

Cardiovascular Disease in CKD WHO Perspectives

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		Causative risk factors			
		Tobacco use	Unhealthy diets	Physical inactivity	Harmful use of alcohol
Non-communicable diseases	Heart disease and stroke	✓	✓	✓	✓
	Diabetes	✓	✓	✓	✓
	Cancer	✓	✓	✓	✓
	Chronic lung disease	✓			



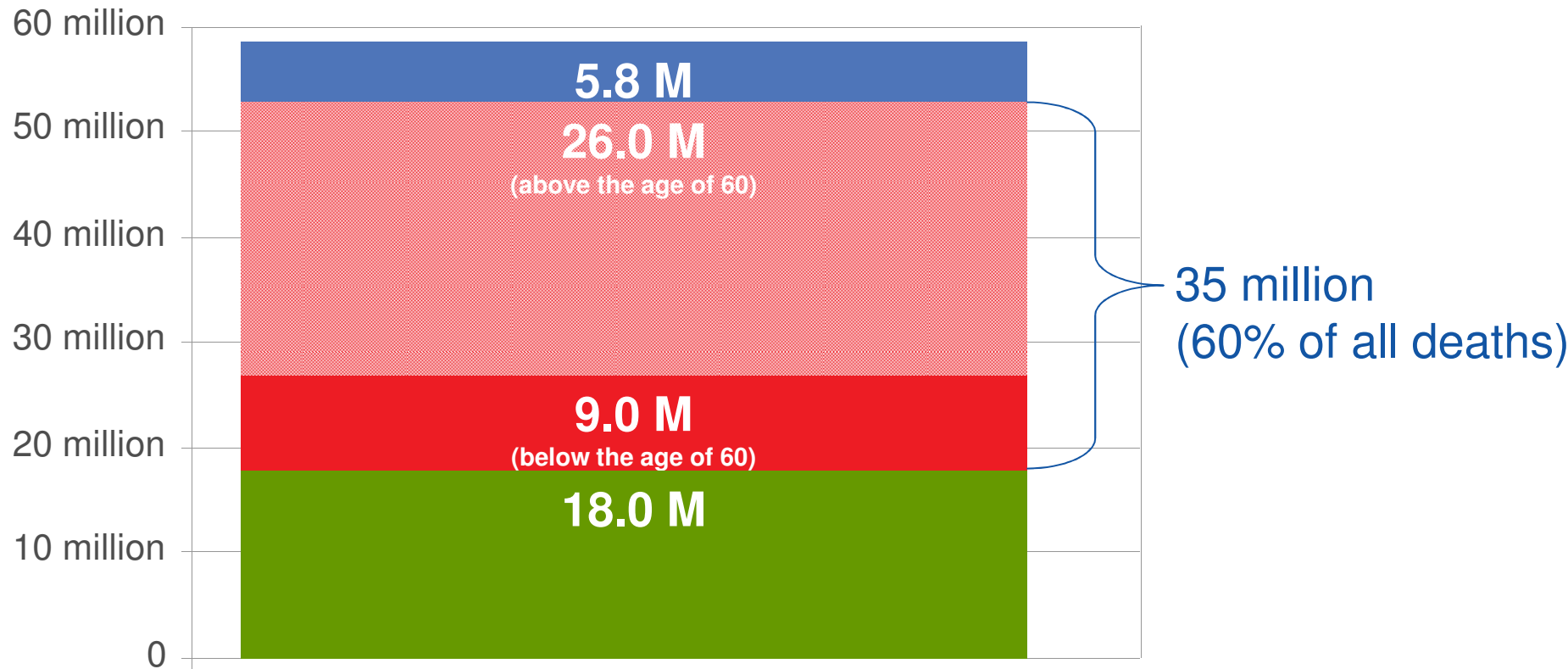
Noncommunicable Diseases (NCDs)

- NCDs are the single biggest cause of death. A large proportion of deaths are premature.
- NCDs are preventable, there are cost effective solutions that are affordable to all countries.
- Most NCDs share common risk factors and an integrated prevention strategy is essential
- Health systems in developing countries are overwhelmed with the increasing magnitude but demands for technical support remains largely unanswered.
- NCDs are a serious development problem and there is a window of opportunity to act now.

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NCDs are the single biggest cause of death 9 million people die every year at young age

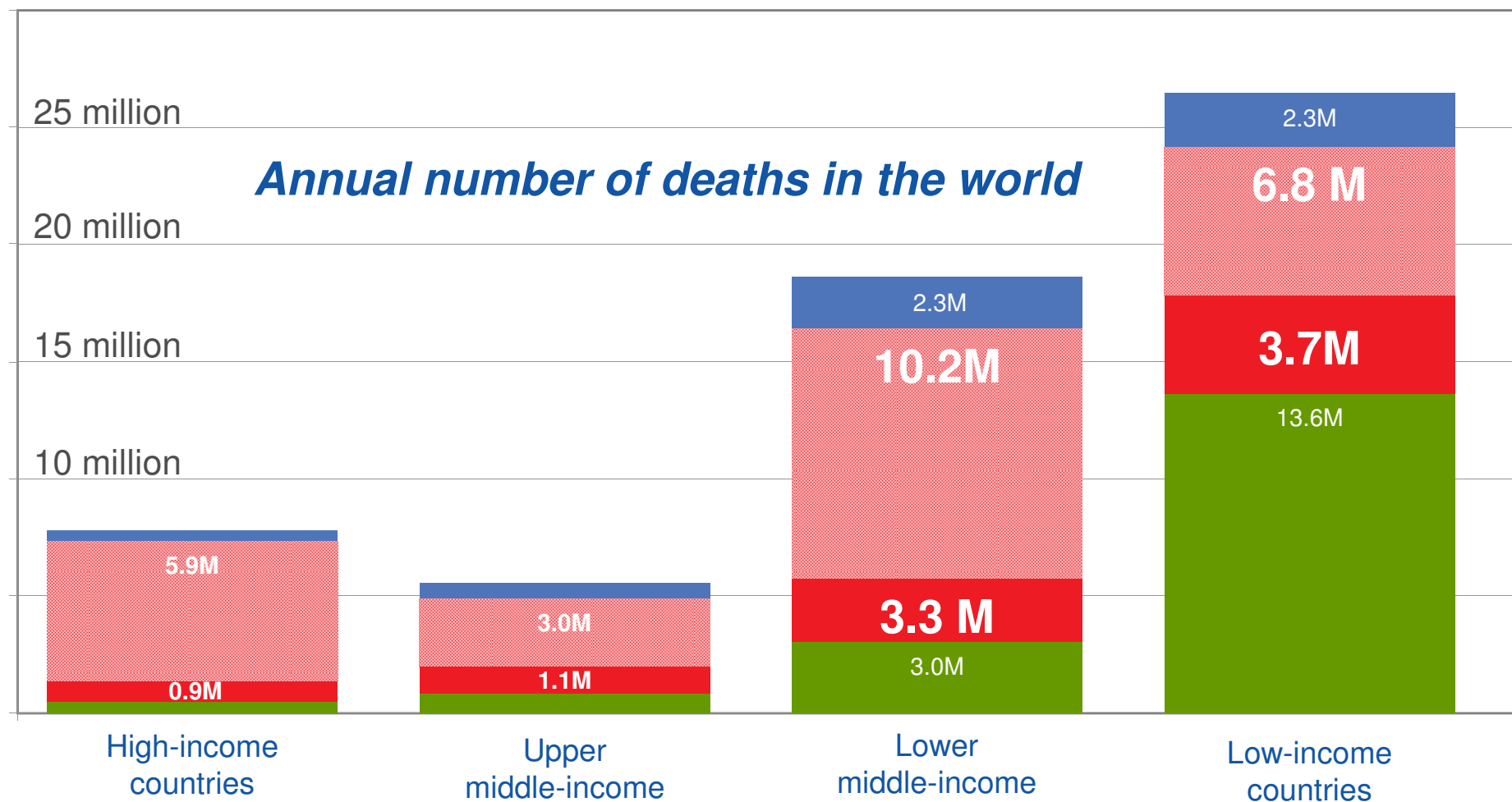
Total number of deaths in the world



- Group III - Injuries
- Group II – Other deaths from noncommunicable diseases
- Group II – Premature deaths from noncommunicable diseases (below the age of 60), which are preventable
- Group I – Communicable diseases, maternal, perinatal and nutritional conditions



90% of premature deaths from NCDs occur in developing countries



■ Group III - Injuries

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■ Group I – Communicable diseases, maternal, perinatal and nutritional conditions



Leading causes of attributable global mortality (2004)

		%
1.	High blood pressure	12.8
2.	Tobacco use	8.7
3.	High blood glucose	5.8
4.	Physical inactivity	5.5
5.	Overweight and obesity	4.8
6.	High cholesterol	4.5
7.	Unsafe sex	4.0
8.	Alcohol use	3.8
9.	Childhood underweight	3.8
10.	Indoor smoke from solid fuels	3.3

59 million total global deaths in 2004



Top causes of death in the poorest countries include NCDs

Low-income countries	Middle-income countries
1. Lower respiratory infections	1. ● Stroke and cerebrovascular disease
2. ● Coronary heart disease	2. ● Coronary heart disease
3. Diarrhoeal diseases	3. ● Chronic pulmonary disease
4. HIV/AIDS	4. Lower respiratory infection
5. ● Stroke and cerebrovascular disease	5. ● Trachea, bronchus, lung cancers
6. ● Chronic pulmonary disease	6. Road traffic accidents
7. Tuberculosis	7. ● Hypertensive heart disease
8. Neonatal infections	8. ● Stomach cancer
9. Malaria	9. Tuberculosis
10. Premature and low birth weight	10. ● Diabetes mellitus



The top-10 countries reported to have the highest diabetes prevalence are countries in developing regions of the world.

COUNTRY/TERRITORY	2010 PREVALENCE (%)	COUNTRY/TERRITORY	2030 PREVALENCE (%)
1 Nauru	30.9	1 Nauru	33.4
2 United Arab Emirates	18.7	2 United Arab Emirates	21.4
3 Saudi Arabia	16.8	3 Mauritius	19.8
4 Mauritius	16.2	4 Saudi Arabia	18.9
5 Bahrain	15.4	(5 Réunion)	18.1
6 Réunion)	15.3	6 Bahrain	17.3
7 Kuwait	14.6	7 Kuwait	16.9
8 Oman	13.4	8 Tonga	15.7
9 Tonga	13.4	9 Oman	14.9
10 Malaysia	11.6	10 Malaysia	13.8

Includes only countries/territories where surveys with glucose testing were undertaken for that country/territory
comparative prevalence

Source: International Diabetes Federation's Diabetes Atlas

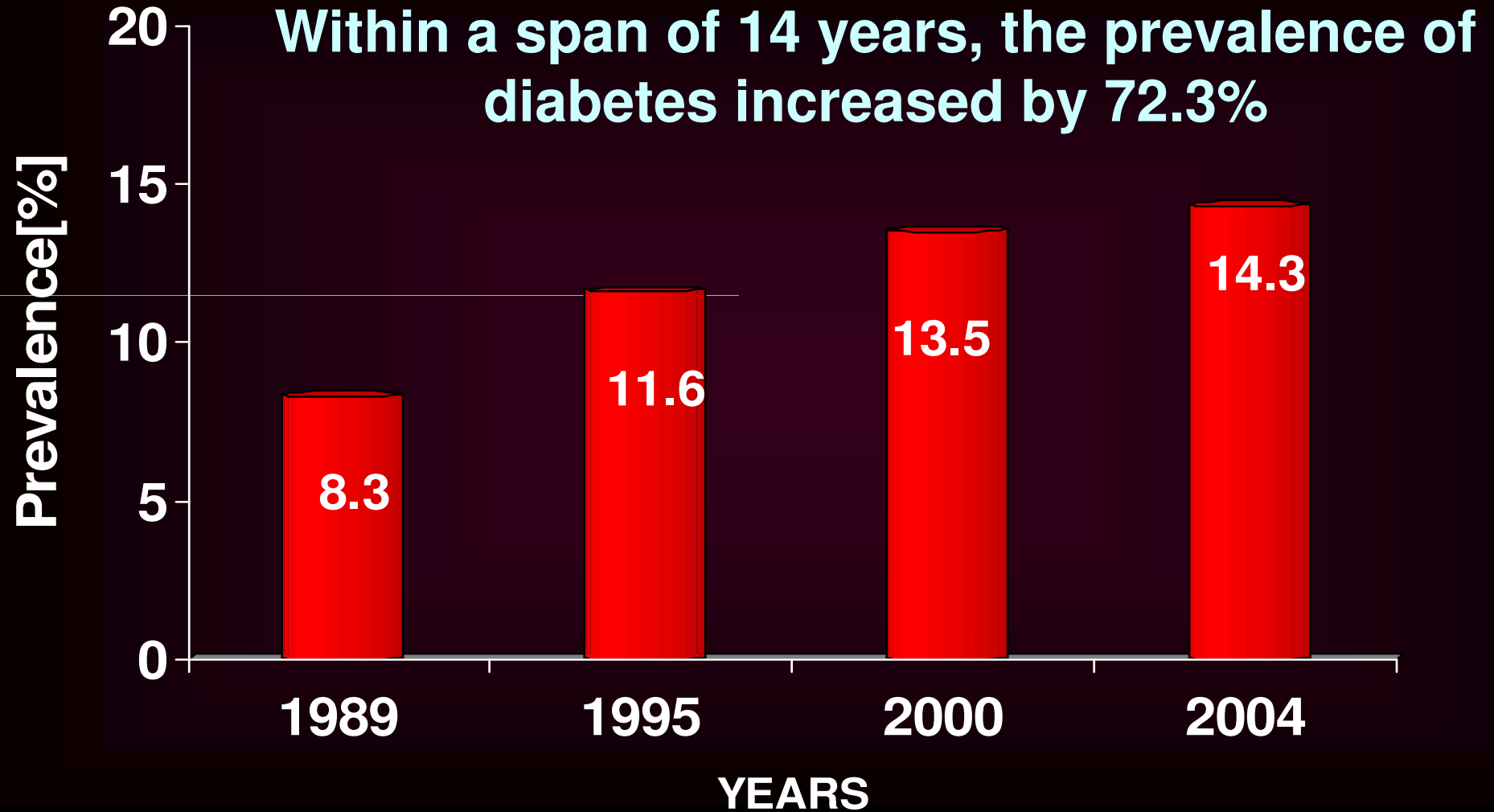


RISING PREVALENCE OF DIABETES IN URBAN INDIA

Chennai Urban Rural Epidemiology Study [CURES] is compared with other studies conducted on representative population of Chennai city

1989 - 2005

Within a span of 14 years, the prevalence of diabetes increased by 72.3%



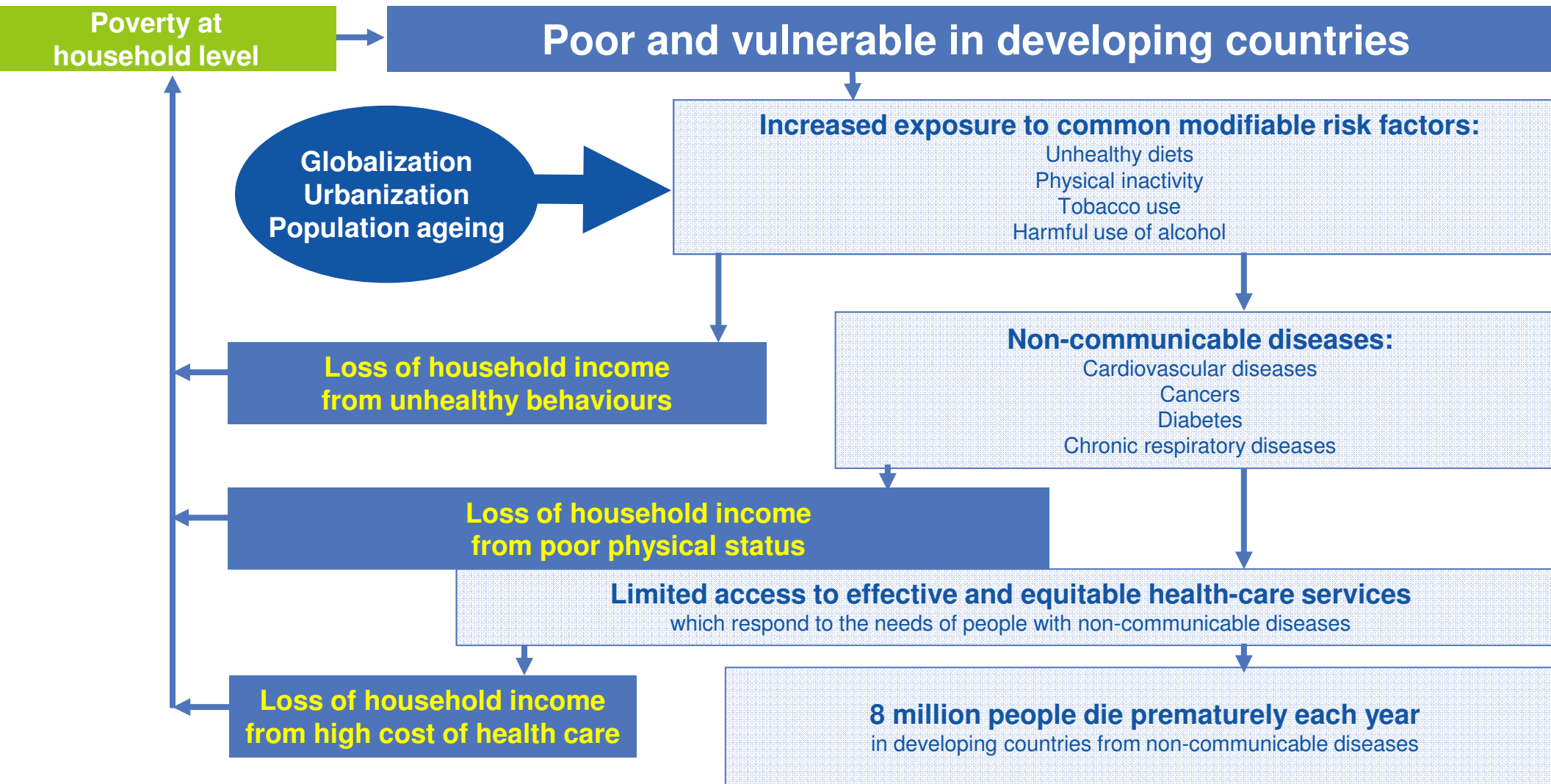
Mohan V et al, CURES, Diabetologia, 2006

Mortality Trends (2006-2015)

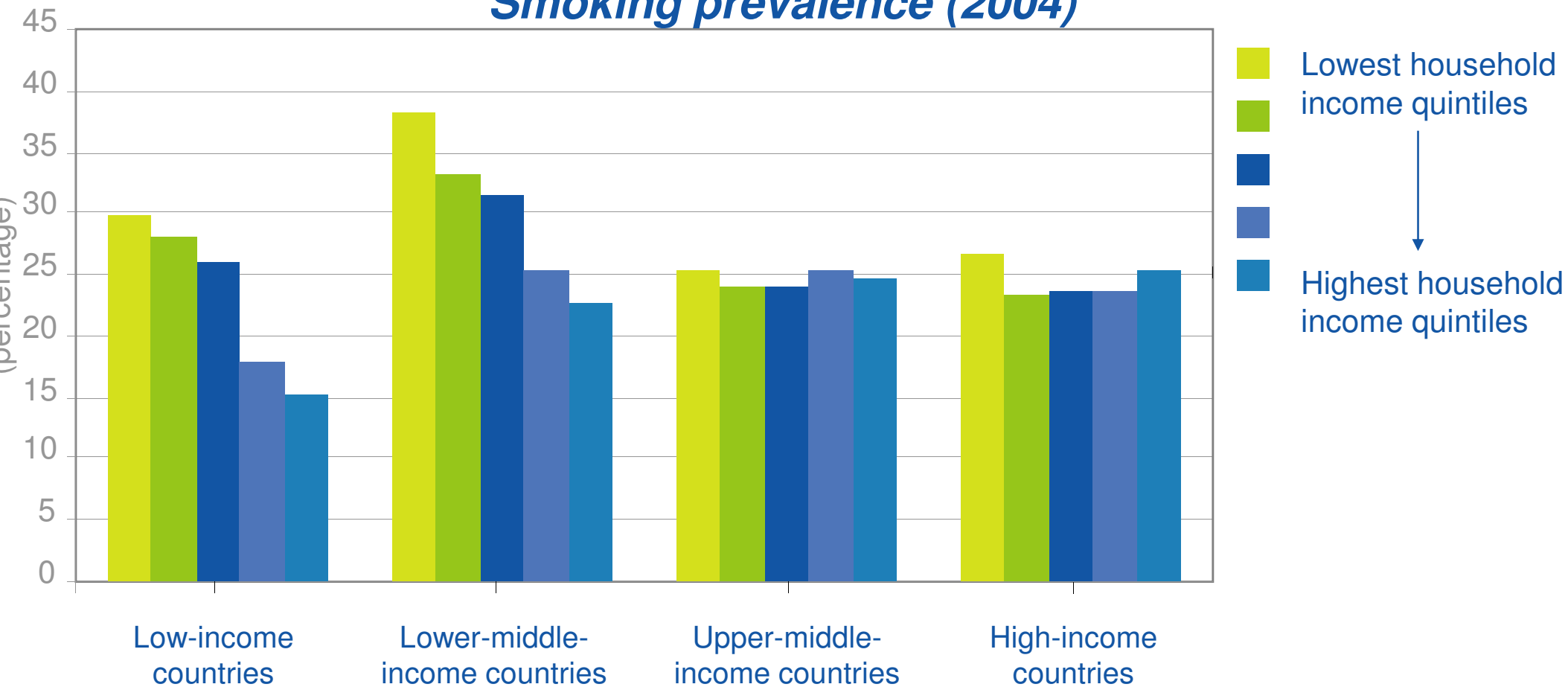
Geographical regions (WHO classification)	2005		2006-2015 (cumulative)		
	Total deaths (millions)	NCD deaths (millions)	NCD deaths (millions)	Trend: Death from infectious disease	Trend: Death from NCD
Africa	10.8	2.5	28	+6%	+27%
Americas	6.2	4.8	53	-8%	+17%
Eastern Mediterranean	4.3	2.2	25	-10%	+25%
Europe	9.8	8.5	88	+7%	+4%
South-East Asia	14.7	8.0	89	-16%	+21%
Western Pacific	12.4	9.7	105	+1	+20%

WHO projects that over the next 10 years, the largest increase in deaths from diabetes, cardiovascular disease, cancer, and respiratory disease will occur in Africa and the Eastern Mediterranean.

NCDs are closely related to poverty and contribute to poverty



Smoking prevalence (2004)



Health care costs are enormous

- Cardiovascular diseases
- Chronic kidney diseases
- Cancers
- Diabetes



The poorest people in developing countries affected the most

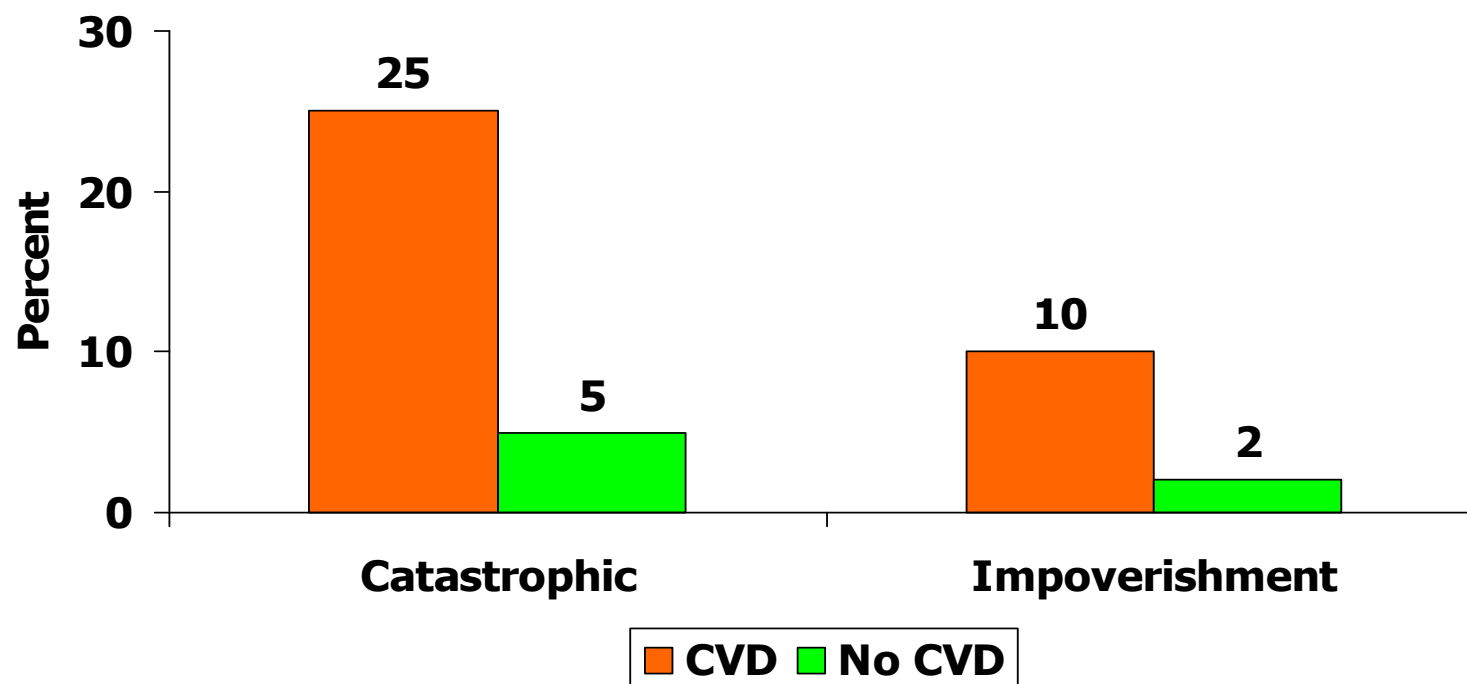
The cost of caring for a family member with diabetes can be more than 20 per cent of low-income household incomes in developing countries

The cost per year of diabetes care at household level

	Insulin	Syringes	Testing	Consultation	Travel	Total cost	% of per capita Income
Mali (2004)	38%	34%	8%	7%	12%	\$339.4	61%
Mozambique (2003)	5%	24%	1%	9%	61%	\$273.6	75%
Nicaragua (2007)	0%	73%	0%	0%	27%	\$74.4	7%
Zambia (2003)	12%	63%	6%	6%	12%	\$199.1	21%
Vietnam (2008)	39%	8%	5%	3%	46%	\$427.0	51%



Percent and number of men with and without CVD experiencing catastrophic spending and impoverishment- 2005



Number affected 1.4 – 2.0 million

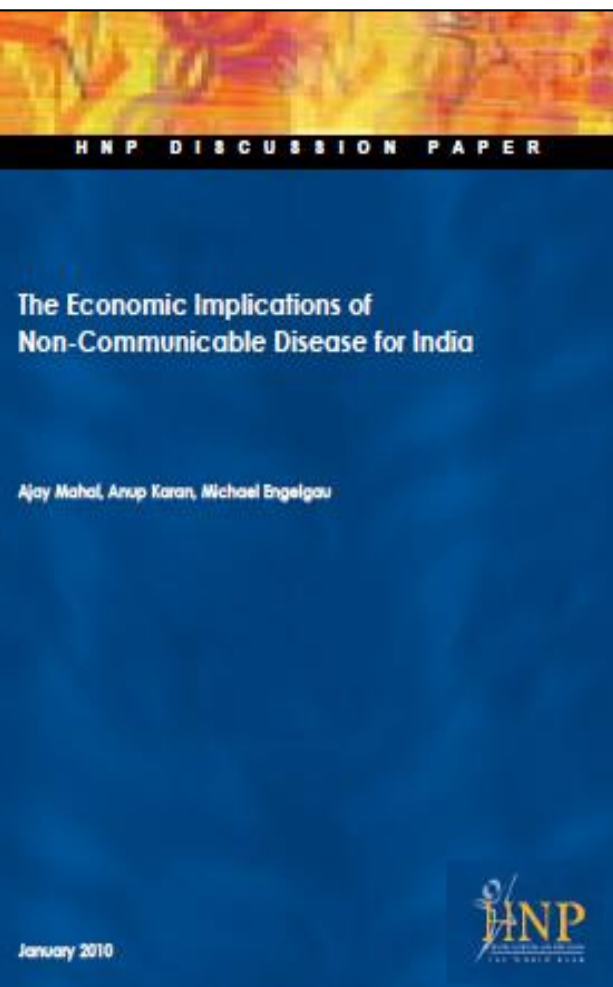
0.6-0.8 million

Source: Mahal et al 2010

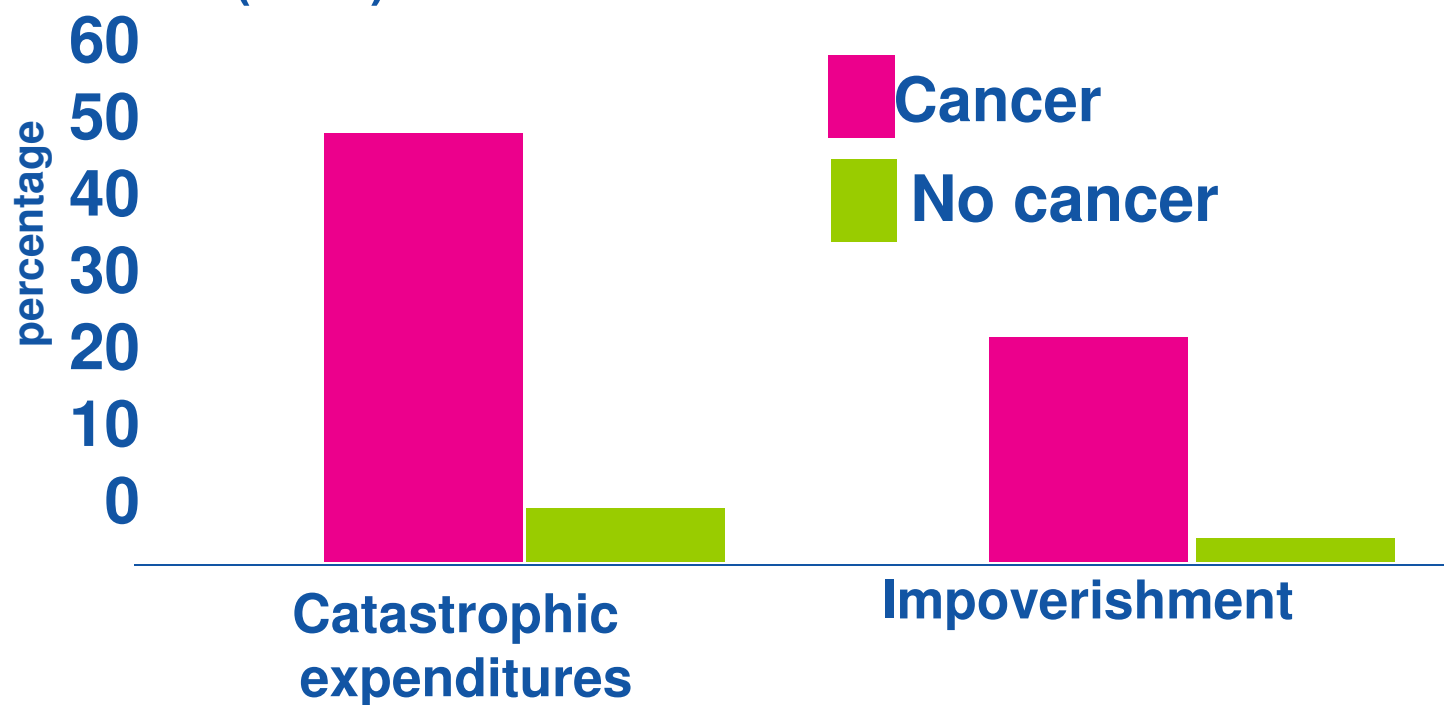
Catastrophic spending >30% HH income in one year; Impoverishment from above poverty line to below during year



NCDs lead to catastrophic health expenditures in India

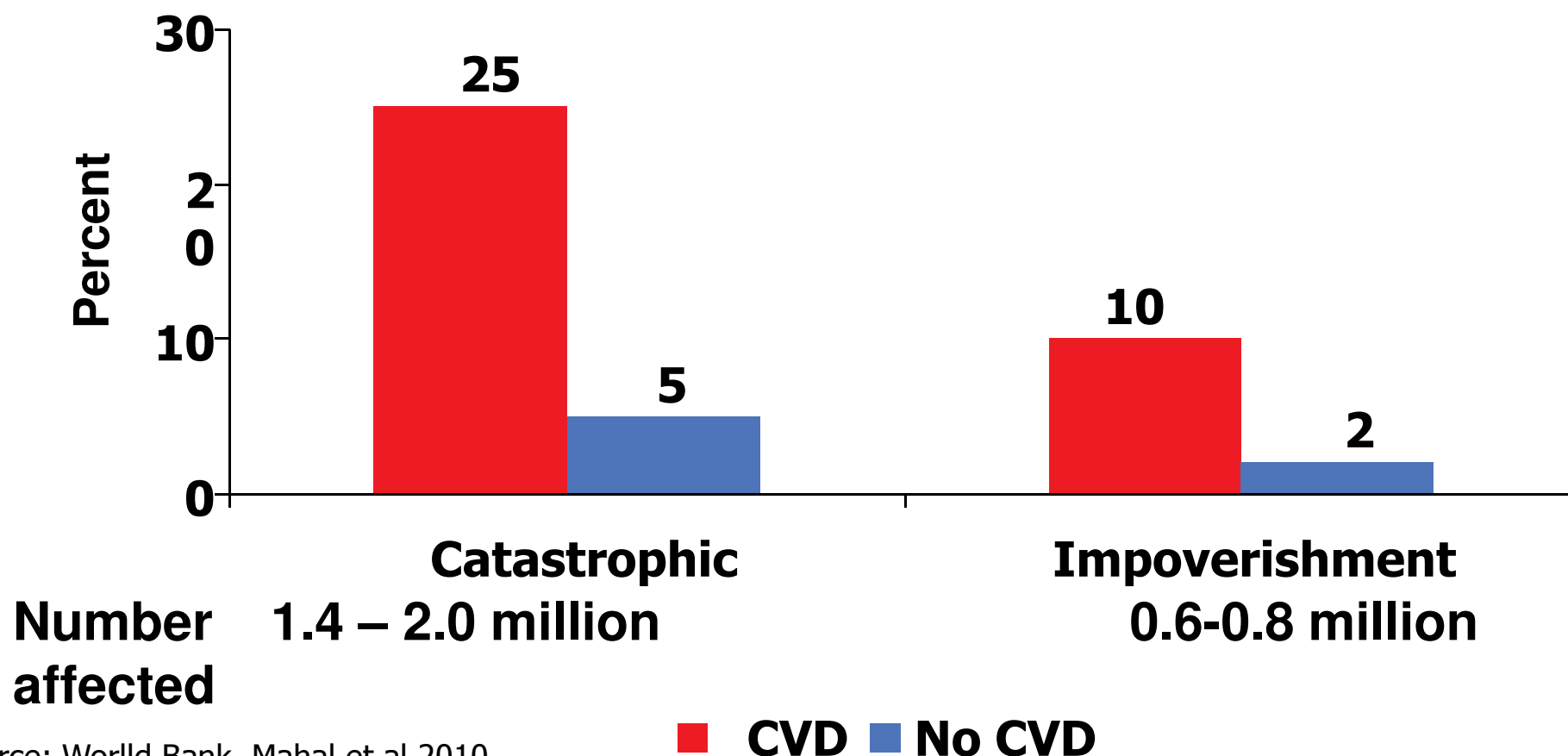


Percent with and without cancer experiencing catastrophic spending and impoverishment (2004)



Heart disease lead to catastrophic expenses

Percent and number of men with and without cardiovascular diseases experiencing catastrophic spending and impoverishment (2004)



Source: World Bank, Mahal et al 2010

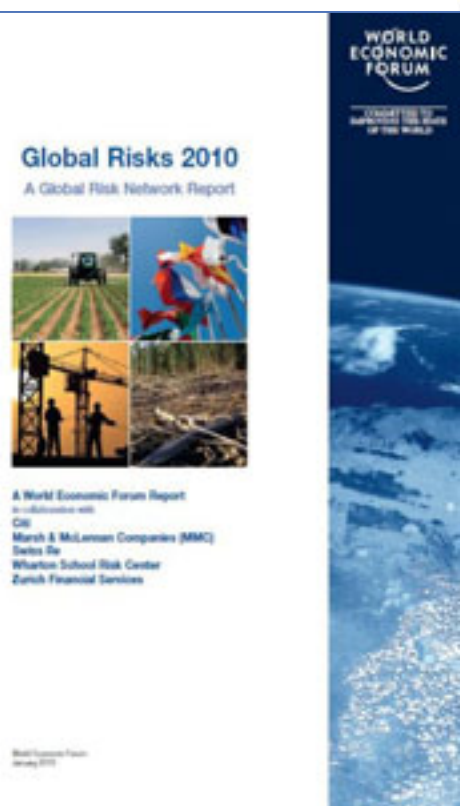


Families with members who have a chronic disease are at increase financial risk and more likely to be exposed to catastrophic spending and impoverishment

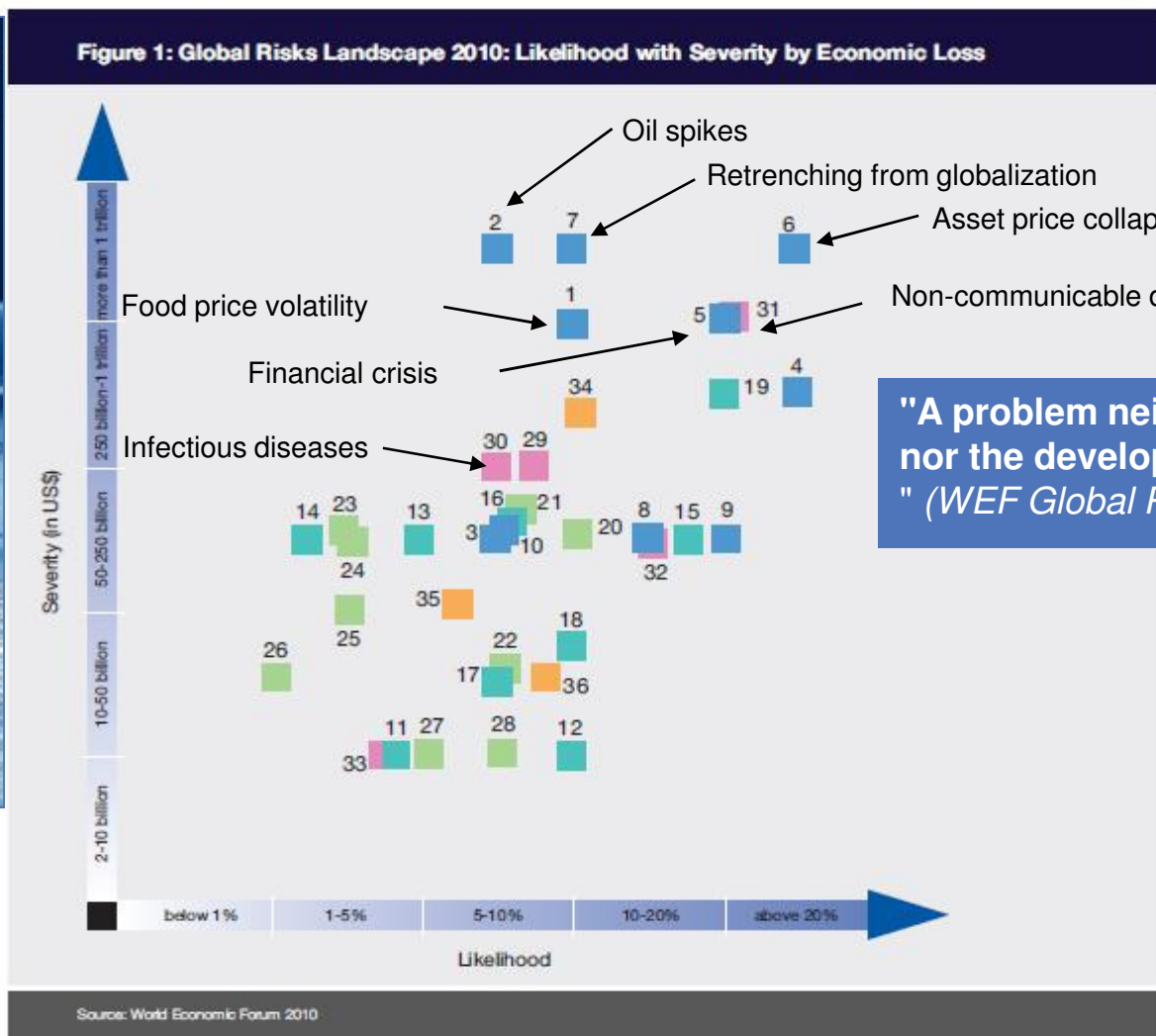
Chronic diseases can play an adverse role in efforts to reduce poverty



NCDs are the third largest global risk in terms of likelihood



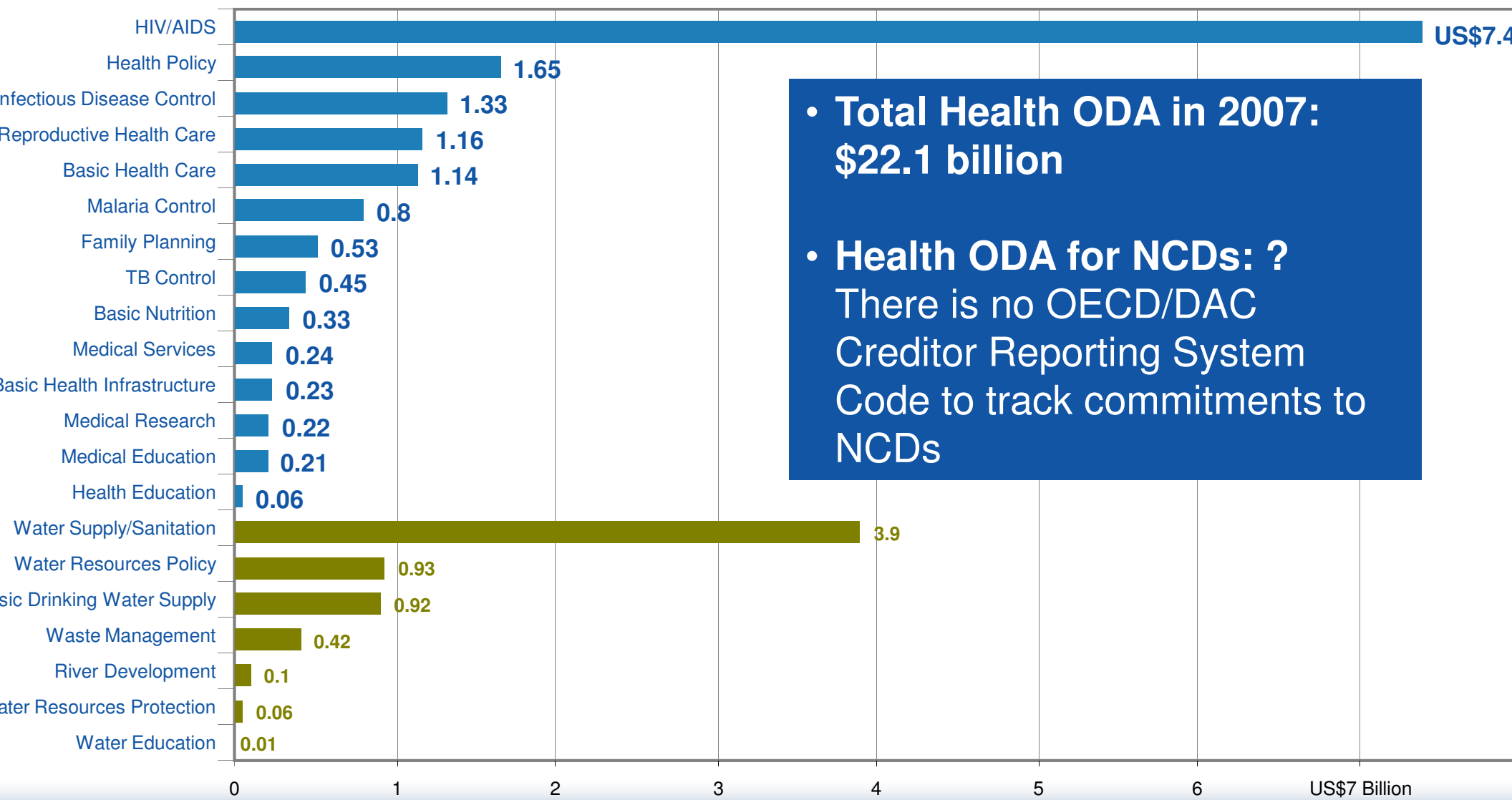
World Economic Forum: Global Risk 2010 Report



"A problem neither the developed world nor the developing world can afford"
 " (WEF Global Risk 2010 Report)

Global commitments to public health (2007)

(measured in Official Development Assistance)



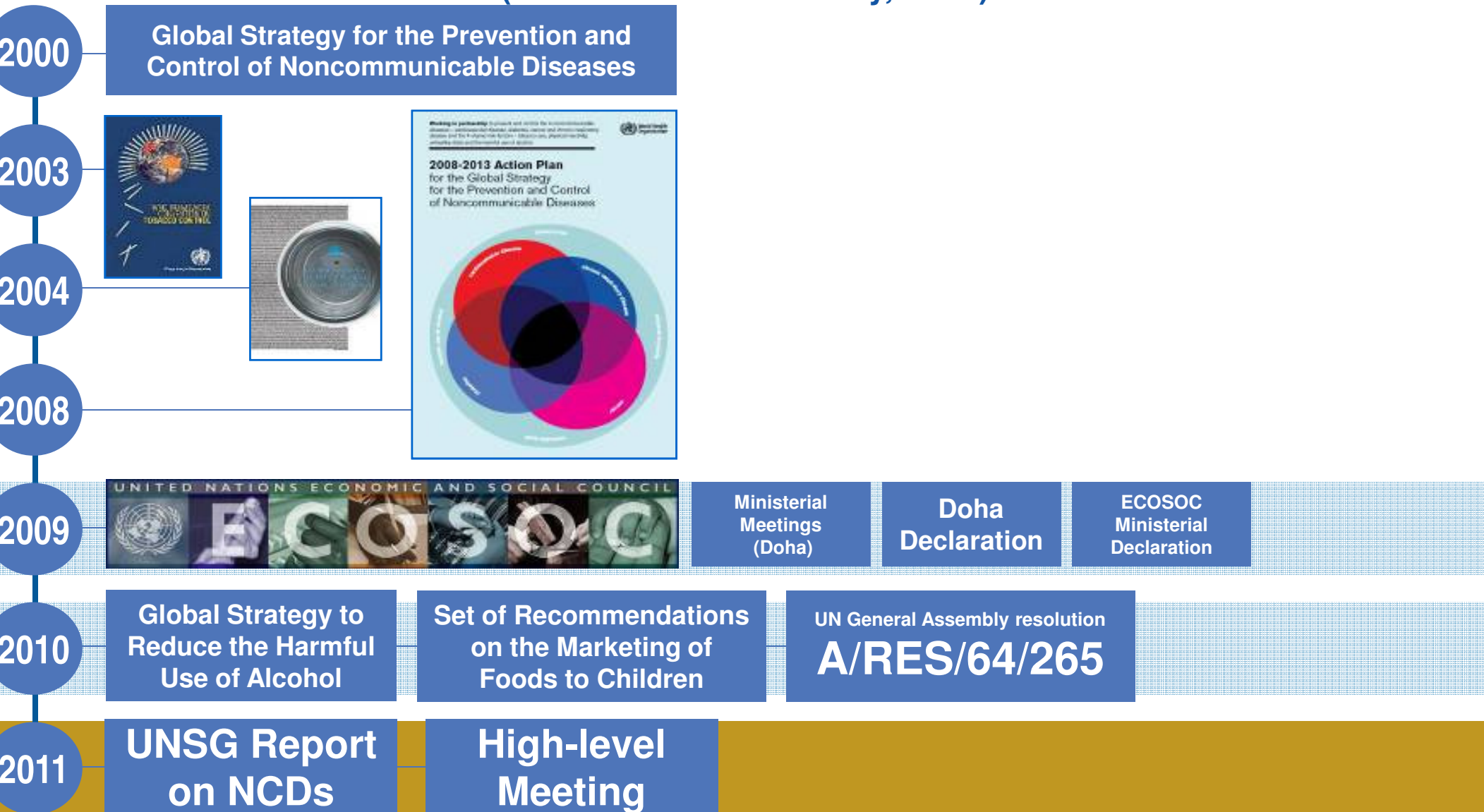
- **Total Health ODA in 2007: \$22.1 billion**
- **Health ODA for NCDs: ?**
There is no OECD/DAC Creditor Reporting System Code to track commitments to NCDs

(Source: Kaiser Family Foundation, 23 July 2009, based on OECD/DAC)



Action Plan for the Global Strategy

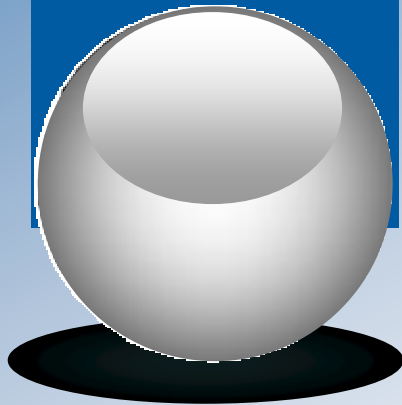
(World Health Assembly, 2008)



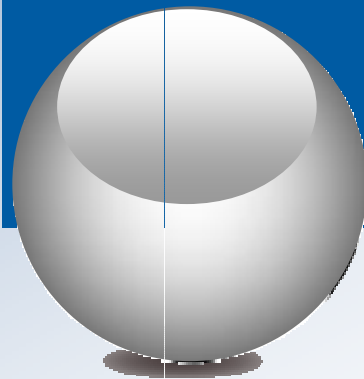
The Global Strategy for the Prevention and Control of NCDs

(World Health Assembly, 2000)

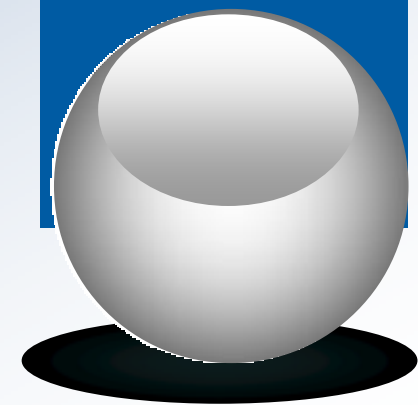
Mapping the
epidemic of
NCDs



Reducing the
level of
exposure to
risk factors



Strengthening
health care for
people with
NCDs



Surveillance: Gaps and Lessons Learned

- Good progress in risk factors surveillance over the last decade but NCD surveillance systems are still generally weak in member States
- No consensus on key components of an NCD surveillance system and lack of standardized indicators to monitor NCD trends at national and global levels – duplication/inconsistencies
- When it exists, NCD surveillance work is not institutionalized and rarely integrated into the national health information systems of LMICs
- Limited capacity in epidemiology and surveillance in Member States



Framework for a national NCD surveillance system

Exposures (Risk factors)

- Behavioral and dietary/nutritional risk factors
- Physiological and metabolic risk factors

Outcomes

- Mortality
- Morbidity

Health System Response

- Interventions
- Health system capacity



Prevention and Health Promotion



Prevention

Reduction of Risk factors

- Actions for:
 - Tobacco control
 - Promoting healthy diet
 - Promoting physical activity
 - Reducing the harmful use of alcohol
- Cost effectiveness and best buys..



Major Challenge

- Health in All Policies and Intersectoral Action

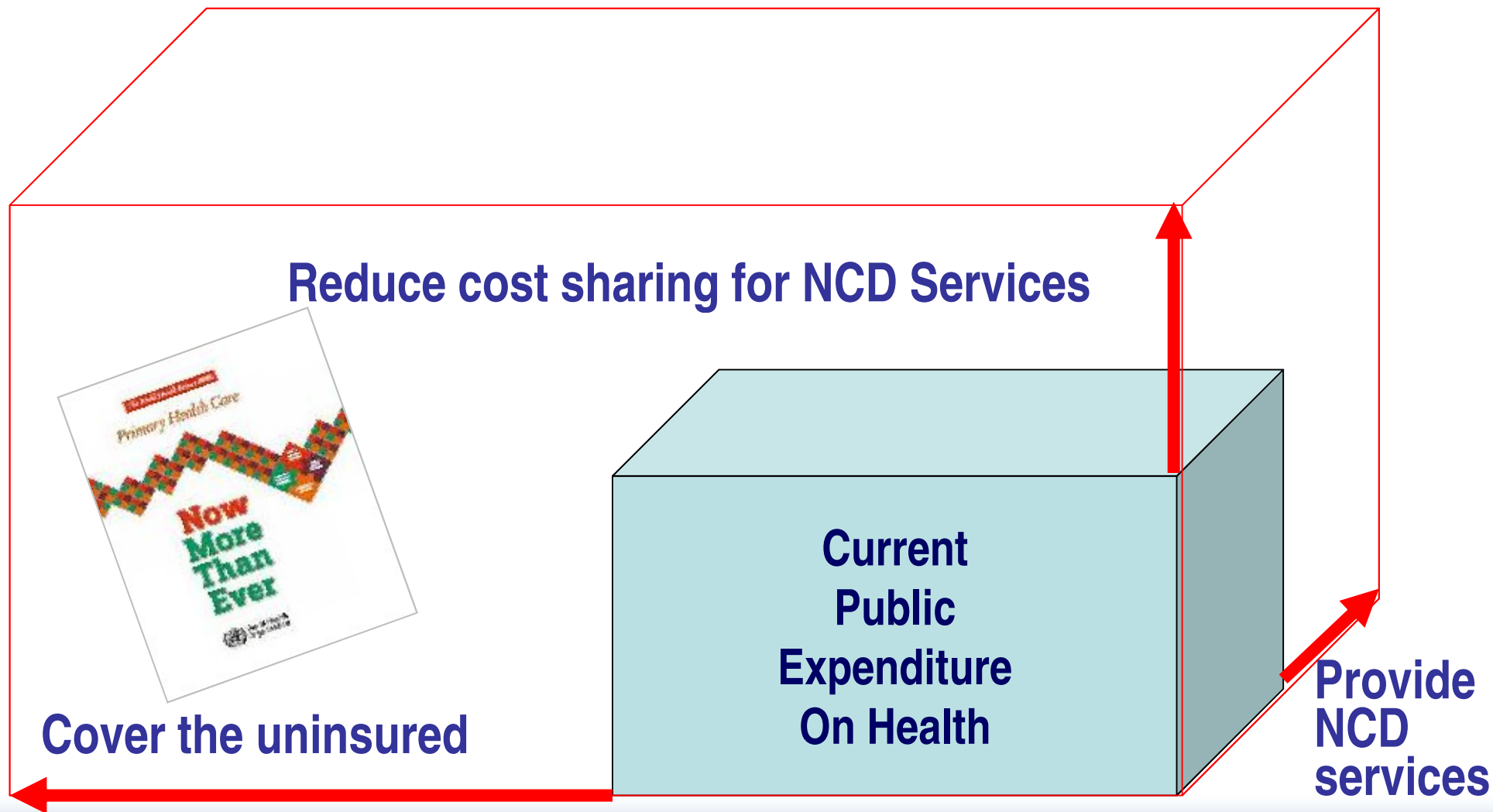


Improving Health Care

- Health system strengthening based on primary health care-
- Actions to achieve short term gains in promoting access to the essential NCD interventions



Improving Access to Health care



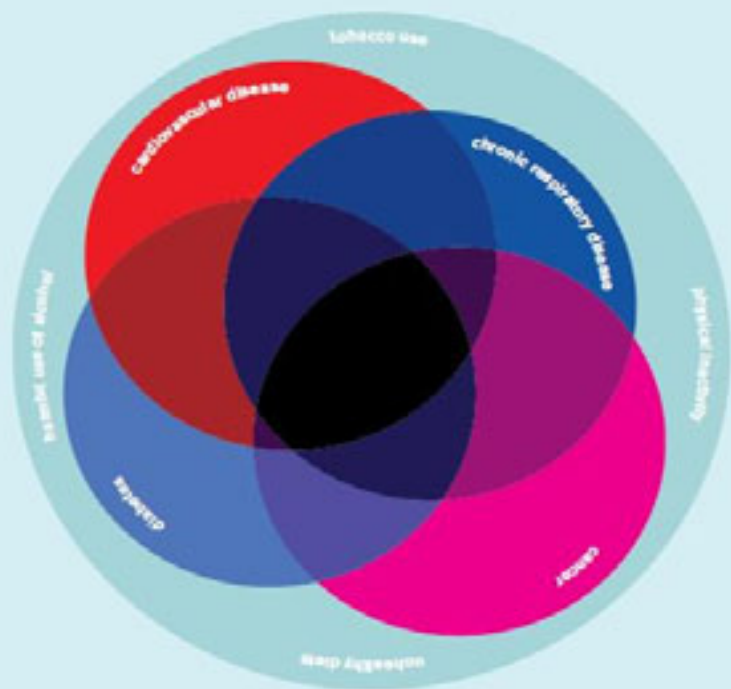
Action Plan for the Global Strategy

(World Health Assembly, 2008)

Working in partnership to prevent and control the 4 noncommunicable diseases – cardiovascular disease, diabetes, cancer and chronic respiratory disease and the 4 shared risk factors – tobacco use, physical inactivity, unhealthy diets and the harmful use of alcohol.



2008-2013 Action Plan for the Global Strategy for the Prevention and Control of Noncommunicable Diseases



Six objectives:

1. Raising the priority accorded to non-communicable diseases in development work at global and national levels
2. Establishing and strengthening national policies and programmes
3. Reducing and preventing risk factors
4. Prioritizing research on prevention and health care
5. Strengthening partnerships
6. Monitoring NCD trends and assessing progress made at country level



Love that Body CARIBBEAN WELLNESS DAY

Port-of-Spain
Trinidad and Tobago
15 September 2007

DECLARATION OF PORT-OF-SPAIN: UNITING TO STOP THE EPIDEMIC OF CHRONIC NCDs

We, the Heads of Government of the Caribbean Community (CARICOM), meeting at the Crowne Plaza Hotel, Port-of-Spain, Trinidad and Tobago on 15 September 2007 on the occasion of a special Regional Summit on Chronic Non-Communicable Diseases (NCDs);

Conscious of the collective actions which have in the past fuelled regional integration, the goal of which is to enhance the well-being of the citizens of our countries;

Recalling the Nassau Declaration (2001), that "the health of the Region is the wealth of Region", which underscored the importance of health to development;

Inspired by the successes of our joint and several efforts that resulted in the Caribbean being the first Region in the world to eradicate poliomyelitis and measles;

Affirming the main recommendations of the Caribbean Commission on Health and Development which included strategies to prevent and control heart disease, stroke, diabetes, hypertension, obesity and cancer in the Region by addressing their causal risk factors of unhealthy diets, physical inactivity, tobacco use and alcohol abuse and strengthening our health services;

Impelled by a determination to reduce the suffering and burdens caused by NCDs on the citizens of our Region which is the one worst affected in the Americas;

Fully convinced that the burdens of NCDs can be reduced by comprehensive and integrated preventive and control strategies at the individual, family, community, national and regional levels and through collaborative programmes, partnerships and policies supported by governments, private sectors, NGOs and our other social, regional and international partners;

Declare -

- Our full support for the initiatives and mechanisms aimed at strengthening regional health institutions, to provide critical leadership required for implementing our agreed strategies for the reduction of the burden of Chronic, Non-Communicable Diseases as a central priority of the Caribbean Co-operation in Health Initiative Phase III (CCH III), being coordinated by the CARICOM Secretariat, with able support from the Pan American Health Organisation/World Health Organisation (PAHO/WHO) and other relevant partners;
- That we strongly encourage the establishment of National Commissions on NCDs or analogous bodies to plan and coordinate the comprehensive prevention and control of chronic NCDs;
- Our commitment to pursue immediately a legislative agenda for passage of the legal provisions related to the International Framework Convention on Tobacco Control; urge its immediate ratification in all States which have not already done so and support the immediate enactment of legislation to limit or eliminate smoking in public places, ban the sale, advertising and promotion of tobacco products to children, insist on effective warning labels and introduce such fiscal measures as will reduce accessibility of tobacco;



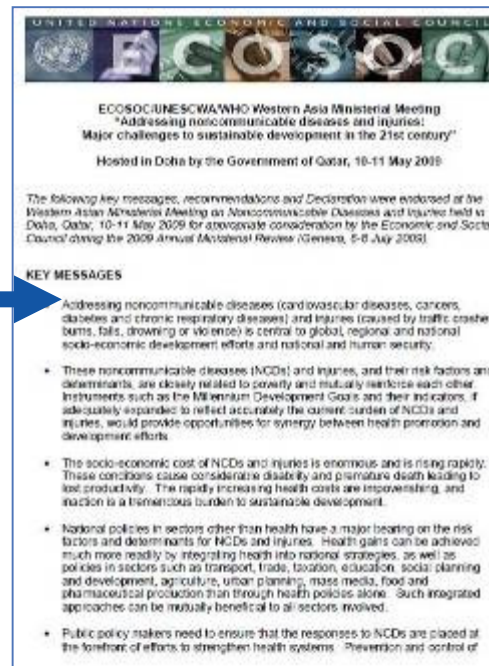
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To raise the priority accorded to NCDs in development work

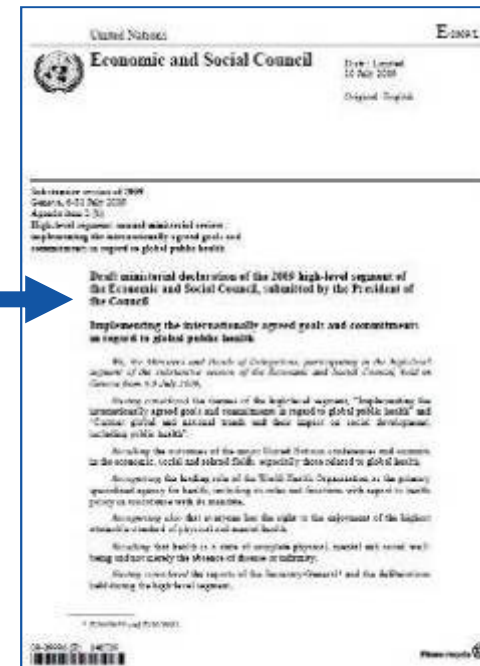




- Regional Ministerial Meeting on Health Literacy (Beijing, 29-30 April 2009)
- Regional Ministerial Meeting on Non-communicable Diseases and Injuries, Poverty and Development (Qatar, 10-11 May 2009)
- ECOSOC High-level Segment on Global Health (Geneva, 6-9 July 2009)
- ECOSOC Ministerial Roundtable Meeting on Non-communicable Diseases and Injuries (Geneva, 8 July 2009)



Doha Declaration on Non-communicable Diseases



ECOSOC Ministerial Declaration



United Nations General Assembly Resolution
A/RES/64/265
on the prevention and control of non-communicable diseases
(adopted on 13 May 2010)



Resolution A/RES/64/265 – Prevention and Control of NCDs

“

- ❖ **Decides** to convene a **High-level Meeting of the General Assembly in September 2011**, with the participation of Heads of State and Government, on the prevention and control of non-communicable diseases;
- ❖ **Also decides** to hold **consultations on the scope, modalities, format and organization** of the high-level meeting of the General Assembly on the prevention and control of non-communicable diseases, with a view to concluding consultations, preferably before the end of 2010;
- ❖ **Encourages** Member States to include in their **discussions at the High-level Plenary Meeting of the sixty-fifth session of the General Assembly** on the review of the Millennium Development Goals, to be held in September 2010, the rising incidence and the socio-economic impact of the high prevalence of non-communicable diseases worldwide;
- ❖ **Requests** the Secretary-General to submit a **report to the General Assembly at its sixty-fifth session** in collaboration with Member States, the World Health Organization and the relevant funds, programmes and specialized agencies of the United Nations system, on the global status of non-communicable diseases, with a particular focus on the developmental challenges faced by developing countries.

”





2

To establish and strengthen national policies and plans for prevention and control of NCDs



2008-2013 Action Plan for the Global Strategy for the Prevention and Control of Noncommunicable Diseases

Global strategy on diet, physical activity and health



Developing intersectoral action to:

- Reduce population salt intake
- Reduce childhood obesity
- Change food marketing to children
- Increase physical activity

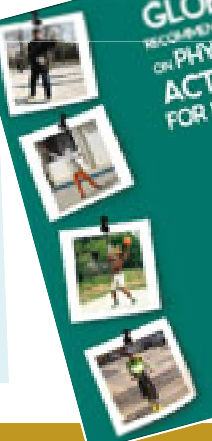

Stratégie mondiale pour l'alimentation, l'exercice physique et la santé





FCTC
FRAMEWORK CONVENTION

GLOBAL RECOMMENDATIONS ON PHYSICAL ACTIVITY FOR HEALTH





A FRAMEWORK TO MONITOR AND EVALUATE IMPLEMENTATION



World Health Organization

WHO REPORT ON THE GLOBAL TOBACCO EPIDEMIC, 2009
Implementing smoke-free environments




POPULATION-BASED INTERVENTION STRATEGIES FOR CHILDHOOD OBESITY

alcohol

MAY-WORLD NO TOBACCO DAY

lamour? No, mouth cancer

Protect lipians from tobacco advertising and smoke.

CHEWING TOBACCO IS UGLY



3 To promote interventions to reduce (tobacco use, unhealthy diet, physical



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