

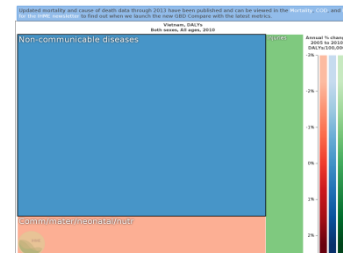
Burden of diseases in Vietnam: current situation and future trends

Dialogue event: Hanoi, March 24th, 2015

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Outline

1. Vietnam at a glance
2. Health challenges in a changing context
3. Burden of diseases of Vietnam
4. Opportunities/ conclusions



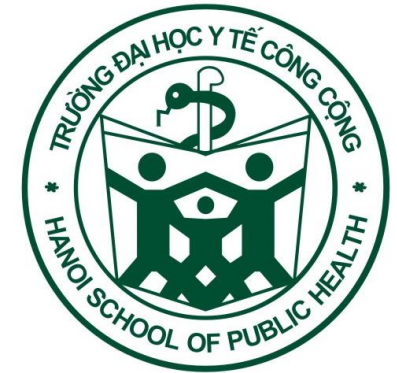


CENPHER

TRUNG TÂM Y TẾ CÔNG CỘNG VÀ HỆ SINH THÁI
CENTER FOR PUBLIC HEALTH AND ECOSYSTEM RESEARCH

CENTER FOR PUBLIC HEALTH AND ECOSYSTEM RESEARCH

at Hanoi School of Public Health



- Studies the **health and well-being** impacts of **development factors** using integrative approaches of **Ecohealth/One Health**.
- Focus on the link between **health and agriculture**. **infectious and zoonotic diseases**. **chemical pollution**. **food safety and nutrition**. from lab to the field.

Main research themes

- ✓ **Ecosystem Health / One Health**
- ✓ **Food Safety**
- ✓ **Health Impact Assessment**



Vietnam at a glance

- Population: 90 mil (2014 estimate)
- Area: 331.210 km²
- Density: 272/km²
- GDP (nominal)
 - Total \$188.000 billion (54th)
 - Per capita \$2,000 (133rd)
- Economic growth: 6%
- Agricultural export: rice, coffee...
- 70% population agriculture based



Health challenges in a changing world

- Global health: emerging and reemerging infectious diseases: SARS, H5N1, AMR...



Vietnam Health challenges in a changing world

- Environmental pollution:
air, water, soil



Vietnam Health challenges in a changing world

- Food safety
- Urbanization - mobility
- Life style
- Poverty...



Health system issues



Burden of disease methods

Summary measures of population health

Measures that combine information on mortality and non-fatal health outcomes

Disability-Adjusted Life Year (DALY) =

Years of life lost due to **premature mortality** based on life expectancy:

Years of Life Lost (YLL)

+

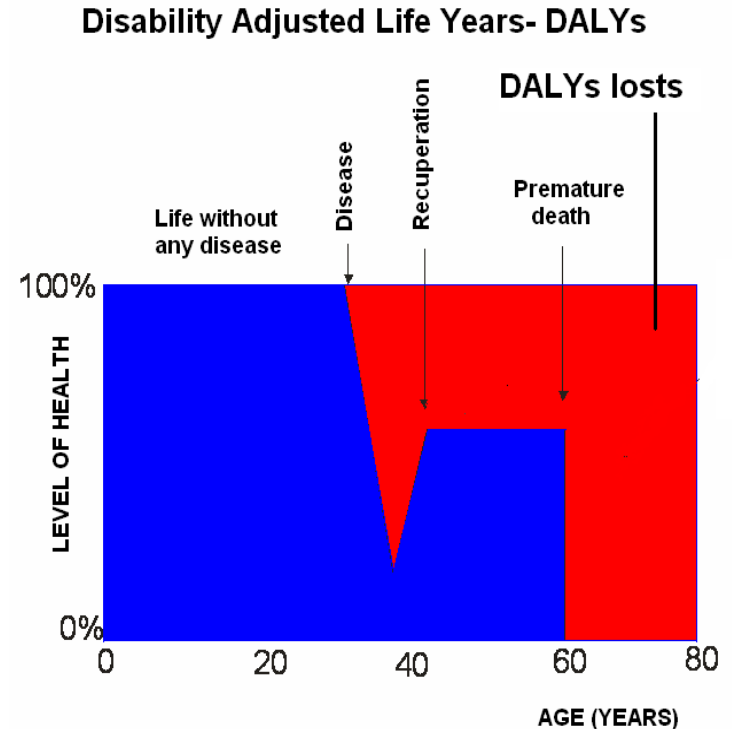
Years of 'healthy' life lost in **new** cases of **disabling** conditions:

Years Lived with Disability (YLD)

DALY = YLL+ YLD



Priority setting and resources allocation in settings with constraint resources



Global burden of diseases of Vietnam

Articles



Viet Nam Burden of Disease and Injury Study 2008

The
ATLANTIC
Philanthropies



MEDICAL PUBLISHING HOUSE
HANOI - 2011

Global, regional, and national age-sex specific all-cause and cause-specific mortality for 240 causes of death, 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013



GBD 2013 Mortality and Causes of Death Collaborators*

Summary

Background Up-to-date evidence on levels and trends for age-sex-specific all-cause and cause-specific mortality is essential for the formation of global, regional, and national health policies. In the Global Burden of Disease Study 2013 (GBD 2013) we estimated yearly deaths for 188 countries between 1990, and 2013. We used the results to assess whether there is epidemiological convergence across countries.

Lancet 2015; 385: 117–71

Published Online
December 18, 2014
[http://dx.doi.org/10.1016/S0140-6736\(14\)61682-2](http://dx.doi.org/10.1016/S0140-6736(14)61682-2)



IHME: Institute for
Health Metric and
Evaluation

Mortality data

Based on second mortality survey using Verbal Autopsy in Vietnam

- Carried out in 16 provinces
- WHO Verbal autopsy questionnaire in 9,293
- Physicians determining cause of death based on interview information
- Coding in ICD10

already discussion in this morning

Data sources non-fatal diseases

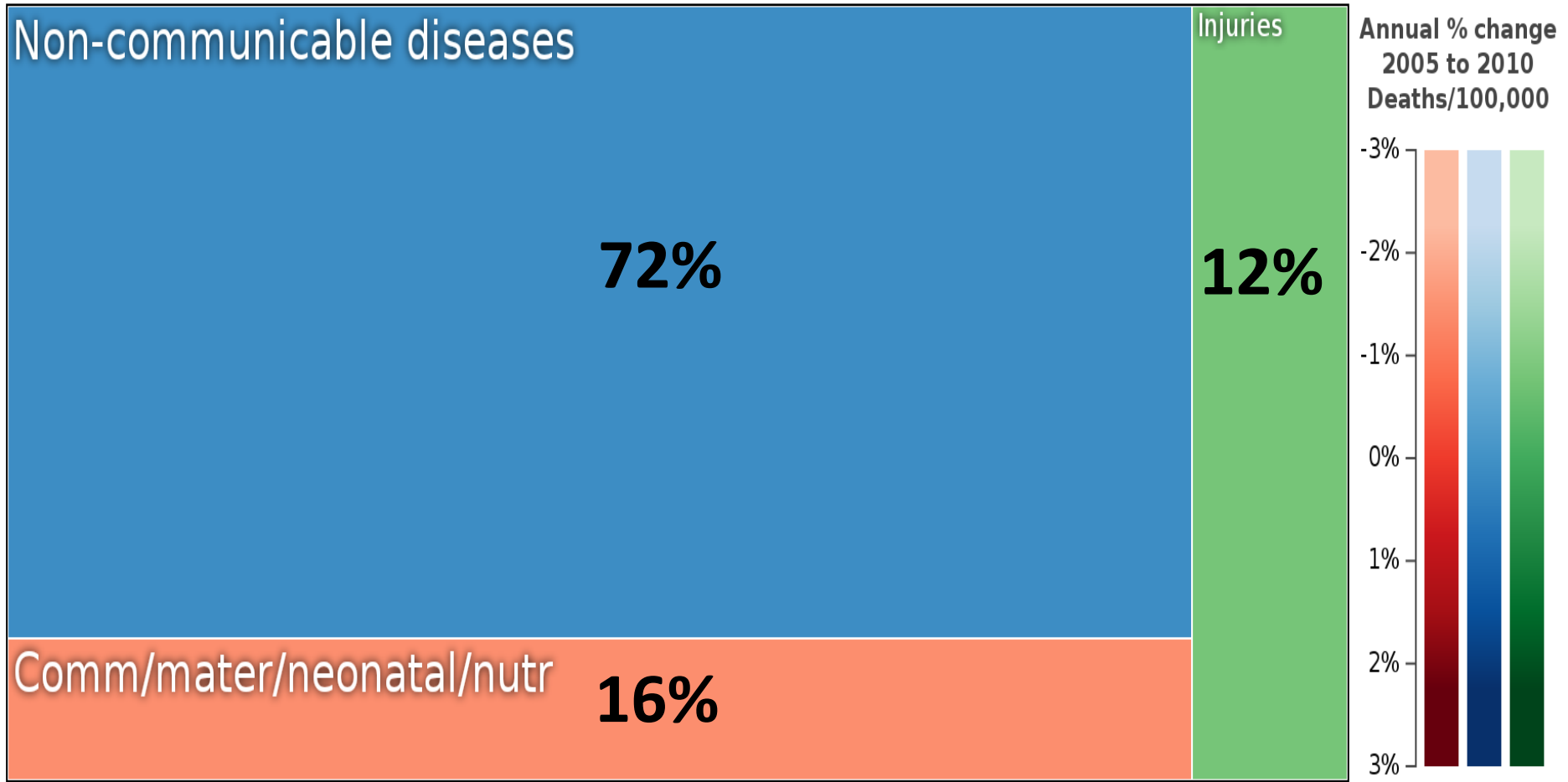
Data source	Diseases
Hospital data	IHD, stroke
Disease notifications	TB, HIV/AIDS
Vietnam Multi center Injury surveys	Injuries
Cancer register	Cancers
National Health Survey	Diarrhoea , respiratory infections, hearing loss vision loss
Mental Health Survey	Mental disorders, dementia, epilepsy
Multi country survey	Osteoarthritis
National survey on COPD	COPD
National survey on Diabetes	Diabetes

Results

- The number of deaths in Viet Nam in 2008 was estimated at 541,228; 54% in males and 46% in females
- Life expectancy at birth in 2008 was 69.7 years in men and 77.7 years in women.
- Death rate was 6.4 per 1,000

Death

Vietnam, deaths
Both sexes, All ages, 2010



Top ten causes of death by sex

Rank	Disease category	Male		Female		
		Deaths	%	Disease category	Deaths	%
1	Stroke	53,217	18%	Stroke	56,771	23%
2	Liver cancer	19,915	7%	COPD	14,941	6%
3	Road traffic accidents	17,330	6%	Pneumonia	11,175	4%
4	Lung cancer	15,720	5%	Ischaemic heart disease	11,015	4%
5	COPD	14,355	5%	Diabetes	9,858	4%
6	Ischaemic heart disease	13,504	5%	Liver cancer	8,587	3%
7	Tuberculosis	11,450	4%	Lung cancers	7,869	3%
8	Pneumonia	9,470	3%	Tuberculosis	6,798	3%
9	HIV/AIDS	9,417	3%	Road traffic accidents	5,750	2%
10	Stomach cancer	8,469	3%	Stomach cancer	5,470	2%
	Total	290,624		Total	250,605	

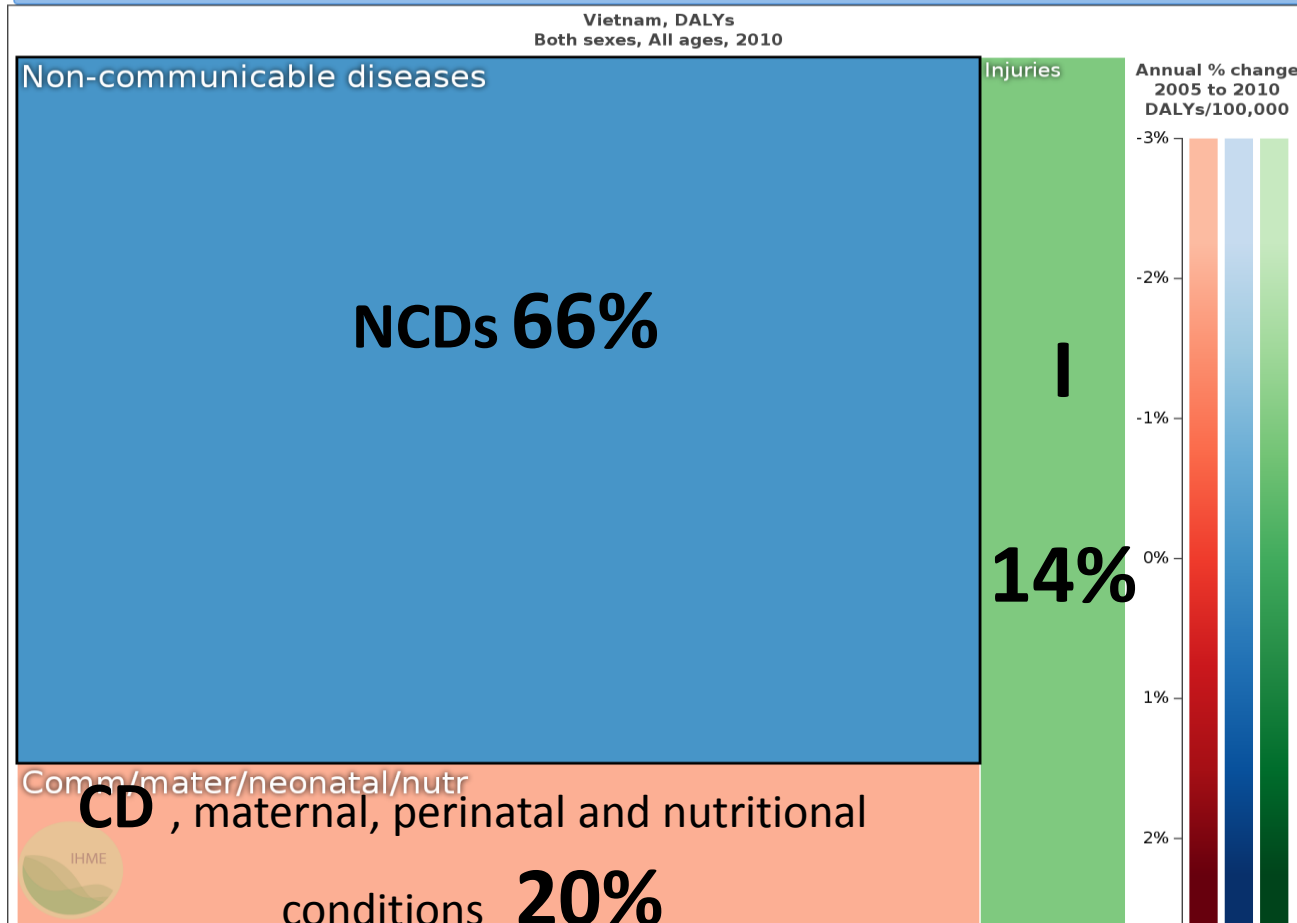
Burden of disease

In 2008 the total burden of disease in Viet Nam amounted to 12.3 million DALYs

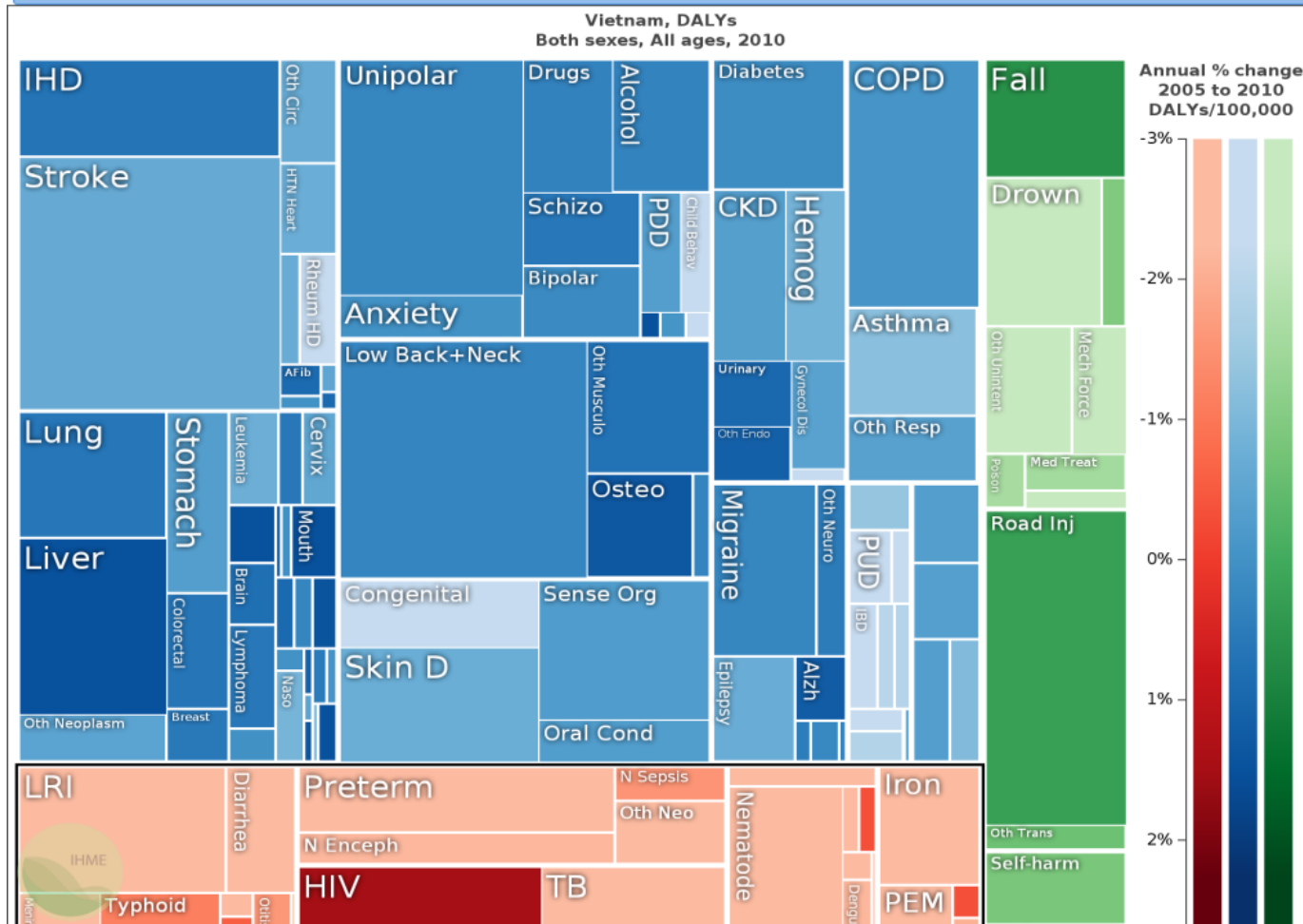
- **Non-communicable diseases: 71%**
- Injuries: 16%
- Infections, neonatal and maternal problems: 13%

NCDs – CDs – Injuries

Updated mortality and cause of death data through 2013 have been published and can be viewed in the Mortality, COD, and Life for the IHME newsletter to find out when we launch the new GBD Compare with the latest metrics.



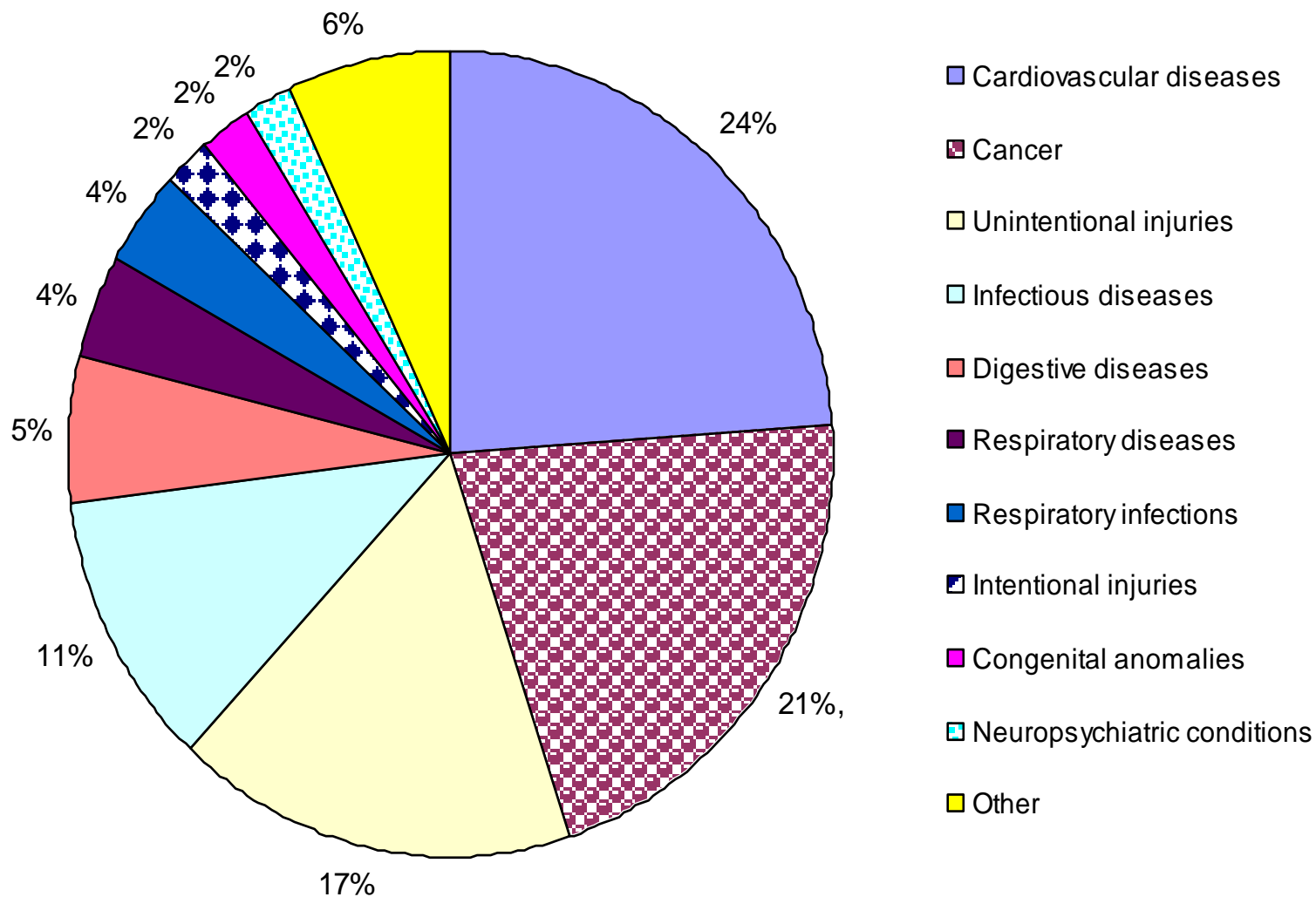
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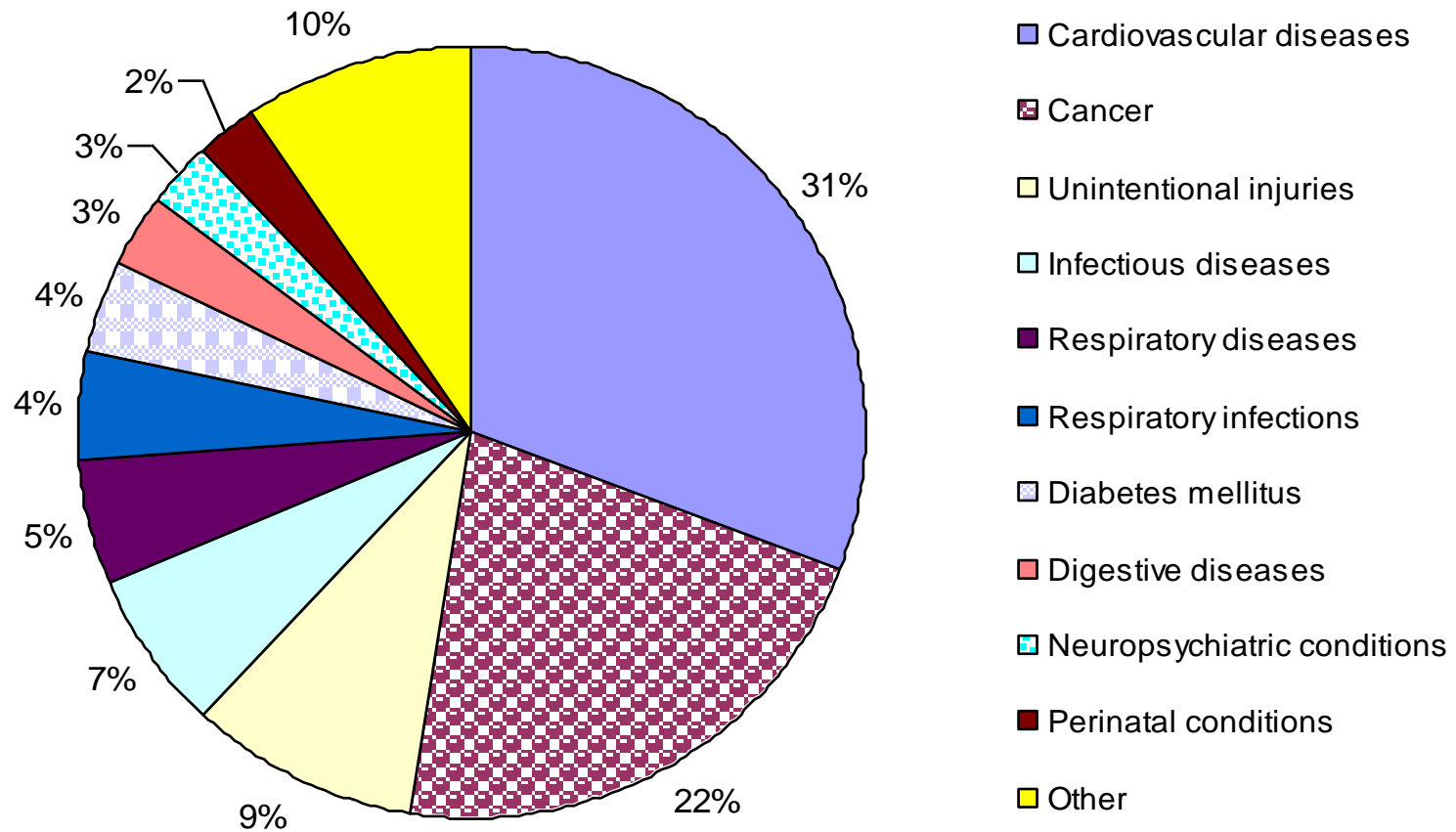
Top 10 causes of YLL by sex

Rank	Disease category	Male		Female		
		YLL	%	Disease category	YLL	%
1	Stroke	579,115	14%	Stroke	453,357	17%
2	Road traffic accidents	381,728	9%	Road traffic accidents	121,629	4%
3	Liver cancer	300,877	7%	Pneumonia	118,805	4%
4	HIV/AIDS	238,430	6%	Liver cancer	117,215	4%
5	Lung cancer	201,595	5%	Ischaemic heart disease	110,197	4%
6	Pneumonia	157,546	4%	Diabetes mellitus	104,814	4%
7	Ischaemic heart disease	150,223	4%	Lung cancer	97,558	4%
8	Tuberculosis	140,286	3%	COPD	96,738	4%
9	COPD	118,716	3%	Tuberculosis	83,496	3%
10	<u>Drownings</u>	118,503	3%	Stomach cancer	71,878	3%

YLL by major disease categories in men, Vietnam

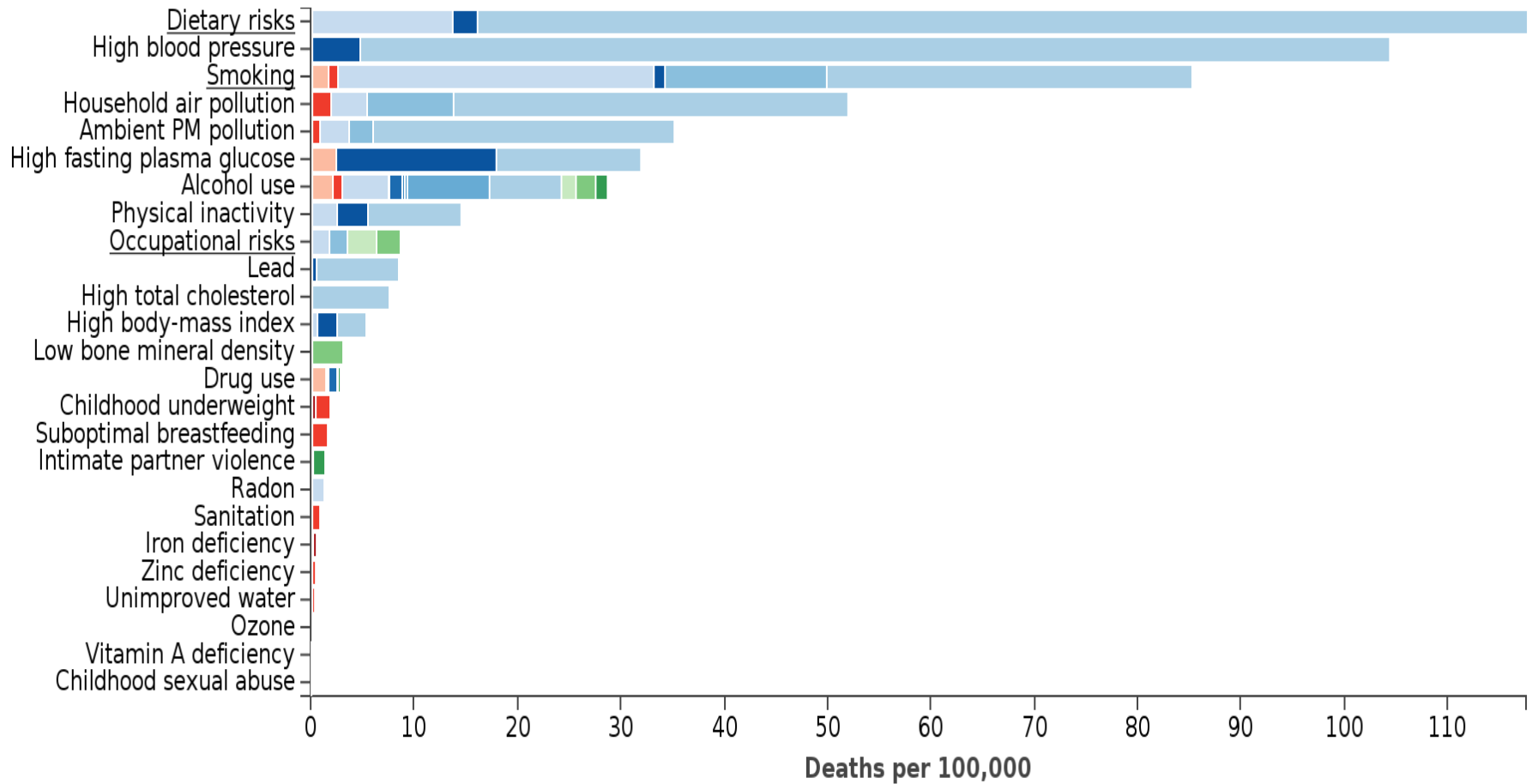


YLL by major disease categories in women, Vietnam



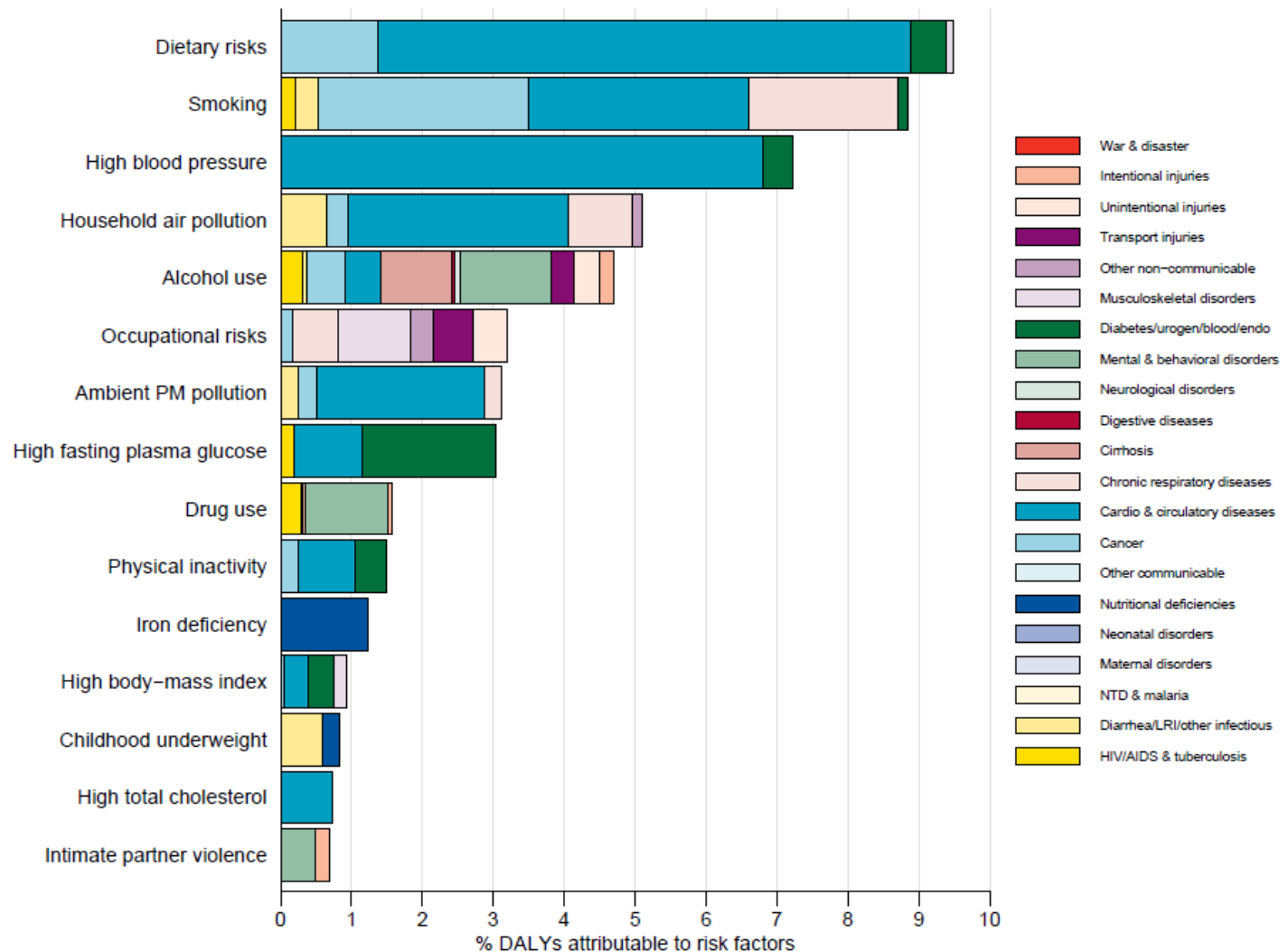
Risk factors

Vietnam, deaths
Both sexes, All ages, 2010



Burden of disease attributable to 15 leading risk factors in 2010, expressed as a percentage of Vietnam DALYs

Burden of disease attributable to 15 leading risk factors in 2010, expressed as a percentage of Vietnam DALYs



Opportunities – considerations

- Data quality
- Use BoD for decision making, health care resource allocation
- Equity aspect: rural vs. urban, NCDs vs. CD, rich vs. poor

Conclusion

- **Health issue in Vietnam: many challenges**
- **Disease pattern in Vietnam: epidemiological transition context**
- **Major impact on poor and populations at risk**
- **Equity principles respected**
- **But evidence-based decisions and innovative measures to health are needed**

Thank you!

Prof. Nguyen Thanh Huong, Ms. Nguyen Trang Nhung (HSPH)

Novartis foundation

