


# Burden due to heart disease and other chronic non- communicable diseases

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NCD unit

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- Disease burden
  - Economic cost
  - Social cost

# What is the definition of NCDs

- All diseases that are not communicable
- This includes acute and chronic NCDs
- Acute NCDs- injury and violence
- Chronic NCDs- cardiovascular diseases, Chronic respiratory diseases, diabetes ,cancer

# Chronic Non-Communicable Diseases

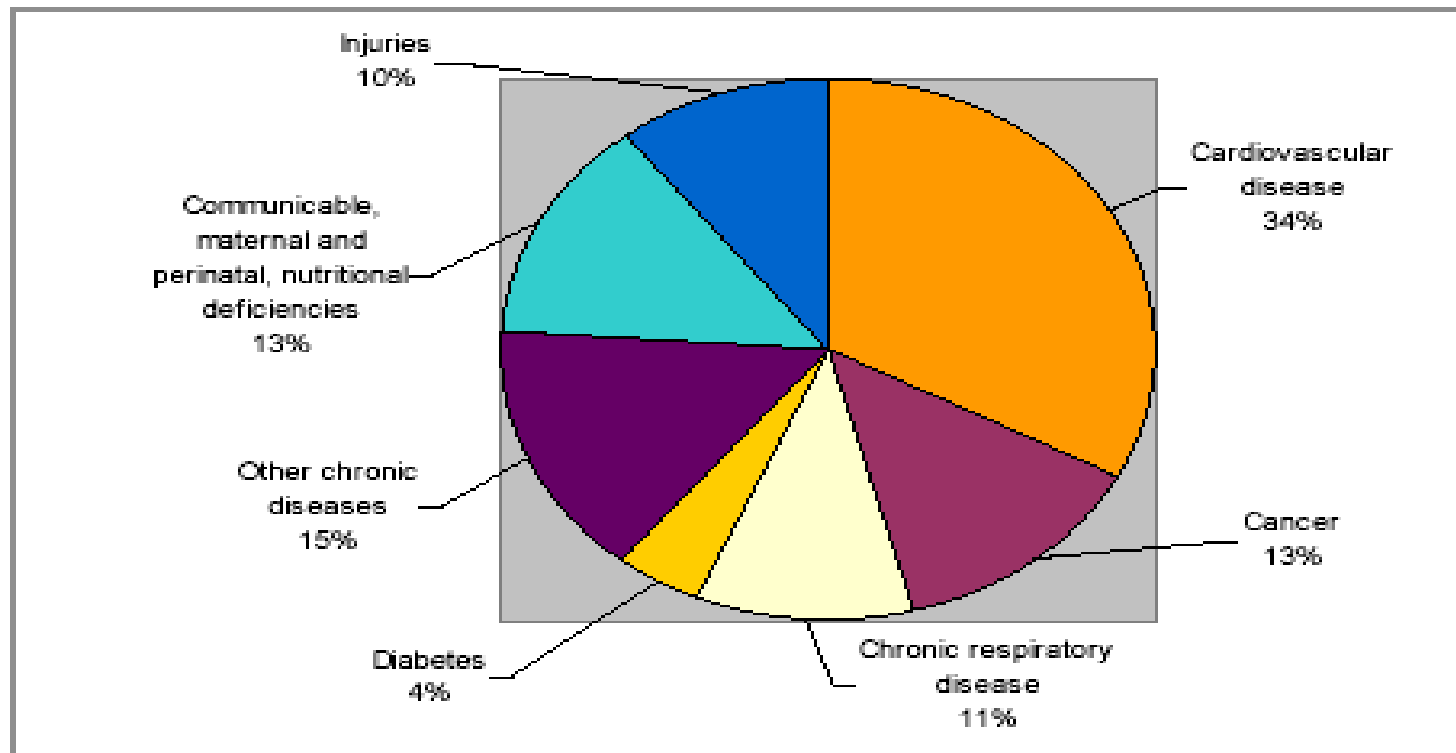
- Cardiovascular diseases ( affecting heart and brain )
- Diabetes
- Chronic respiratory diseases,
- cancer

# Magnitude

- NCDs are accounted for 70 % of all deaths in Sri Lanka ( 600 deaths )
- about 400 deaths per day
- Compare with dengue deaths

# Deaths by all causes

*Deaths by cause, all ages, Sri Lanka, 2002*



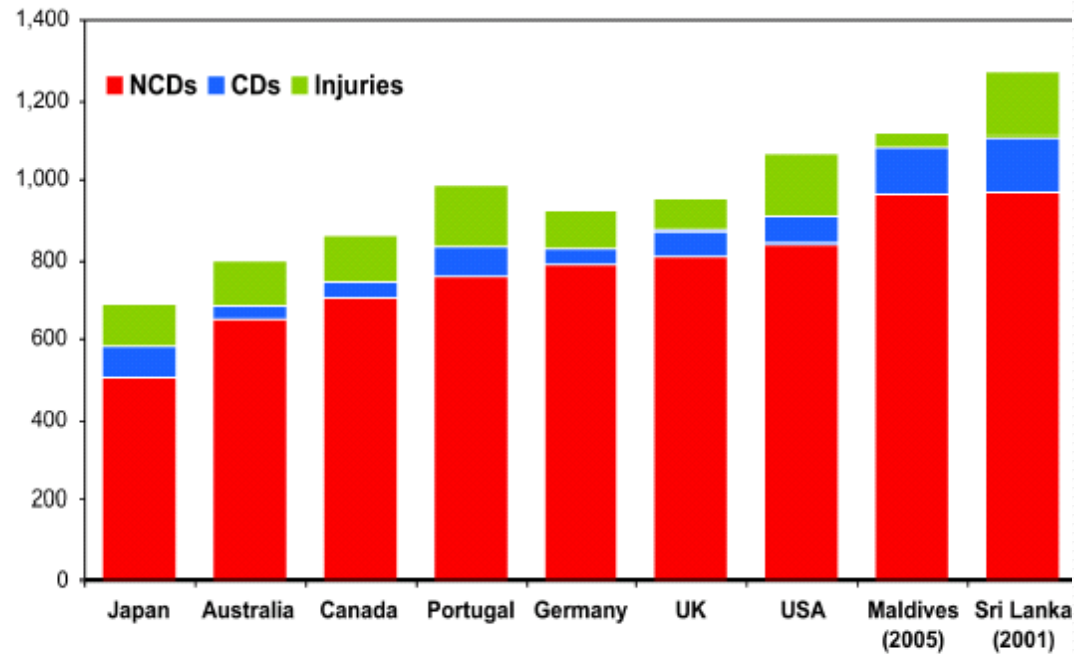
## MISUNDERSTANDING

**CHRONIC DISEASES MAINLY  
AFFECT OLD PEOPLE**

Half of the people  
died due to  
chronic NCD are  
less than 70 years

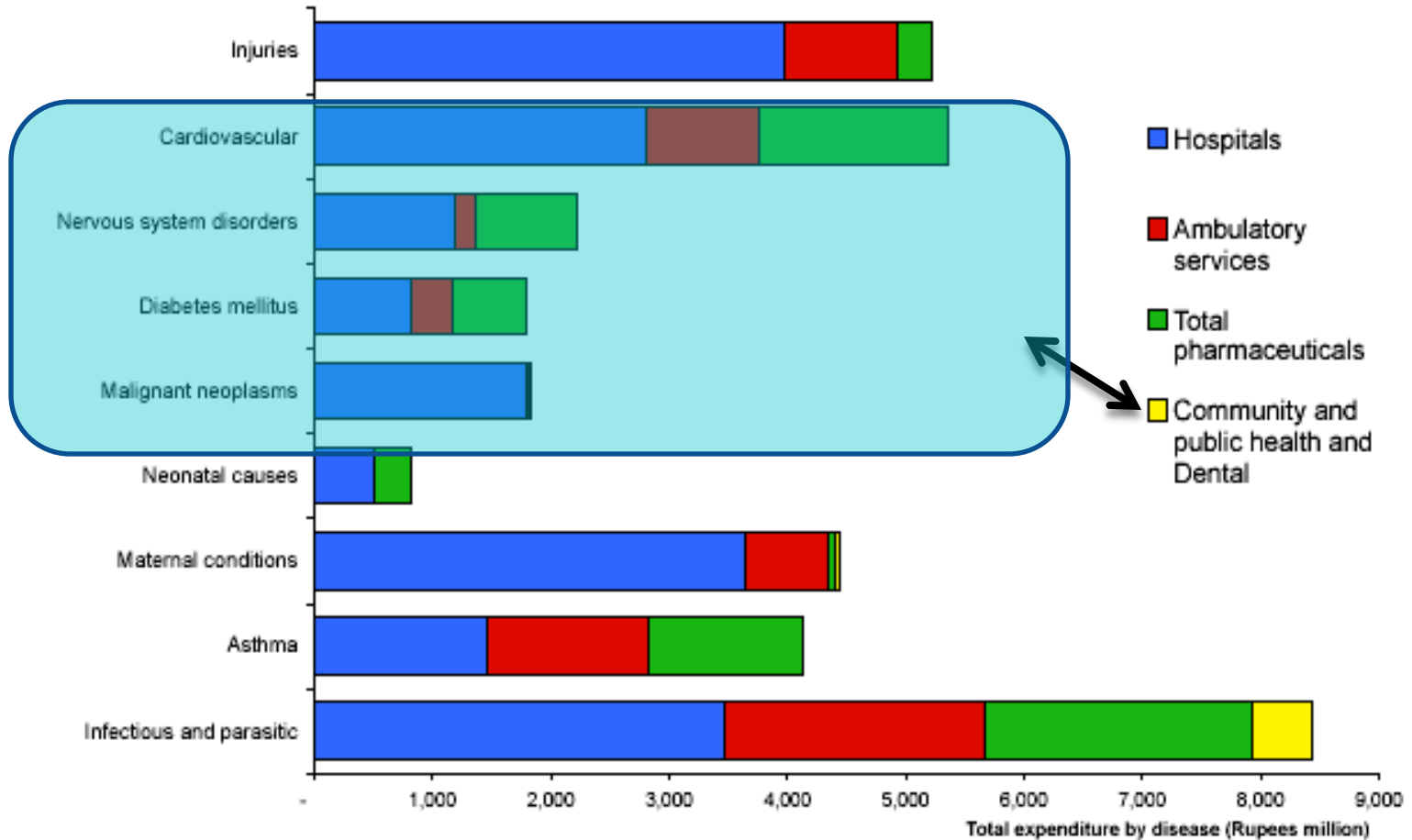
# Comparison of age adjusted death rates

Mortality rates for NCDs in Sri Lanka already higher than OECD countries





## Total costs of disease by sector, Sri Lanka 2005

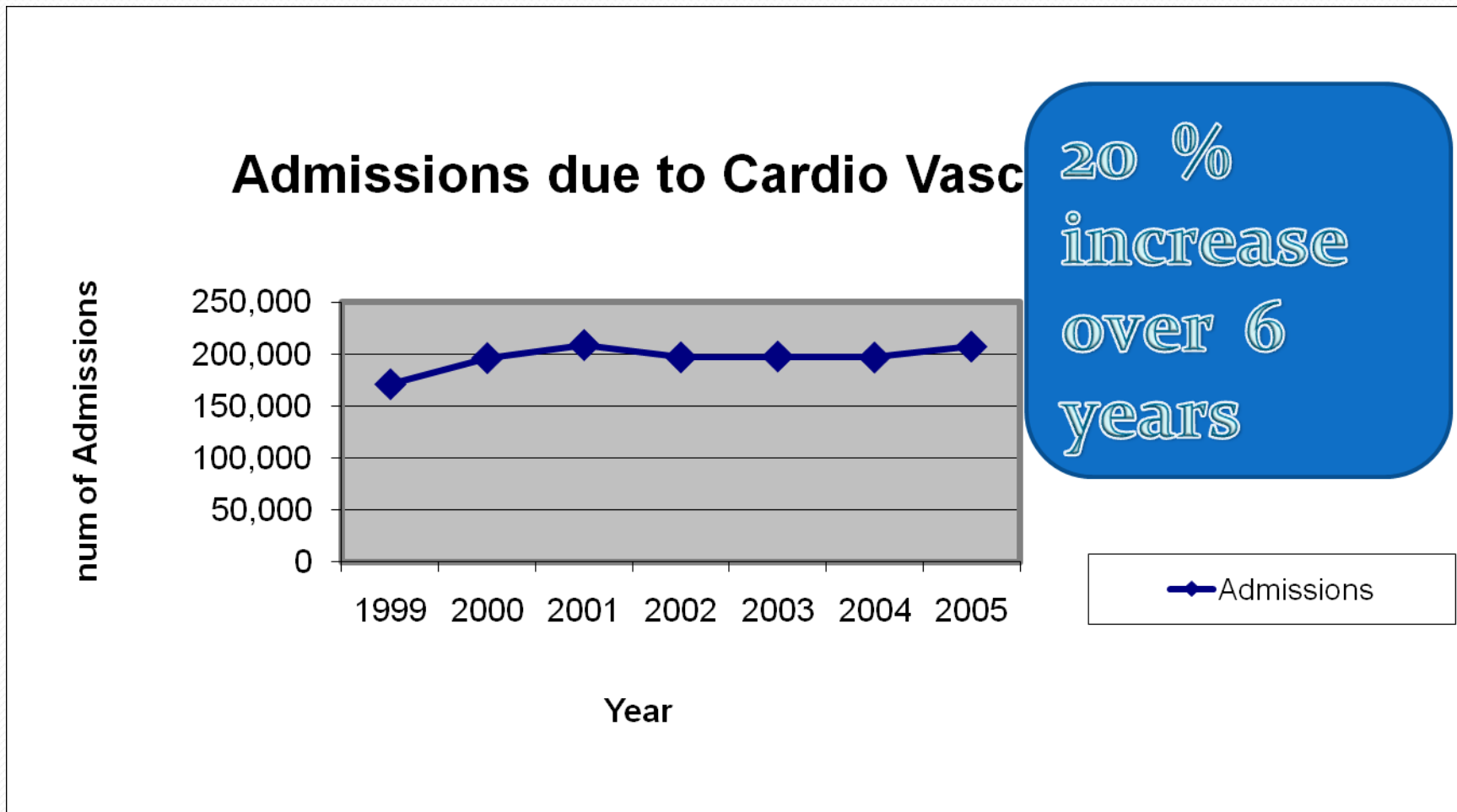


# Social cost

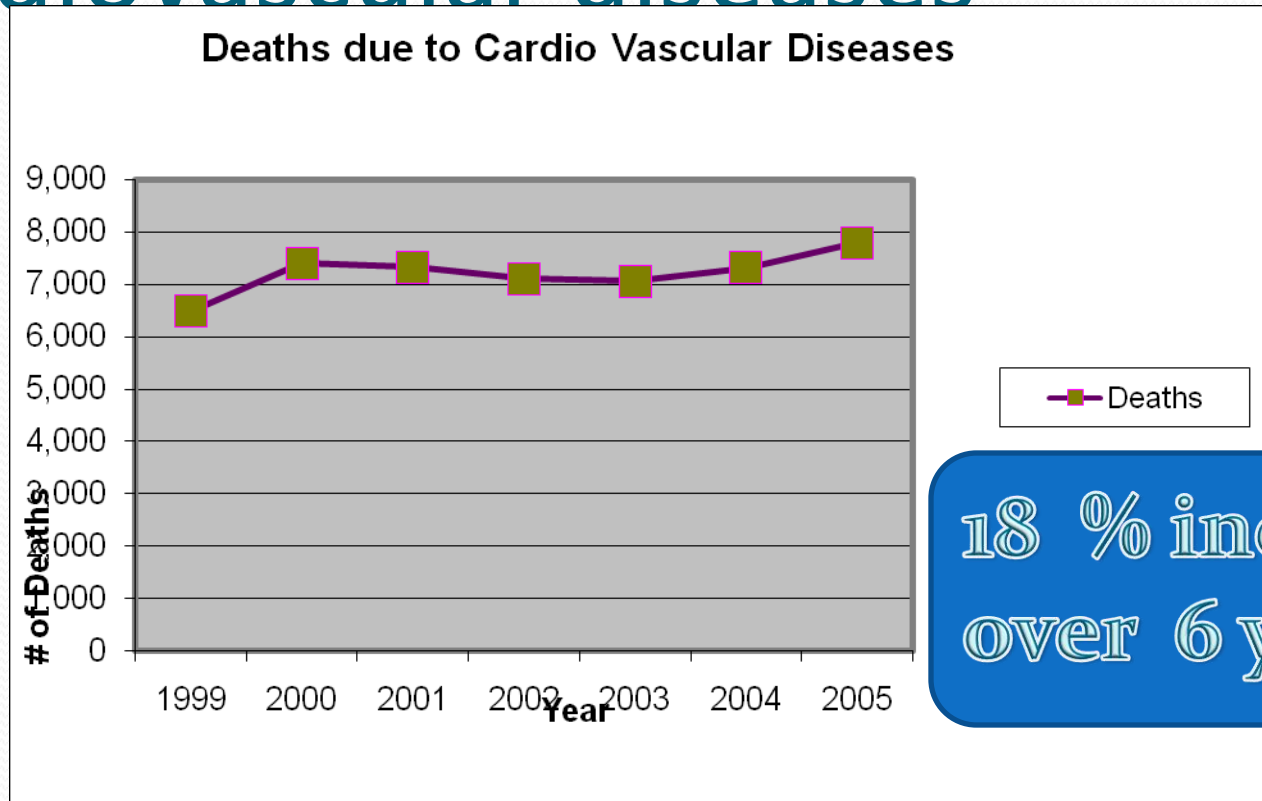
- Reduction in quality of life ( healthy life expectancy is about 60 years )
- Disruption of family life
- Cost of care

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- Increasing trend of heart diseases and other major NCDs has been observed over last 3 / 4 decades

# Government hospital admission due cardio-vascular diseases



# Hospital deaths due to cardiovascular diseases

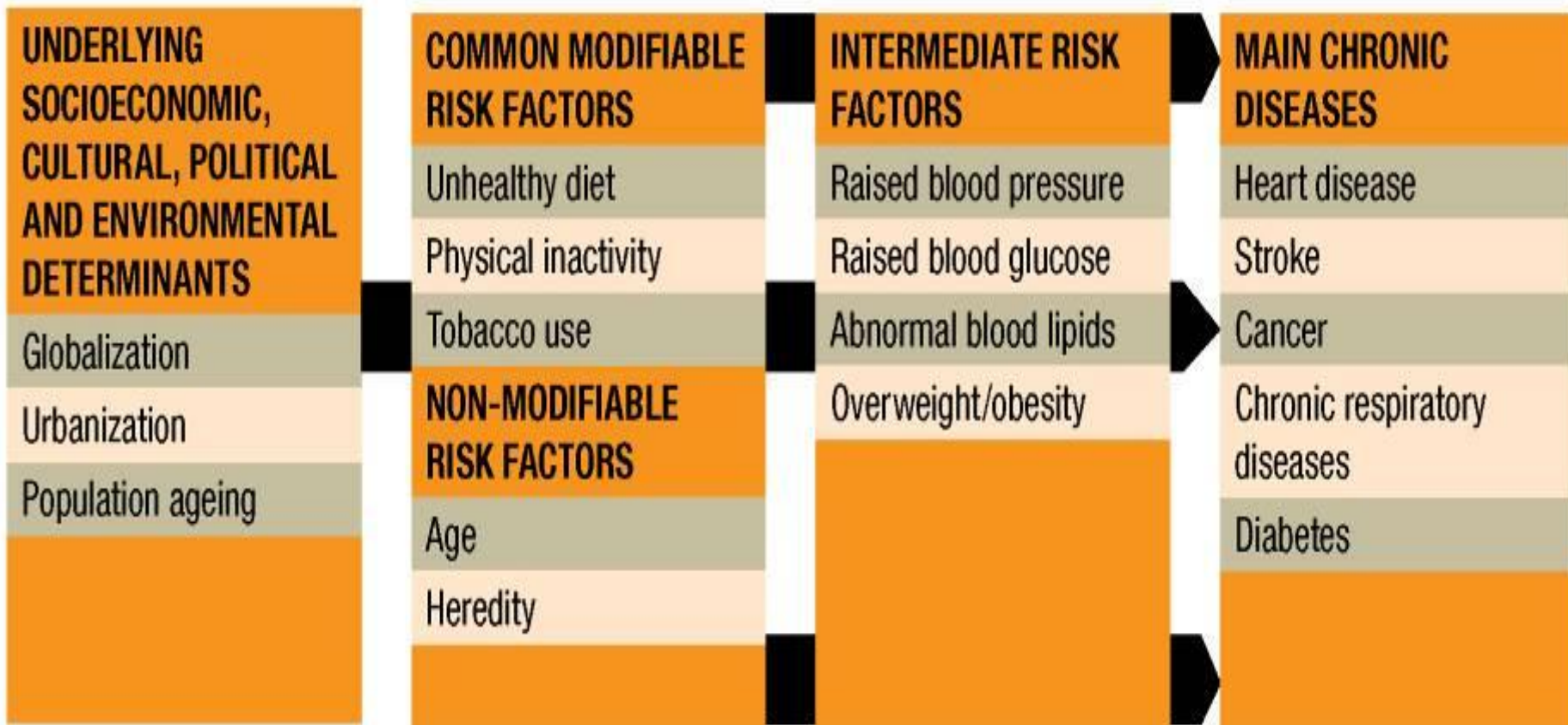


18 % increase  
over 6 years

# life expectancy might be stagnated or reduced

- Female – 76
- Male – 70
  
- Future life expectancy gains could be achieved mainly through NCD prevention and control

# Determinant of NCD



# Hypertension

- Prevalence is around -` 20 – 25 %
- 20 % among 18-65 adult population (Wijewardana et al 2005)
- 25 % among 18-70 ( Katulanda personal communication)



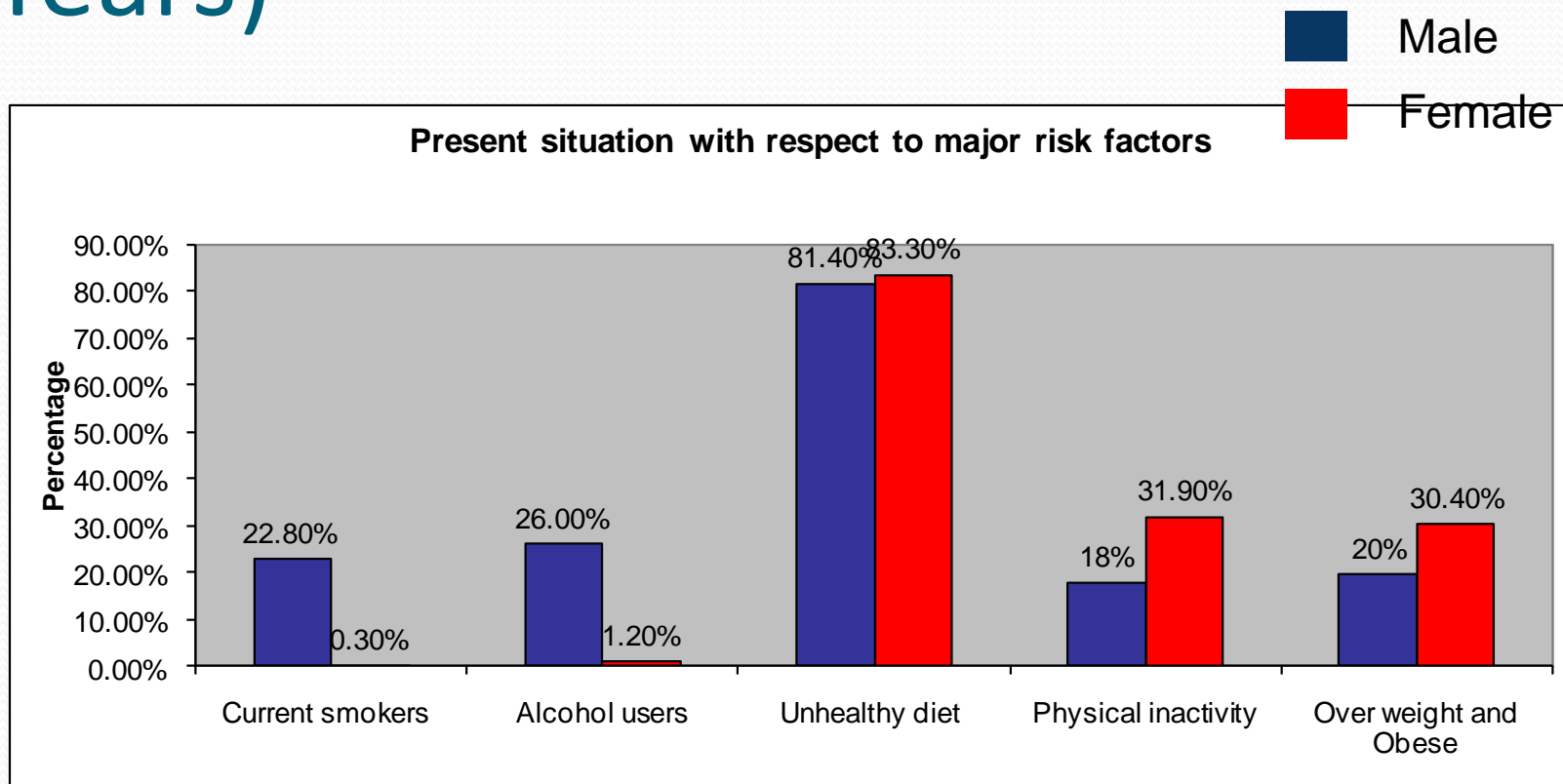
# Diabetes

- Prevalence – 10.2 %
- Among urban / semi urban population – around 18%
- Rural population – around 8%
- Has shown a rapid increase over last 20 years according to several studies conducted.

# Prevalence of modifiable risk factors

- Smoking
- Alcohol
- Unhealthy diet
- Physical inactivity

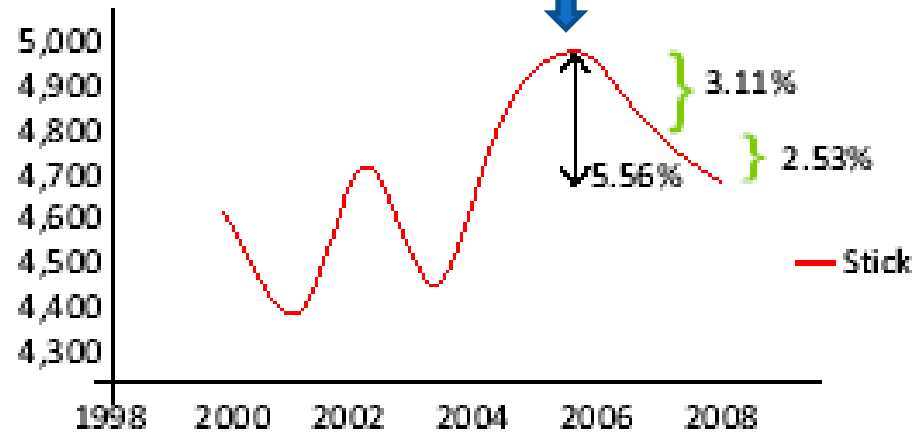
# Prevalence of NCD risk factors among adult population ( 18-65 Years)



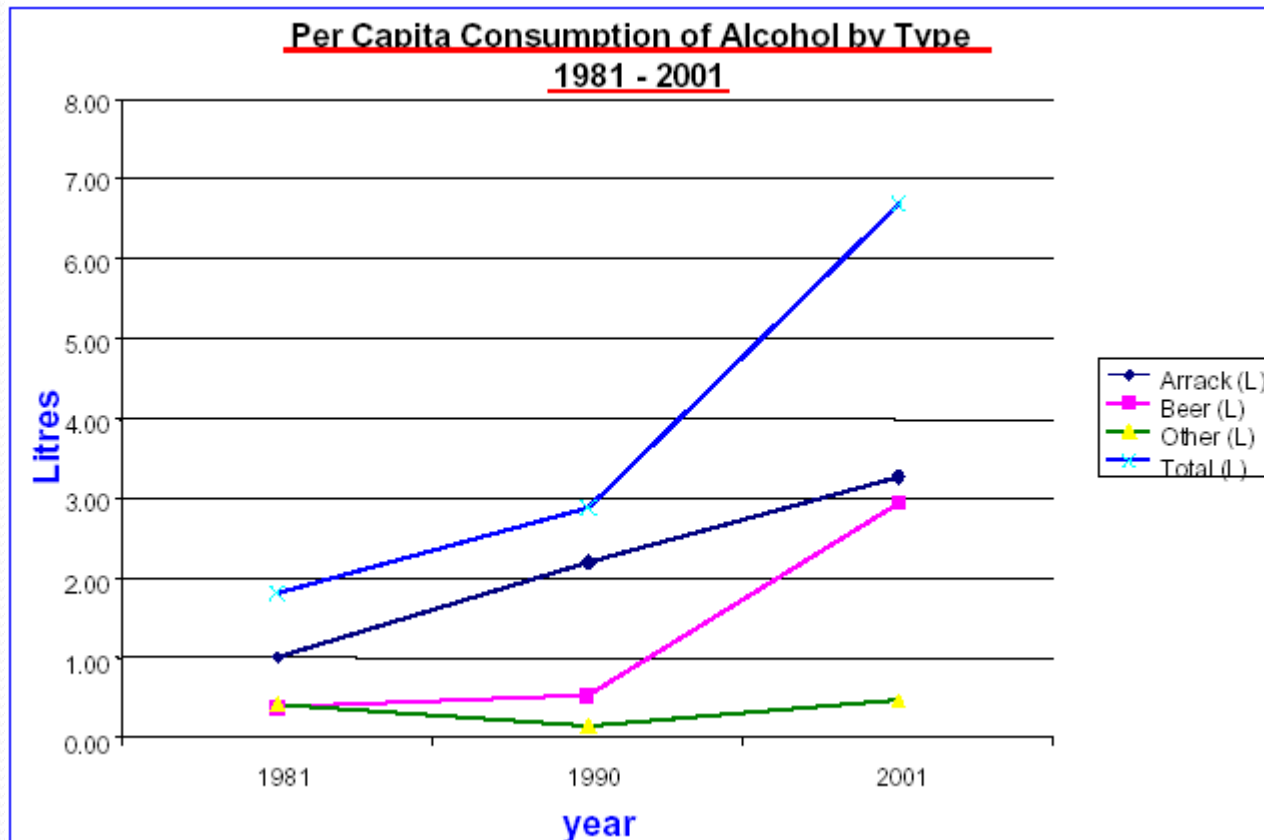
# Cigarette sales drops



NATA Act



# Per capita alcohol consumption has increased



# Heart diseases and other chronic NCDs are preventable

This is by reduction of major risk factors  
namely at individual and community level-

Smoking ,

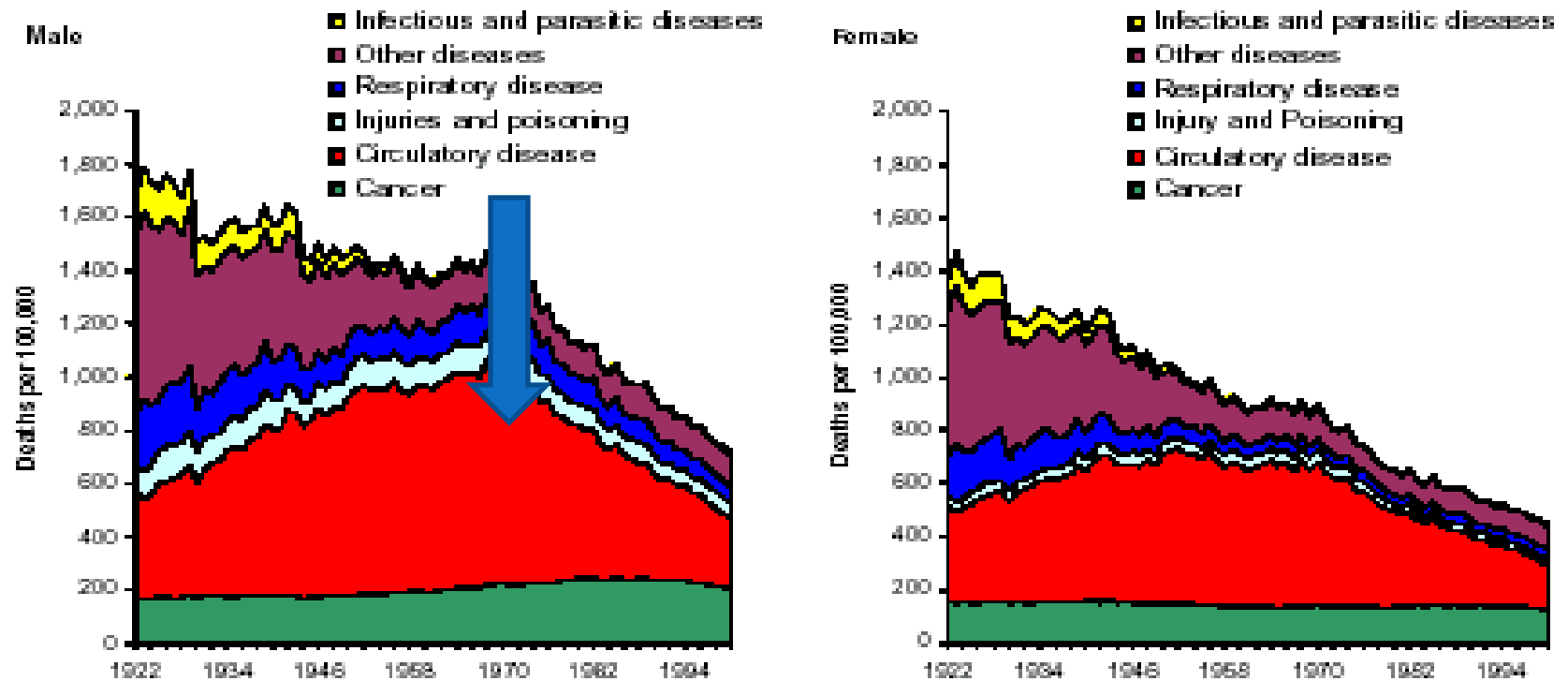
Alcohol use ,

Unhealthy diet ,

Physical inactivity

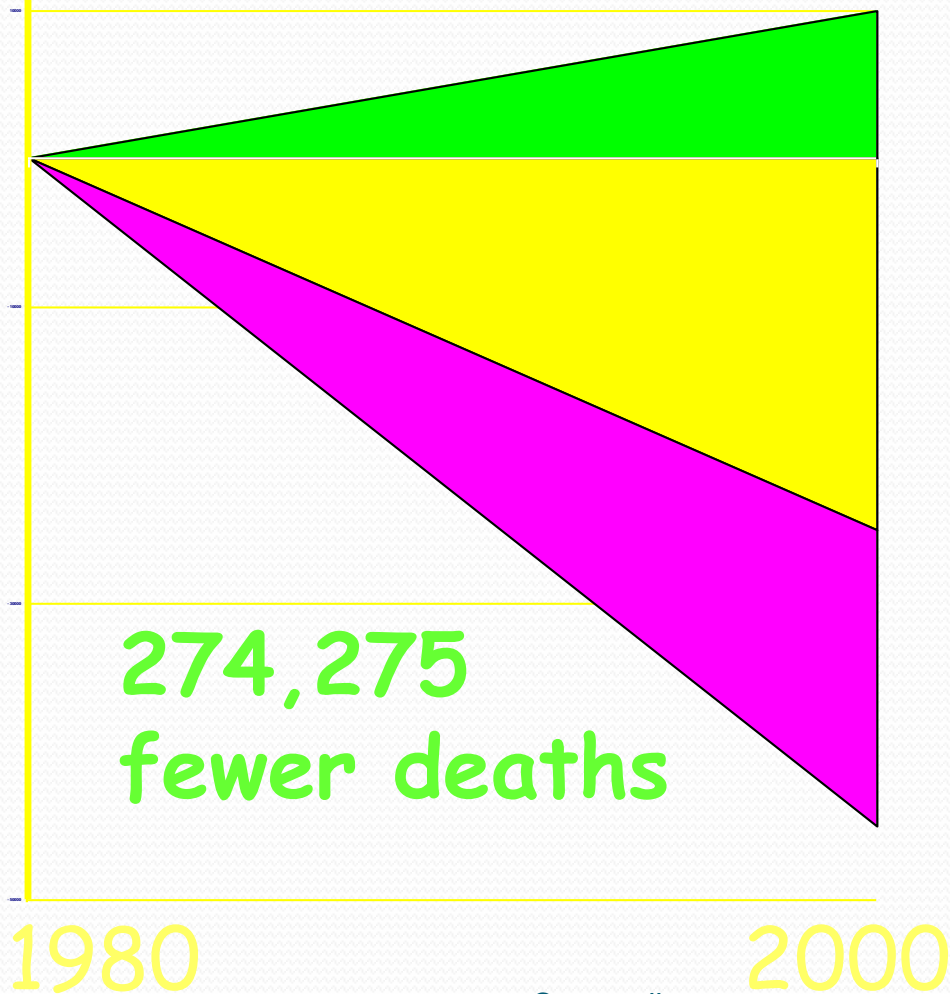
Behaviour change is required -

# Decline in death and disability in rich countries since 1970s due to NCDs, led by heart disease



Changes in age standardized mortality rates by disease group, Australia 1922-2000  
 Source: John Goss, AIHW 2006)

# Explaining the fall in CHD deaths in USA 1980-2000 : RESULTS



## *Risk Factors worse +15%*

- Obesity (increase) +9%
- Diabetes (increase) +6%

## *Risk Factors better -67%*

- Population BP fall -25%
- Smoking -24%
- Cholesterol (diet) -12%
- Physical activity -7%

## *Treatments -46%*

- AMI treatments -8%
- Secondary prevention -15%
- Heart failure -9%
- Angina: CABG & PTCA -4%
- Hypertension therapies -2%
- Statins (primary prevention) -4.5%

*Unexplained -2%*





- Thank you

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