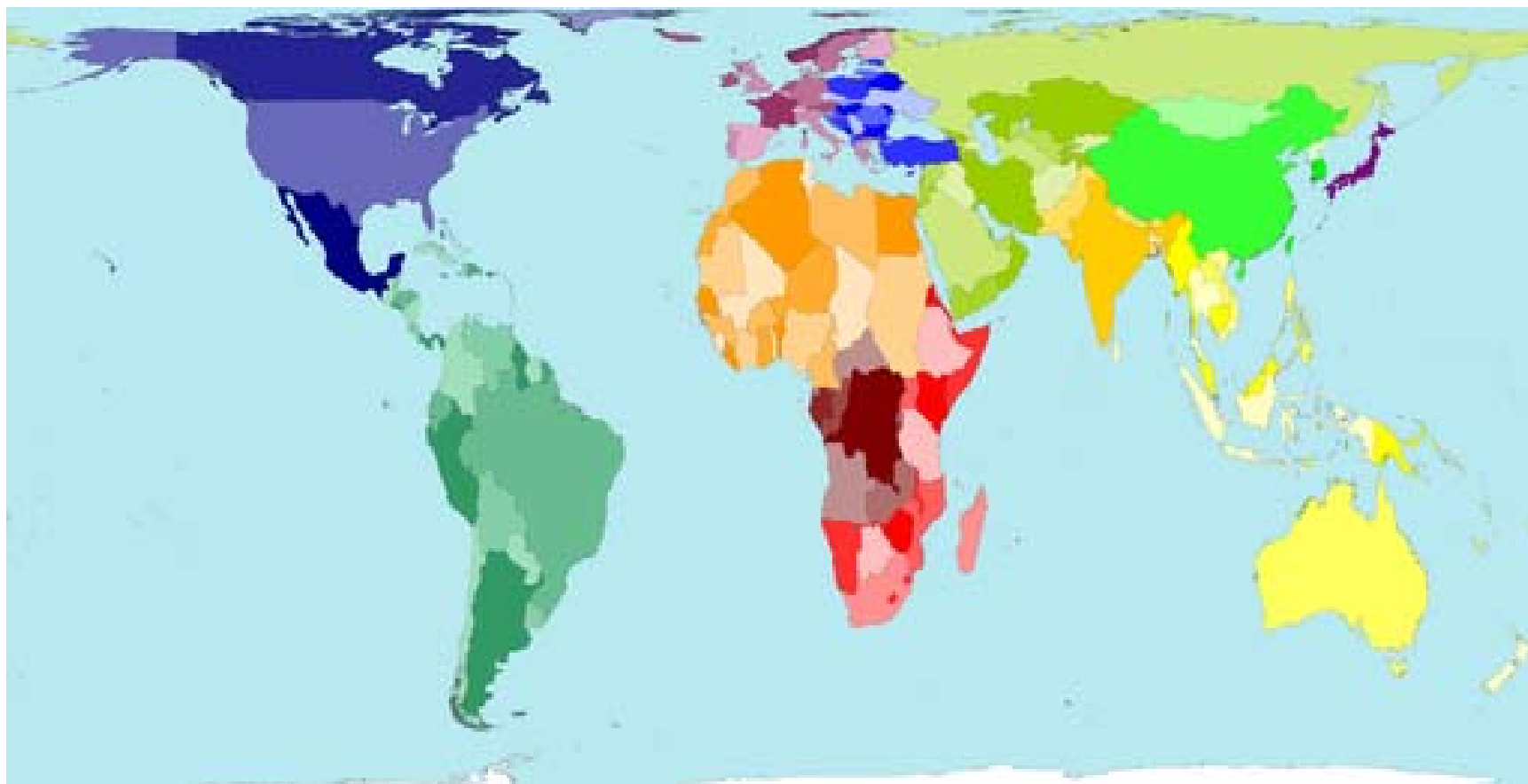
Categories of Countries: World Bank Classification by Income

- **Developed or developing**
 - **Low, middle, high income
(gross national income per person)**
 - \leq \$975: low income**
 - \$976-3855: lower middle income**
 - \$3856-11905: upper middle income**
 - \geq \$11,906: high-income**
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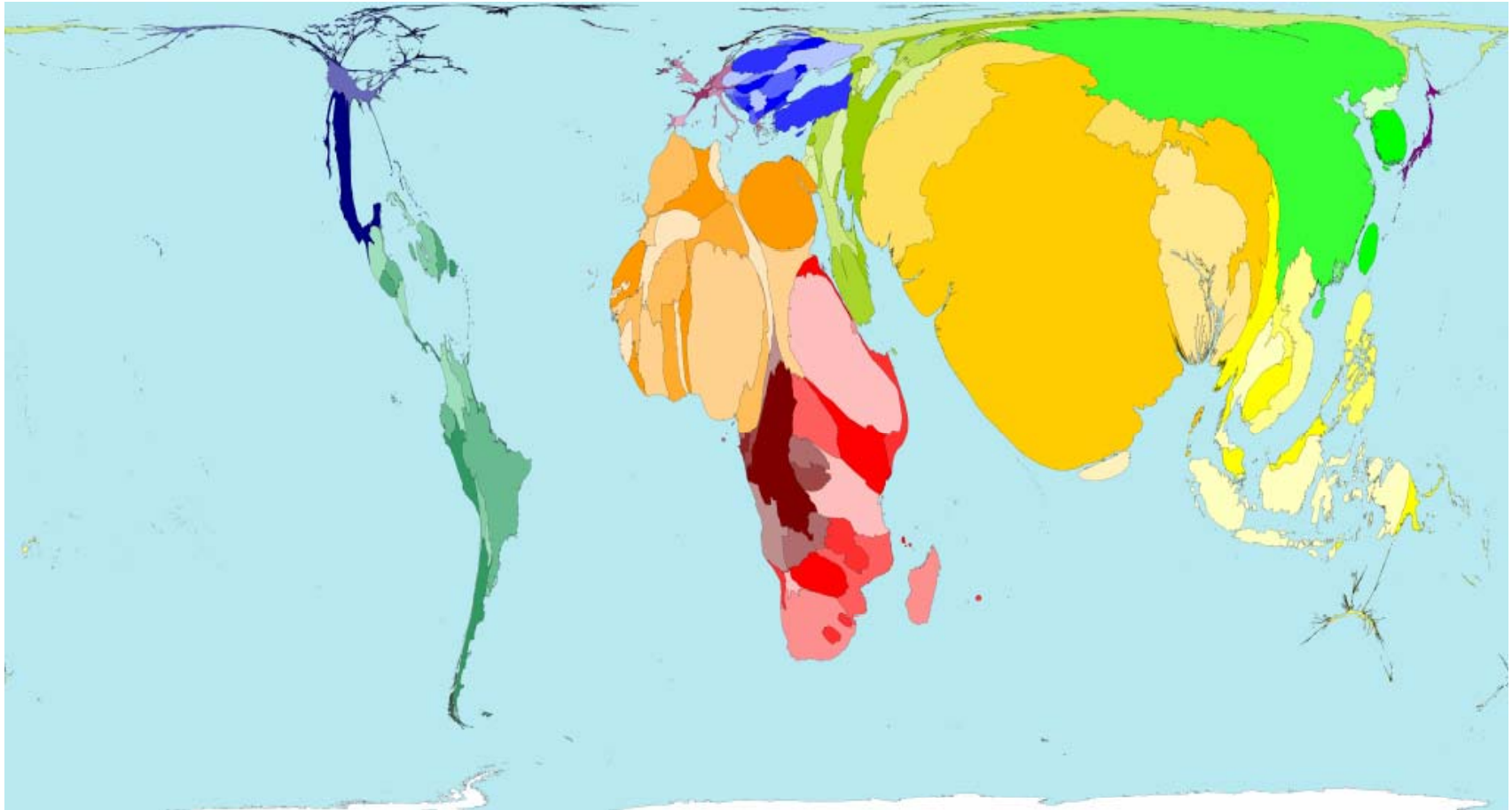
World Bank Category?

- Canada
 - High income
 - Kenya
 - Low income
 - Poland
 - Upper middle income
 - Honduras
 - Lower middle income
 - Botswana
 - Upper middle income
 - Thailand
 - Lower middle income
 - Malaysia
 - Upper middle income
 - Bangladesh
 - Low income
-

Land Area Cartogram



Poverty



Poverty and Global Health

- Worldwide, poverty is the biggest risk for ill health.
 - 1.2 billion people live in extreme poverty (<\$1/day), without decent shelter, clean water, adequate sanitation, or sufficient food
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Poverty and Global Health

- 85% of world's population is in low and middle income countries
 - 92% of the global burden of disease is in these countries.
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Poverty and Global Health

- Malnutrition
 - Obstetrical complications/Neonatal disease
 - Infectious disease
 - Trauma
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Millennium Goals



ACHIEVE UNIVERSAL PRIMARY EDUCATION

- **Target 3.** Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling
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Millennium Goals



PROMOTE GENDER EQUALITY AND EMPOWER WOMEN

- **Target 4.** Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015
-

Millennium Goals



REDUCE CHILD MORTALITY

- **Target 5.** Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate



Burden of Disease

■ Child Mortality

- Each year 11 million children < age 5 die in low and middle income countries
- 41% of world's child deaths occur in sub-Saharan Africa
 - 34% in South Asia



Burden of Disease

- ❑ **In Indonesia, a child born in a poor household is 4X more likely to die by her fifth birthday than a child born to a family in Canada**
- ❑ **About 1/2 million women die in childbirth each year in developing countries**



Millennium Goals



IMPROVE MATERNAL HEALTH

- **Target 6.** Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio



Millenium Goals



COMBAT HIV/AIDS, MALARIA AND OTHER DISEASES

- **Target 7.** Have halted by 2015 and begun to reverse the spread of HIV/AIDS
 - **Target 8.** Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases
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Millennium Goals



ENSURE ENVIRONMENTAL SUSTAINABILITY

- **Target 9.** Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources
 - **Target 10.** Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation
 - **Target 11.** Have achieved by 2020 a significant improvement in the lives of at least 100 million slum dwellers
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Millennium Goals



DEVELOP A GLOBAL
PARTNERSHIP FOR
DEVELOPMENT



Millennium Goals



- **Target 12.** Develop further an open, rule-based, predictable, nondiscriminatory trading and financial system
- **Target 13.** Address the special needs of the Least Developed Countries
- **Target 14.** Address the special needs of landlocked developing countries and small island developing states
- **Target 15.** Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term
- **Target 16.** In cooperation with developing countries, develop and implement strategies for decent and productive work for youth
- **Target 17.** In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries
- **Target 18.** In cooperation with the private sector, make available the benefits of new technologies, especially information and communications technologies