## Status of Non-communicable Diseases in India in Global Context

Seminar on Nutrition & Lifestyle for Emerging NCD Challenges 26<sup>th</sup> April 2012

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## Disease Burden due to NCDs

## Mortality estimates due to NCDs

- Globally all deaths (2005)
- Globally deaths due to NCD (2005)

- 58 million\*
  35 million\*
- (60.3%)

- All deaths in India (2004)
- Deaths due to NCDs in India (2004)

**10.3** million #

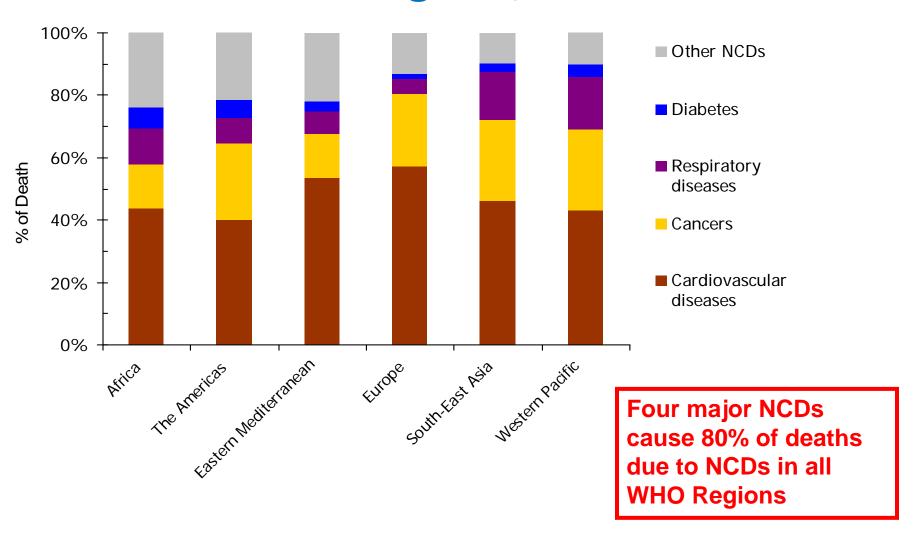
5.2 million #

(50.5%)

\* Source: WHO

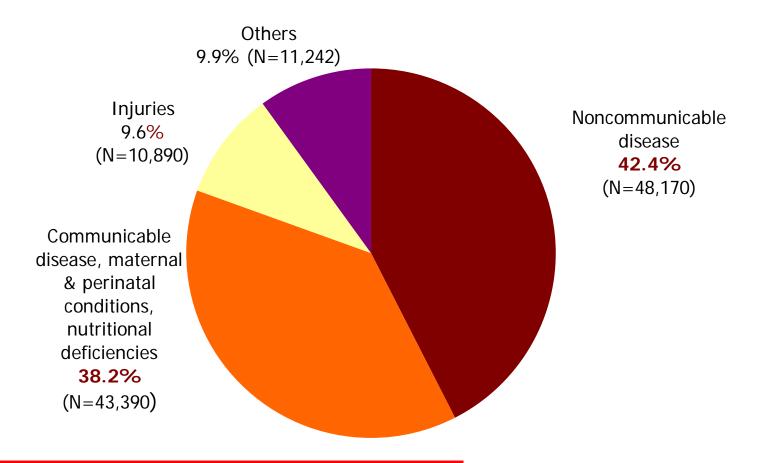
# Source: ICMR

## Percentage of NCD deaths, by cause in WHO Regions, 2008



Source: WHO global Health observatory 2011 <a href="http://apps.who.int/ghodata/">http://apps.who.int/ghodata/</a>

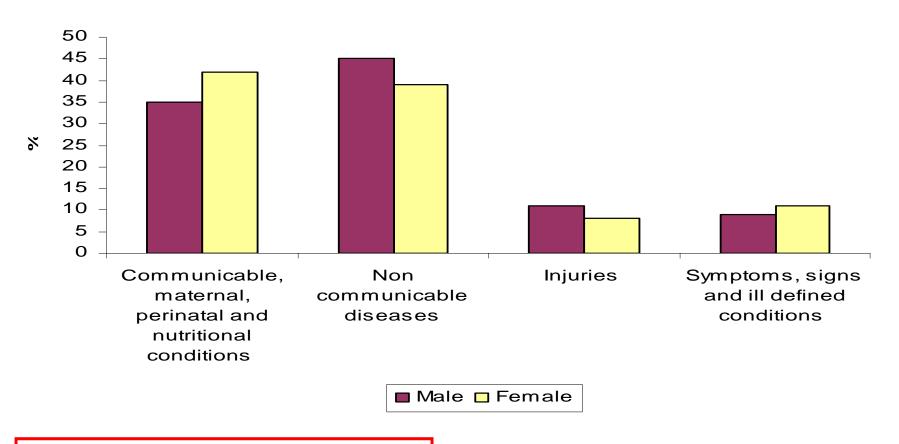
## Distribution of deaths by major cause-India 2001-2003



Deaths due to NCDs outnumber deaths due to communicable diseases, maternal and perinatal causes and nutritional conditions combined

Source: RGI-CGHR Million Death Study

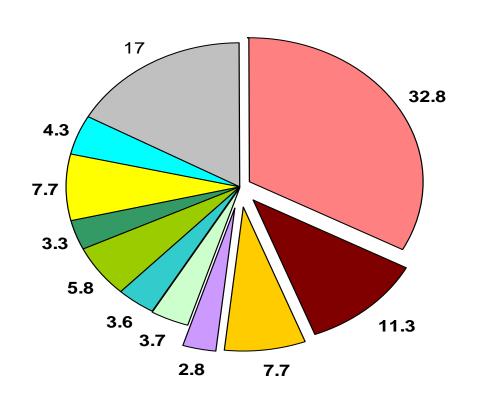
## Distribution of deaths by major cause among men and women, India: 2001-03



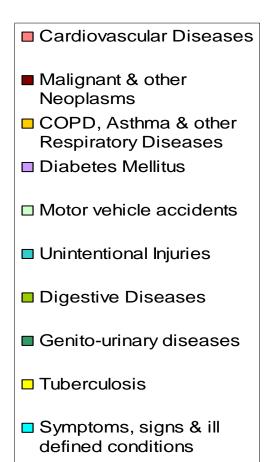
Among men, NCDs cause majority of deaths whereas; among women, communicable diseases along with maternal and child health and nutritional conditions are leading causes of deaths closely followed by NCDs

Source: RGI-CGHR Million Death Study

## Causes of Death (%) in Urban Population (25 to 69 years) India: 2001-2003



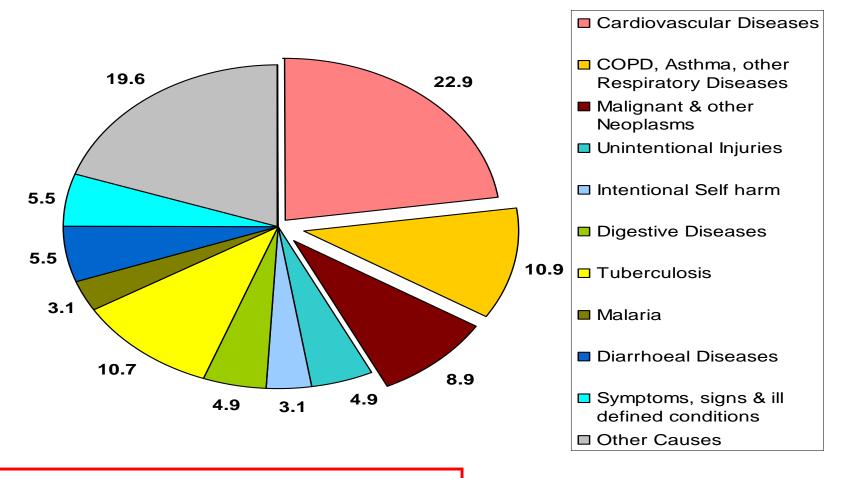
4 major NCDs- Cardiovascular diseases, Malignant & other Neoplasms, COPD, Asthma & other respiratory diseases & Diabetes Mellitus contributes to 55% of the total reported deaths in urban area



Source :Special Survey of Deaths, Registrar General of India

□ Other causes

## Causes of Death (%) in Rural Population (25 to 69 years) India: 2001-2003



3 major NCDs-Cardiovascular diseases, COPD, Asthma & other respiratory diseases, Malignant & other Neoplasms contributes to 43% of the total reported deaths in rural area

Source : Special Survey of Deaths, Registrar General of India

### Disease Burden due to NCDs

- More than 20% of the population have at least one chronic disease
- More than 10% have more than one chronic disease

# **Current Status & Future Trends on Key NCDs in India**

Diseases	<b>Existing Burden and Trends</b>			
Cancer	28 lakh (2010); Incidence 10 lakh in a year;			
	20-25% increase in 5 years			
Cardiovascular Diseases	2.9 crore (2000);			
	Expected to rise to 6.4 crore by 2015			
Stroke	20 lakh			
Diabetes	5.1 crore (2010);			
	Expected to rise to 8 crore by 2030			
Chronic Kidney Disease	Incidence of End Stage Renal Disease /year =			
	175/ million population			
Chronic Lung Disease	Burden: 3.9 crore			
Mental Disorders	6-7% of population;			
	1-2% have severe mental disorders;			

# Risk Factors & Determinants of NCDs

### **NCD:** From Risk Factors to Disease

"Evidence, Policy, Action, Partnership"

### Behavioural Risk Factors

- Tobacco use
- Unhealthy Diet
- Alcohol
- Phys. Inactivity

## Intermediate Risk Factors

- Raised BP
- High BMI
- Dyslipidemia
- Raised blood glucose

### **Endpoints**

- CVD
- Cancers
- COPD
- Diabetes







#### **Determinants and Facilitators**

Social Economic Cultural Environmental

Age

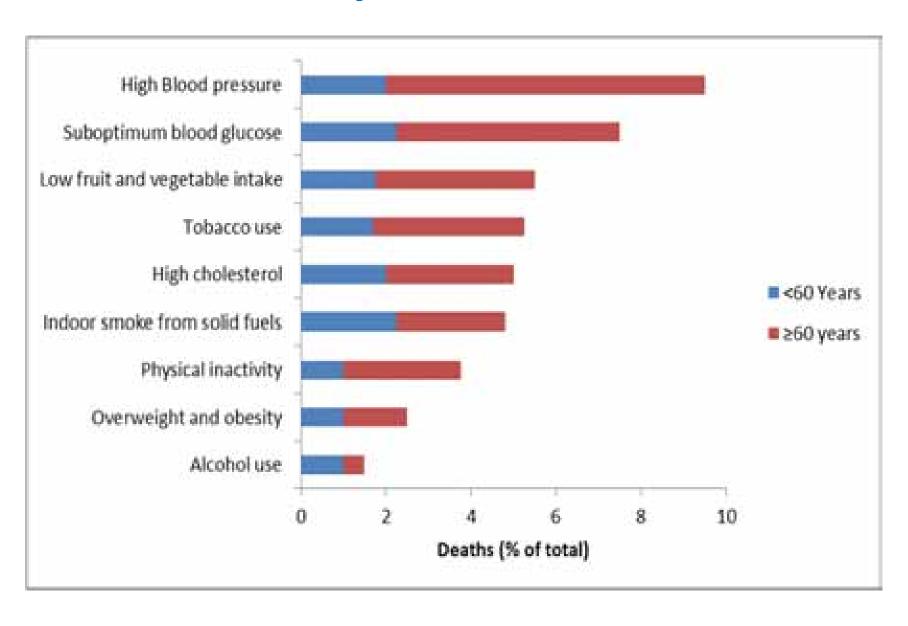
Gender

Genes

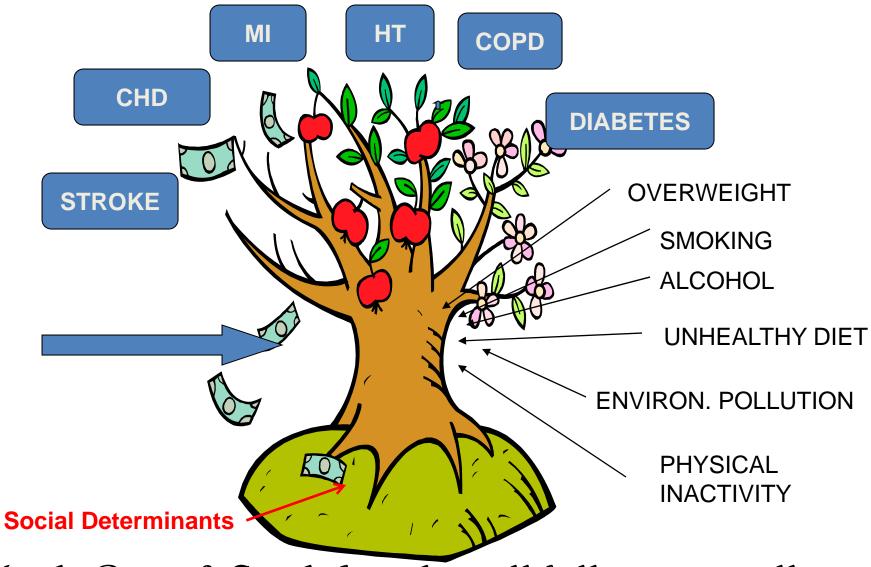
# The four major NCDs are caused by four *common* lifestyle related risk factors—tobacco use, unhealthy diet, physical inactivity and harmful use of alcohol

NCDs	Shared Risk Factors				
	Tobacco use	Unhealthy diets	Physical inactivity	Harmful use of alcohol	
Cardiovascular diseases	✓	✓	✓	✓	
Diabetes (Type II)	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	
Cancer	<b>√</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	
Chronic respiratory disease	✓				

### Deaths caused by NCD Risk Factors in India



### **Disease Prevention and Health Promotion**



Hit the Route & Trunk, branches will fall automatically

