

Health, history and hard choices: Funding dilemmas in a fast-changing world

Thomson Prentice
Global Health Histories



Health and Philanthropy: Leveraging change
University of Indiana, August 2006

An embarrassment of riches?

Spent wisely over the coming years, the vast sums of money now being injected into health philanthropy can have a huge impact on many of the world's most deadly and disabling diseases.

But which ones? In confronting the myriad health problems of today, philanthropists have an embarrassment of riches in one hand, but must grasp thorny funding dilemmas with the other.

Health philanthropy's main targets

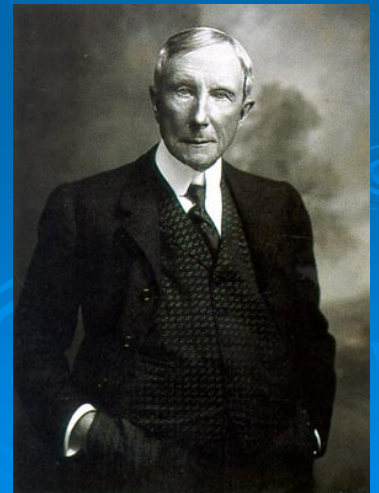
Historically, infectious diseases have been the main targets in health philanthropy

1. They have long been the leading causes of death and disability, particularly among children
2. They have predominantly affected the poorest populations in the poorest countries
3. They have lent themselves to prevention, control, treatment, and cure
4. Progress in fighting them has usually been measurable, which has lead to:
5. Philanthropists able to show results to justify their investment.

Infectious diseases: the quick fix

In 1913, the Rockefeller Foundation was "looking for diseases that might be controlled or perhaps even eradicated in the space of a few years or a couple of decades... Technical approaches also tended to yield immediately quantifiable results that justified equivalent expenditure of funds."

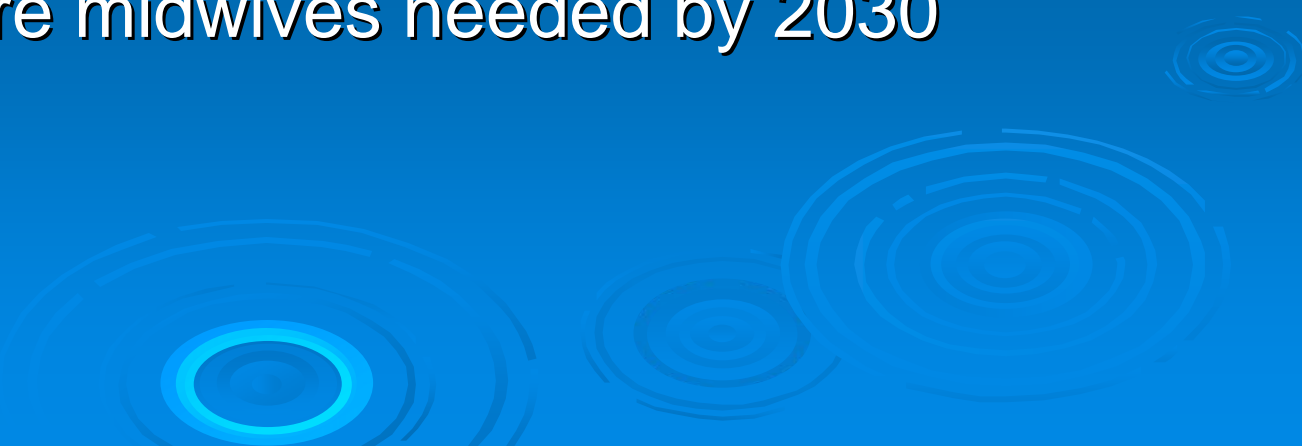
John D. Rockefeller



Fighting infectious diseases

- Smallpox completely eradicated
- Leprosy virtually eliminated
- Global eradication of polio in next few years
- Vaccines against the six killer diseases of childhood
- Measles deaths cut by 48% in 1999 - 2004
- Risk of death for children under 5 projected to fall by over 40% in next 25 years
BUT: over 10 million under-5s will die this year

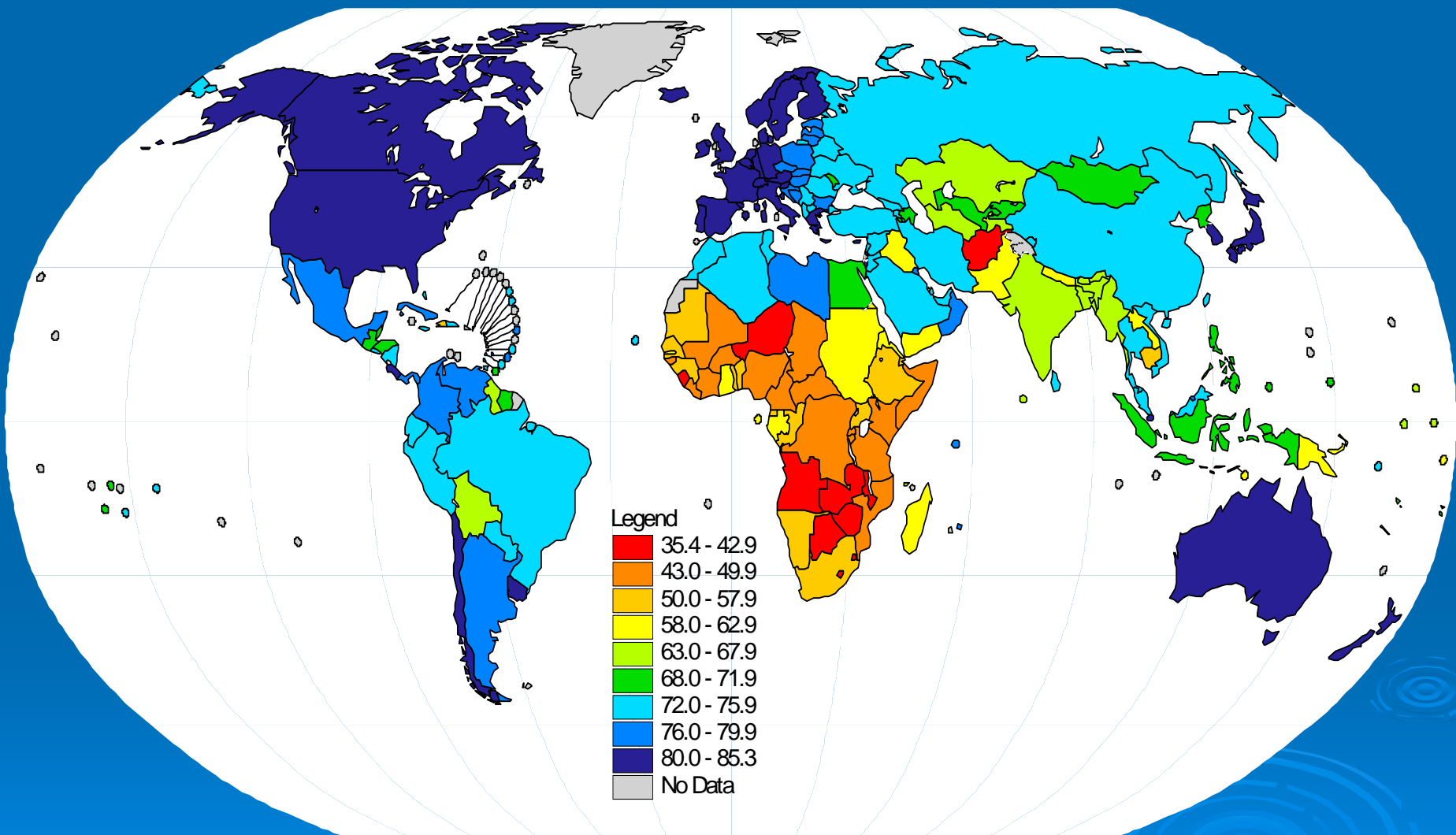
Saving mothers and their newborns

- 136 million births every year
 - 70 million mothers and their babies excluded from health care
 - 4 million babies die in first month of life
 - 530 000 women die in pregnancy, childbirth or soon after
 - 700 000 more midwives needed by 2030
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Life expectancy: 100 years of gain

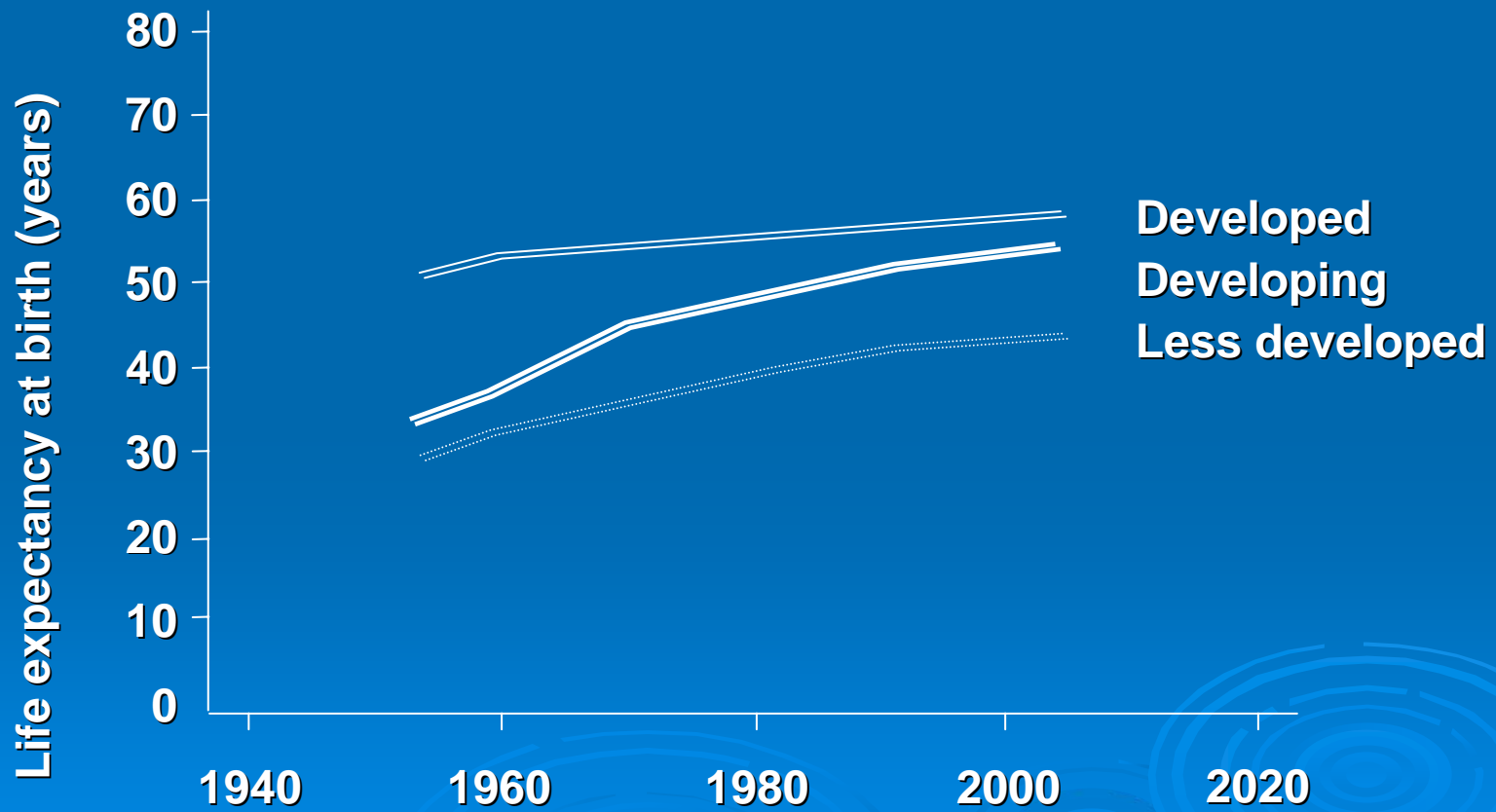
- In 1900, global average lifespan was just 31 years, and below 50 years in even the richest countries
- By the mid-20th century, average life expectancy rose to 48 years
- In 2005, average lifespan reached 65.6 years; over 80 years in some countries
- By 2030, average life expectancy at birth for women in countries like the USA will be 85 years

Life expectancy at birth, (Females, 2003)



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement. © WHO 2005. All rights reserved

Life expectancy at birth (1955–2002)



The greying world

"The increase in the number of old people in the world will be one of the most profound forces affecting health and social services in the next century...

"...With an aging population and advancing medical technology, it is only a matter of time before treatment rationing, with all its ethical implications, comes to the fore"

Dr Hiroshi Nakajima
Director-General WHO
May 1996



The demographic transition

“The very successes of the past few decades will generate a transition to societies with rapidly increasing numbers of middle-aged and elderly. A new set of diseases will rise to prominence: cancers, heart disease, stroke and mental illness, with less decisive results than we achieved for infectious diseases”

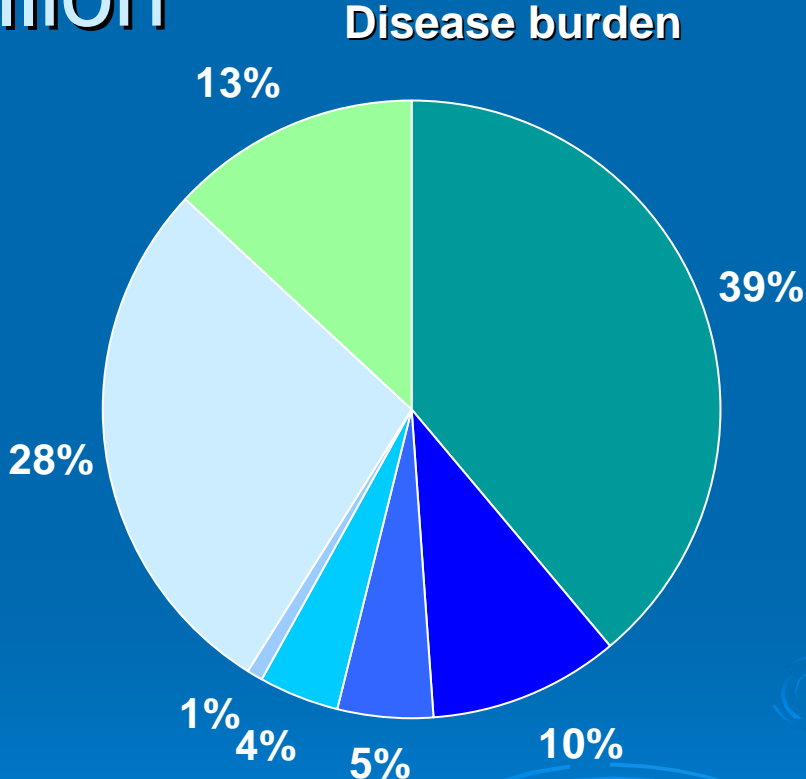
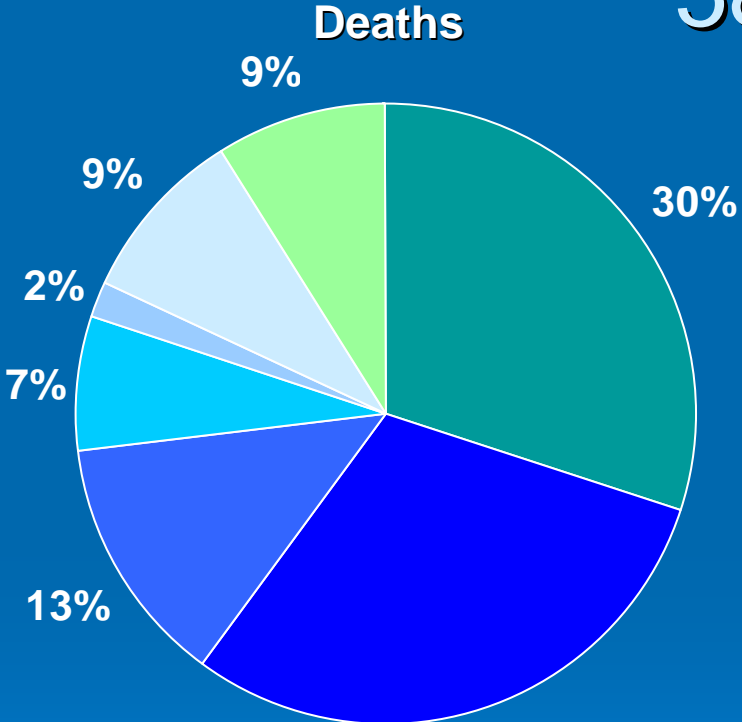
Dr. Gro Harlem Brundtland
Director-General, WHO
May 1999



The epidemiological transition

- As life expectancy increases, major causes of death and disability shift from childhood diseases to non-infectious, chronic illnesses in adulthood
- Almost 35 million deaths a year are caused by chronic diseases. Of these, heart disease, stroke and related conditions together kill as many people as all infectious diseases combined
- Almost 50% of chronic disease deaths occur in people under 70 years of age; 80% are in developing countries

Main causes of death and global burden of disease, 2005 (projections) Total deaths: 58 million

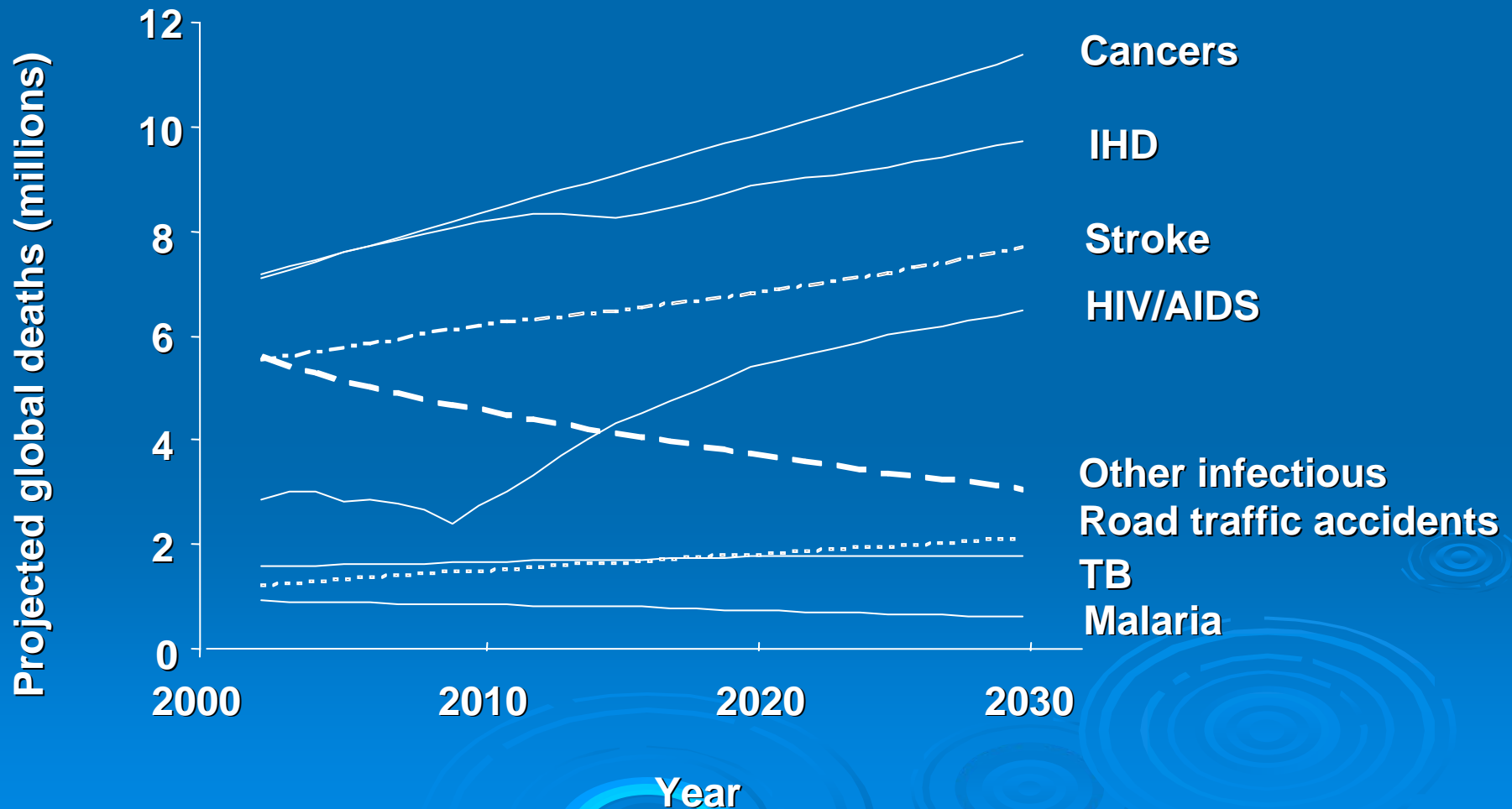


Chronic diseases

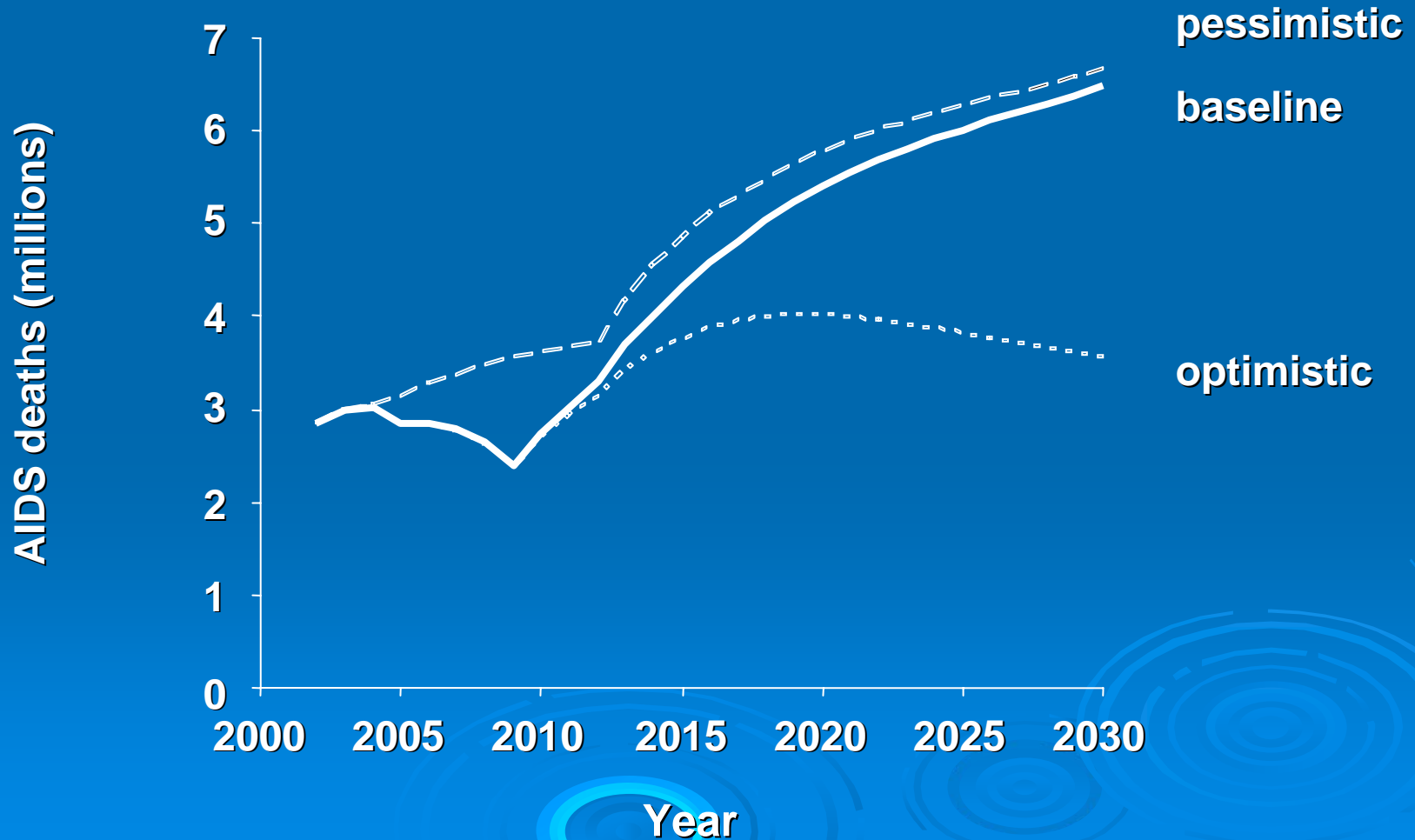
- Cardiovascular diseases
- Cancer
- Chronic respiratory diseases
- Diabetes
- Other chronic diseases

- Injuries
- Communicable diseases, maternal and perinatal conditions, and nutritional deficiencies

Projected trends in total deaths for selected causes, baseline scenario, world, 2002-2030



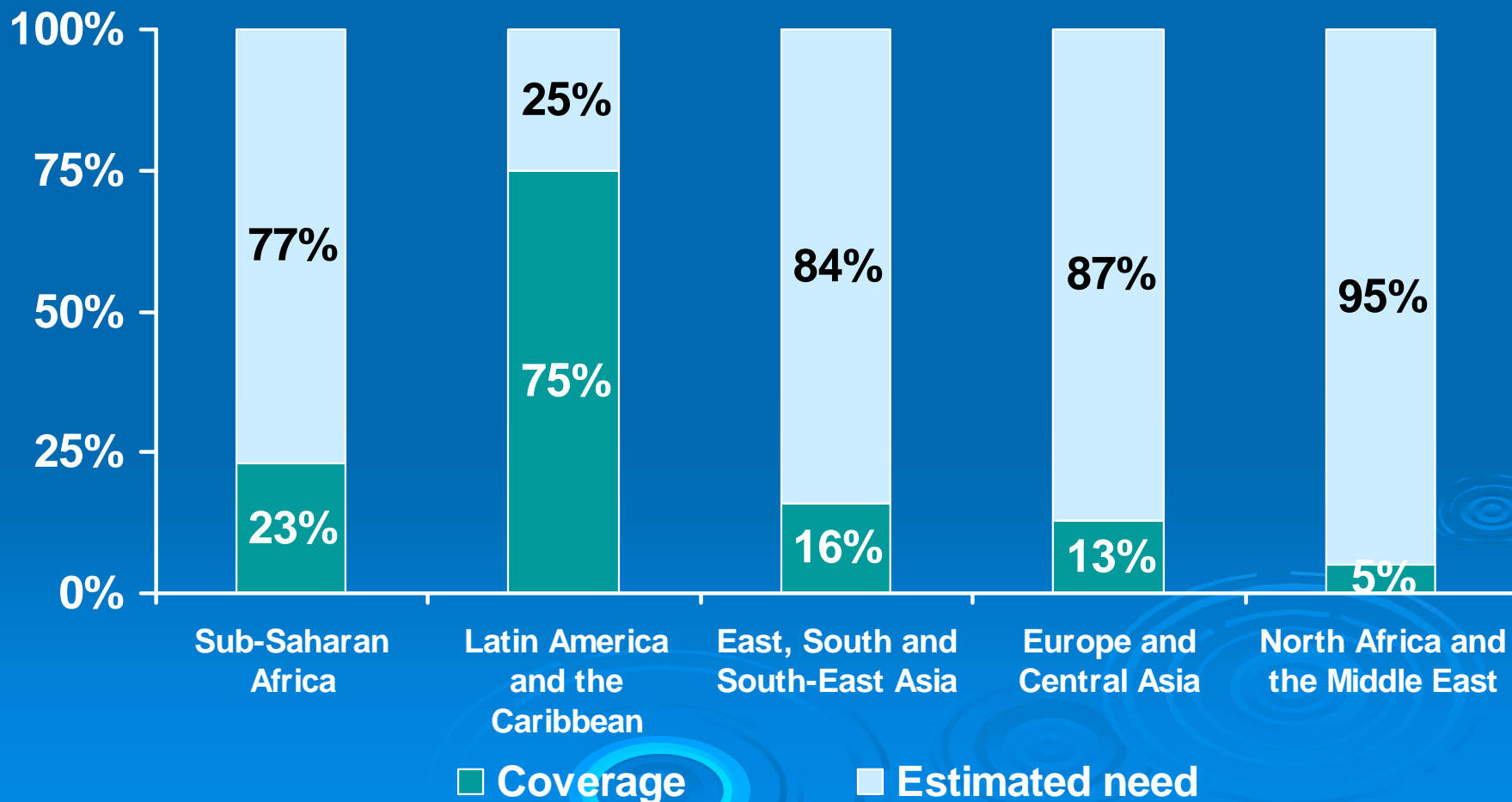
Projections of global AIDS deaths (millions) from 2002 to 2030, for three scenarios:



AIDS is also a chronic disease

40 million HIV infections

6.8 million (24%) urgently need treatment
in low- and middle-income countries, June 2006



Change in rank order of global disease burden for the 15 leading causes 2002-2030

2002 Disease or Injury

1. Perinatal conditions
2. Lower respiratory infections
3. HIV/AIDS
4. Unipolar depressive disorders
5. Diarrhoeal diseases
6. Ischaemic heart disease
7. Cerebrovascular disease
8. Road traffic injuries
9. Malaria
10. Tuberculosis
11. Chronic obstructive pulmonary disease
12. Congenital anomalies
13. Hearing loss, adult onset
14. Cataracts
15. Violence

2030 Disease or Injury

1. HIV/AIDS
2. Unipolar depressive disorders
3. Ischaemic heart disease
4. Chronic obstructive pulmonary disease
5. Perinatal conditions
6. Cerebrovascular disease
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7. Diarrhoeal diseases
8. Tuberculosis
9. Trachea, bronchus and lung cancers
10. Road traffic injuries
11. Diabetes mellitus
12. Malaria
13. Hypertensive heart disease
14. Self-inflicted injuries
15. Stomach cancer

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6. Diabetes mellitus
7. Trachea, bronchus and lung cancers
8. Road traffic injuries
9. Tuberculosis
10. Perinatal conditions
11. Stomach cancer
12. Hypertensive heart disease
13. Self-inflicted injuries
14. Nephritis and nephrosis
15. Liver cancer

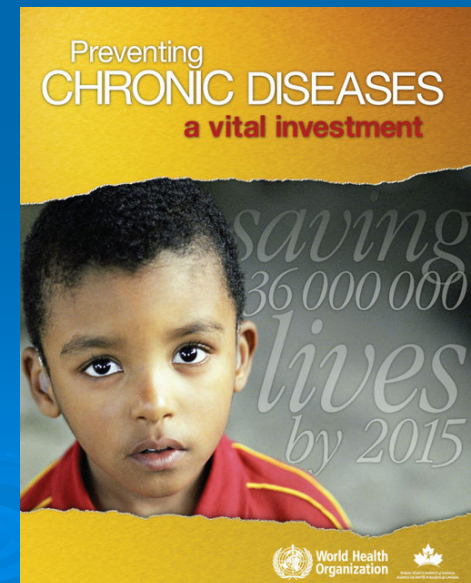
The dementia epidemic

- Over 24 million people currently have dementia, with 4.6 million new cases annually; over 60% occur in developing countries.
- Number of dementia sufferers will double every 20 years
- The rate of increase predicted to be 3 to 4 times higher in developing regions than in developed areas.

Source: The Lancet, 366:2112-2117, December 2005

Preventing chronic diseases

- Global goal: to avert 36 million chronic disease deaths by 2015
- Almost half of the averted deaths would be in men and women under 70 years of age
- Almost nine out of 10 would be in low and middle income countries.
- Achievable with full range of existing cost-effective interventions.



The health workers crisis

“There is a chronic shortage of well-trained health workers. The shortage is global, but most acutely felt in the countries that need them most...countries are unable to educate and sustain the health workforce that would improve people’s chances of survival and wellbeing”

Dr Jong-wook Lee
Director-General WHO
April 2006



Shortages of health professionals

- Global shortage of almost 4.3 million doctors, midwives nurses and support workers
- About 30% of all 59 million health workers are in USA and Canada
- Only 4% of health workers are in sub-Saharan Africa, which has 25% of global disease burden and under 1% of world's financial resources

Source: World Health Report 2006: *Working together for health*, WHO

Gates: Following Rockefeller?

"We focus on accelerating access to existing vaccines, drugs, and other tools to fight diseases that disproportionately affect developing countries, and we support research to discover new health solutions that are effective, affordable, and practical for use in poor countries."

Source: Grand Challenges in Global Health

Bill & Melinda Gates Foundation



Challenging Gates?

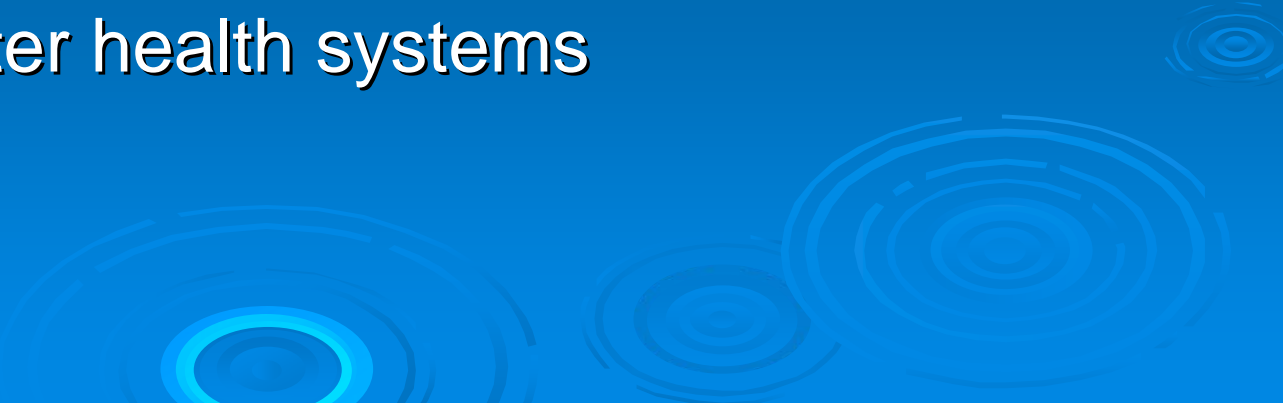
Gates has "turned to a narrowly conceived understanding of health as the product of technical interventions divorced from economic, social and political contexts."

The new challenge: to integrate social, technical and medical approaches to improve global health

*Birn, A-E: The Lancet
March 2005*



Hard choices: which priority?

- Controlling infectious diseases
 - Saving newborns and their mothers
 - Preventing and treating chronic diseases
 - Creating more drugs and vaccines
 - Researching social determinants
 - Training more doctors, midwives, nurses
 - Building better health systems
- 

The never-ending challenge

“In health we are always victims of our own successes. The improvement itself in basic health conditions fuels the epidemiological transition by enhancing the survival of children to reach ages where expensive non-communicable diseases are more prevalent. It is this dynamic which makes health a never-ending challenge.”

Dr Julio Frenk
Minister of Health, Mexico
June 2006

