

Key Findings for India from the Global Burden of Disease Study 2015

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Triple Burden of Disease in India

- Unfinished agenda of communicable diseases
- Emerging non-communicable diseases
- Emerging infectious diseases

With 2.4% of land mass, India supports 17.8% of population which is still growing at 17.7% decadal rate.

The Global Burden of Disease Study

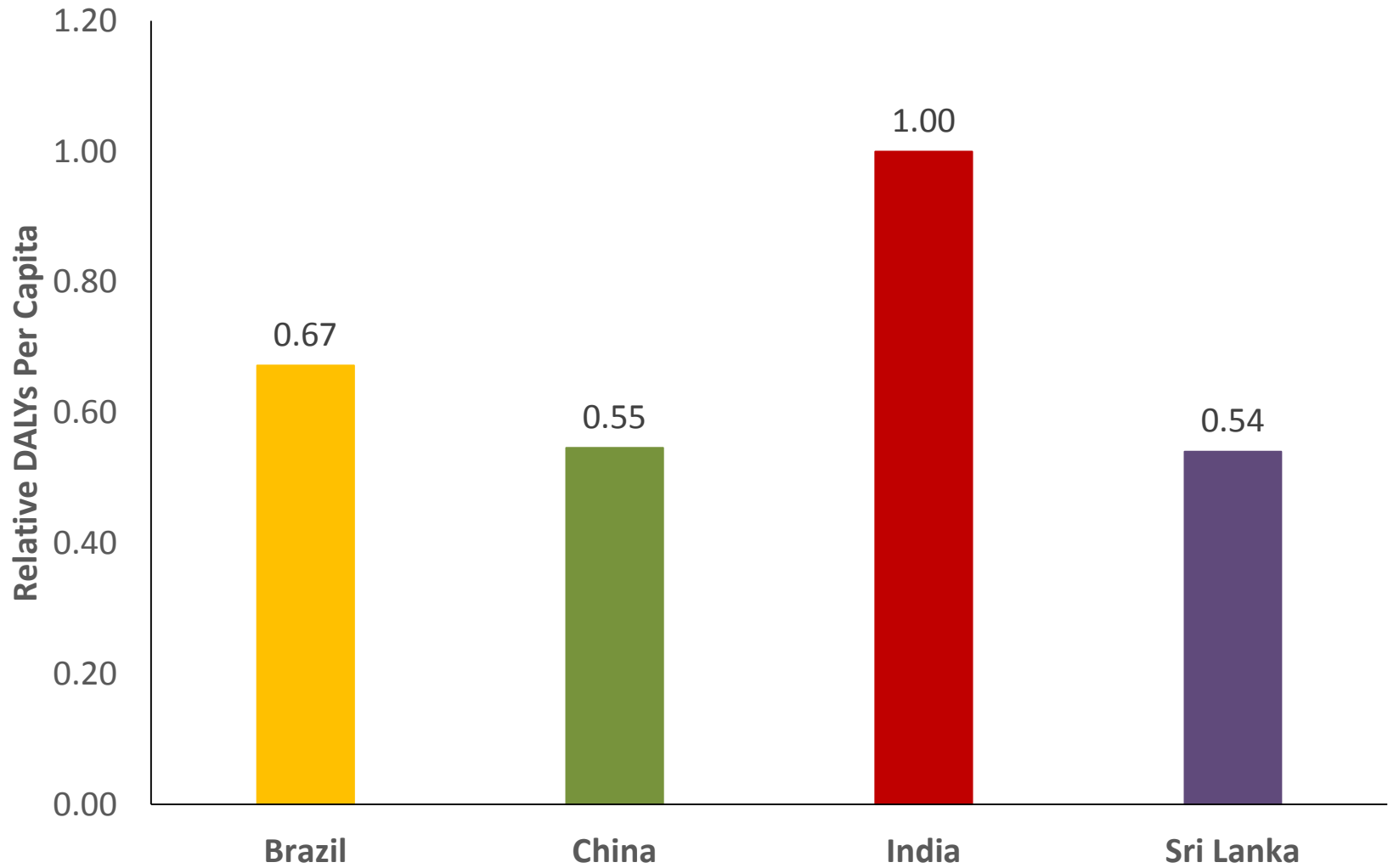
Approach

A systematic scientific effort
to quantify the comparative magnitude of health loss
due to diseases, injuries and risk factors
by age, sex and geographies for specific points in time

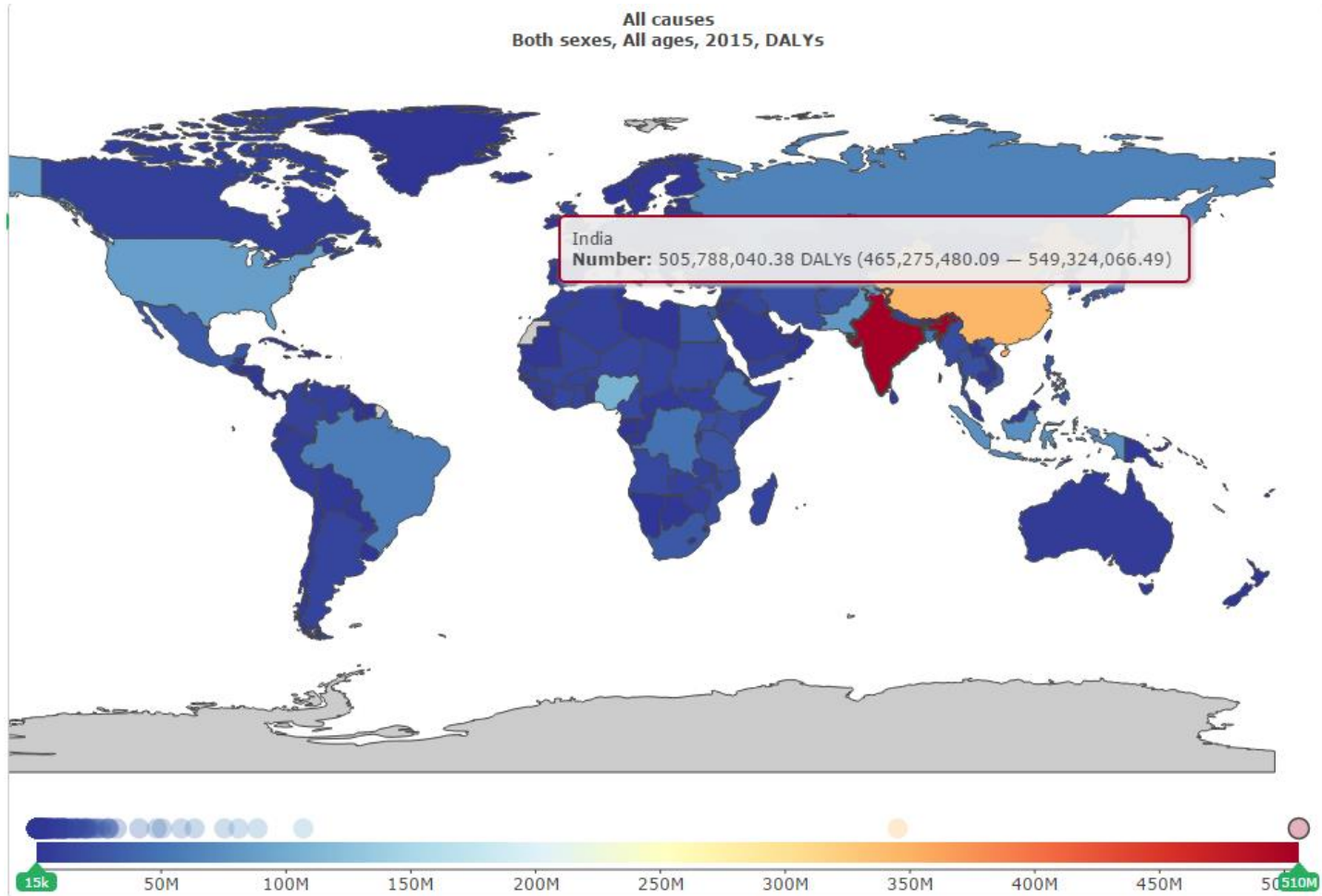
Global Burden of Disease Study 2015

- Estimates of disease burden and risk factors trends produced for 195 countries by GBD Study 2015
- Over 1800 collaborators in 120 countries contributed
- All available sources of data on mortality, morbidity and risk factors used
- Robust methods developed for producing estimates that allow standardized comparisons across countries, age and sex groups, and over time
- GBD estimates used widely for academic and policy purposes
- Disease burden and risk factors estimates available for India from GBD Study 2015

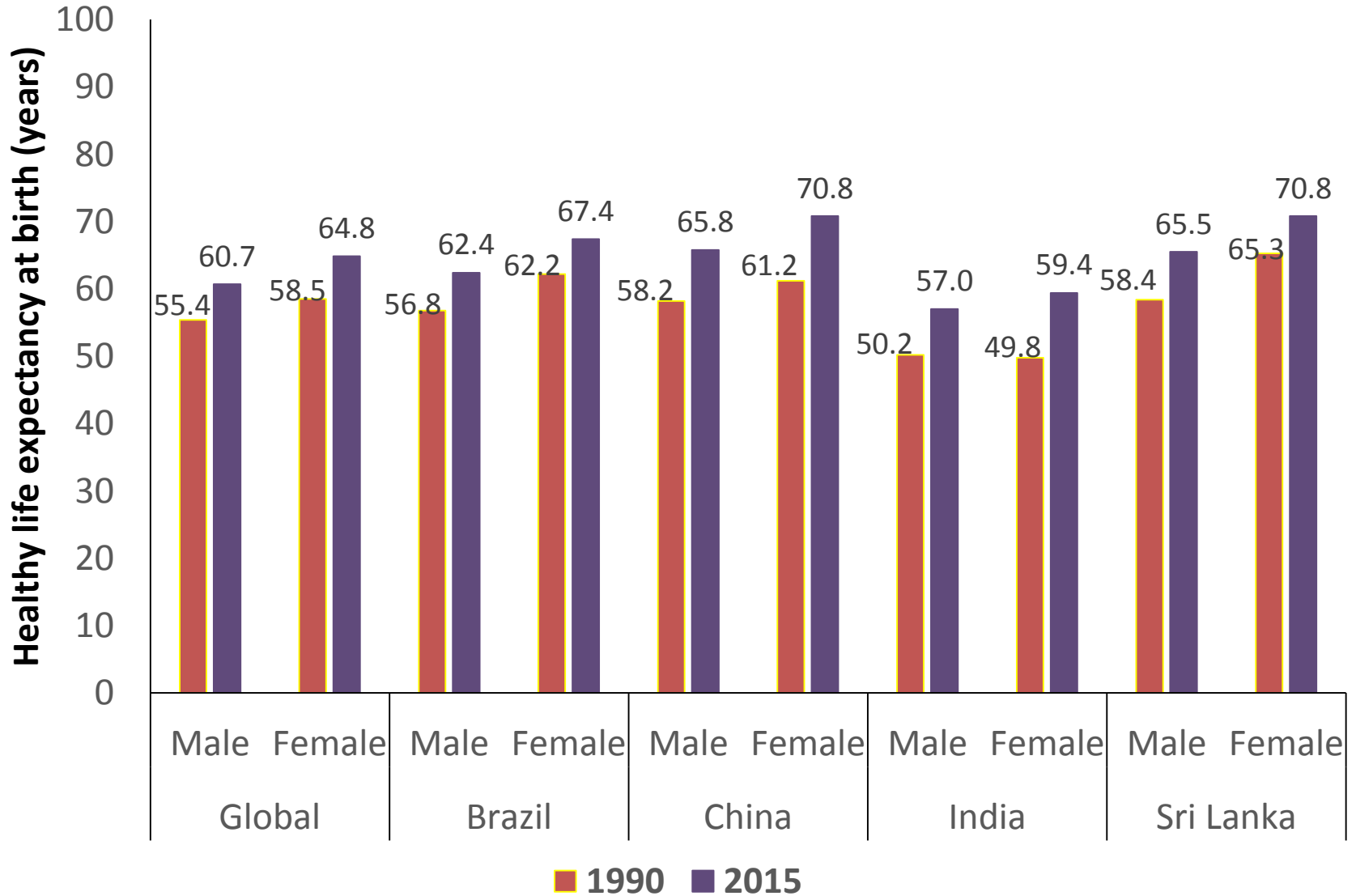
Relative Per Capita Disease Burden in 2015



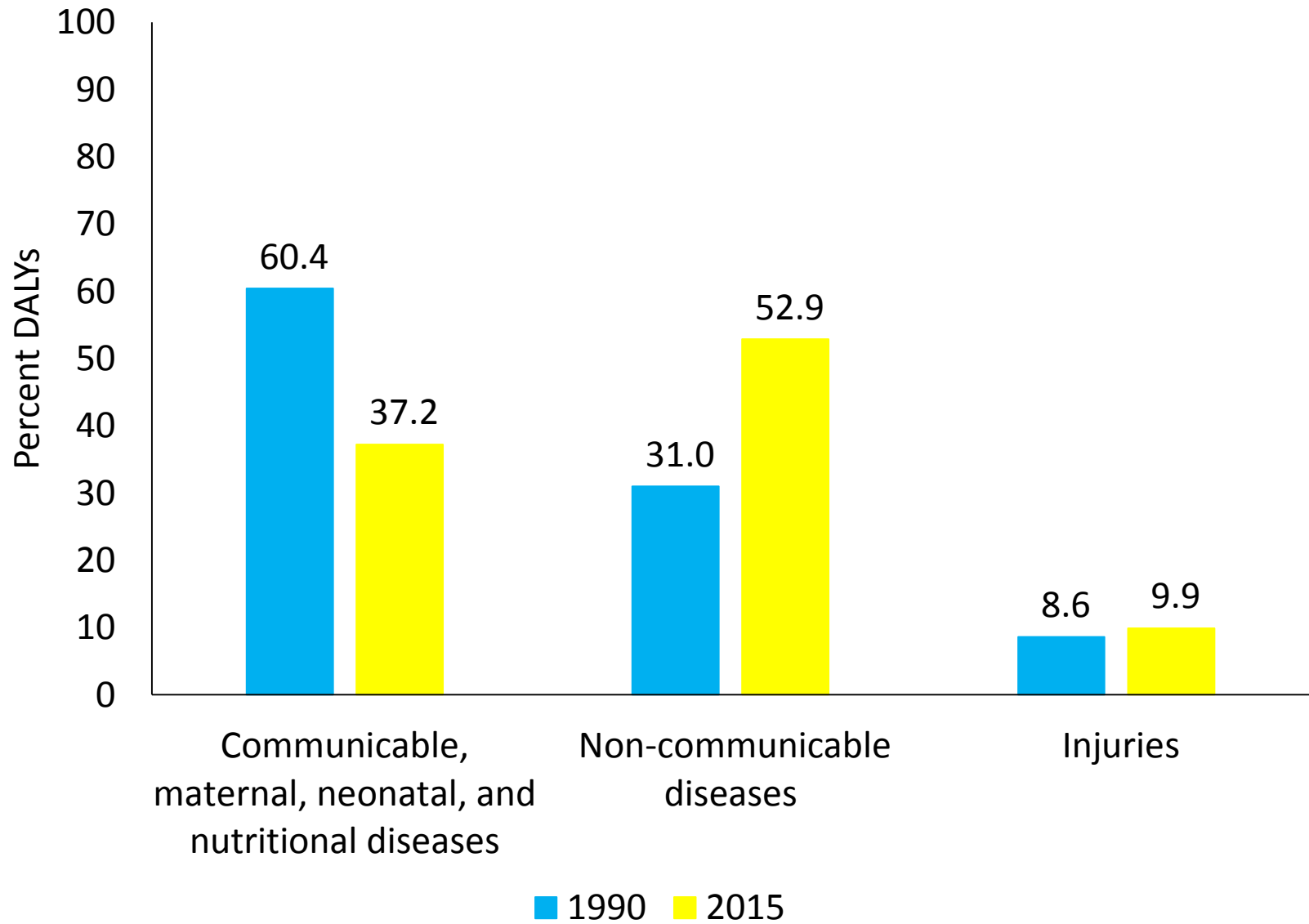
Absolute Number of DALYs in Countries: 2015



Healthy Life Expectancy: 1990 to 2015



Causes of Disease Burden in India: 1990 to 2015

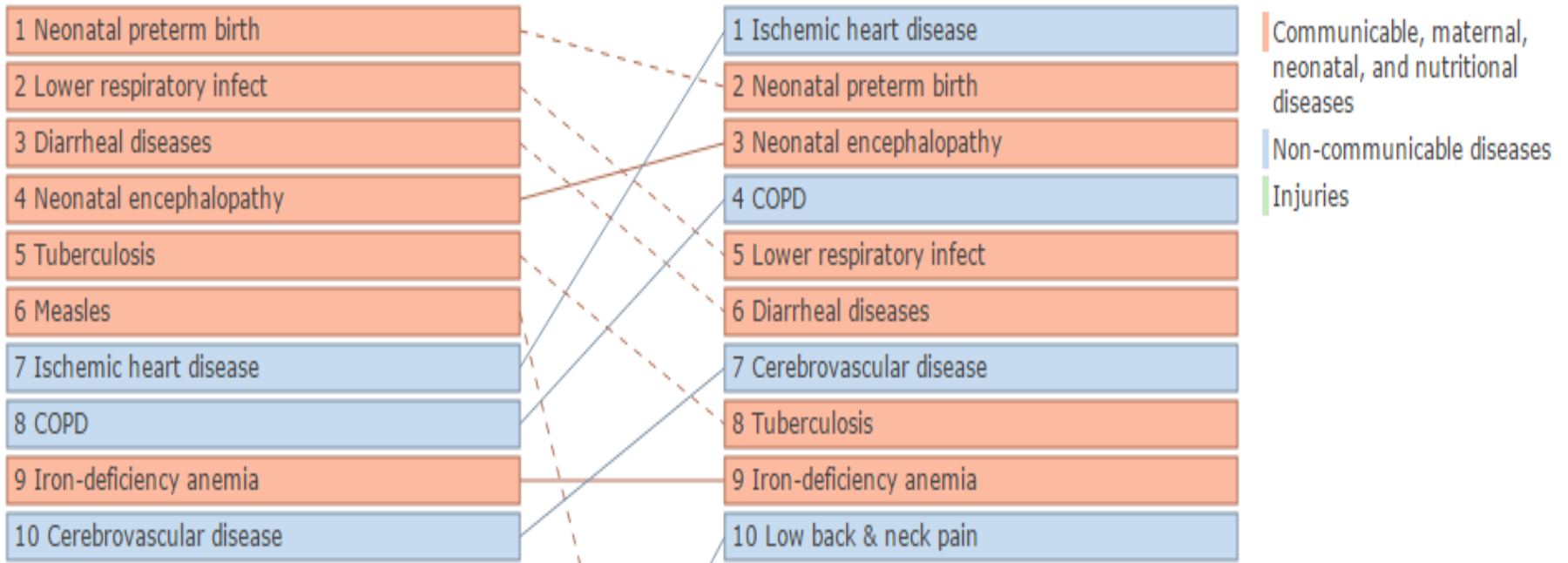


Top 10 Causes for DALYs in India: 1990 to 2015

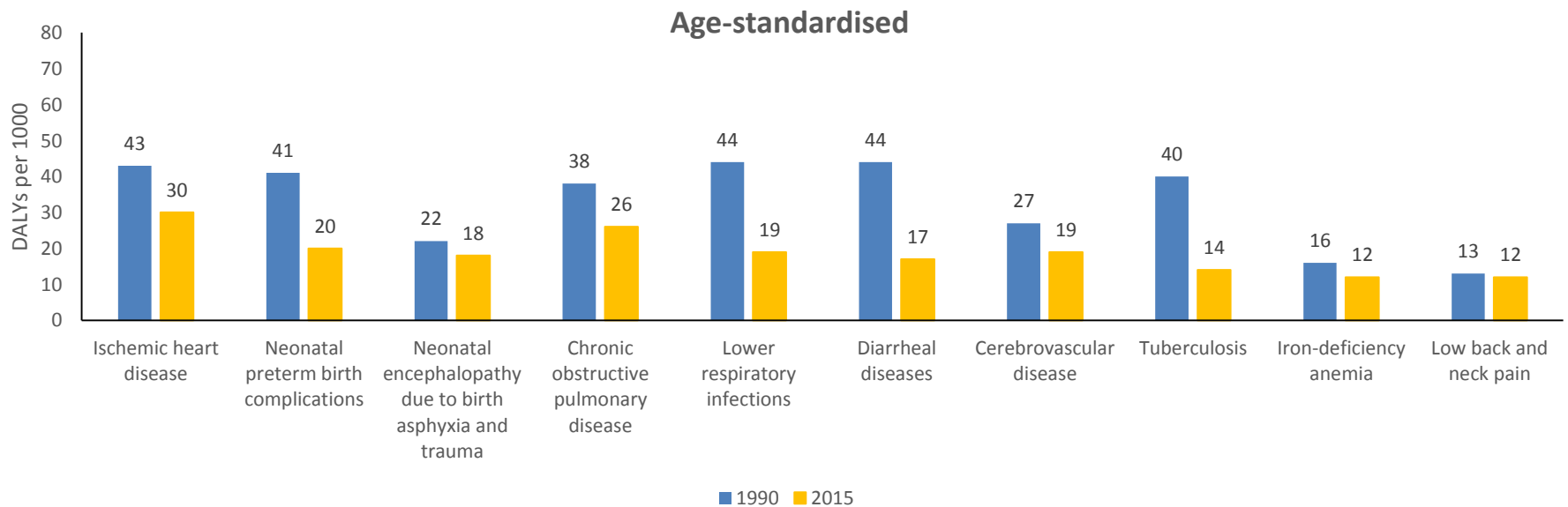
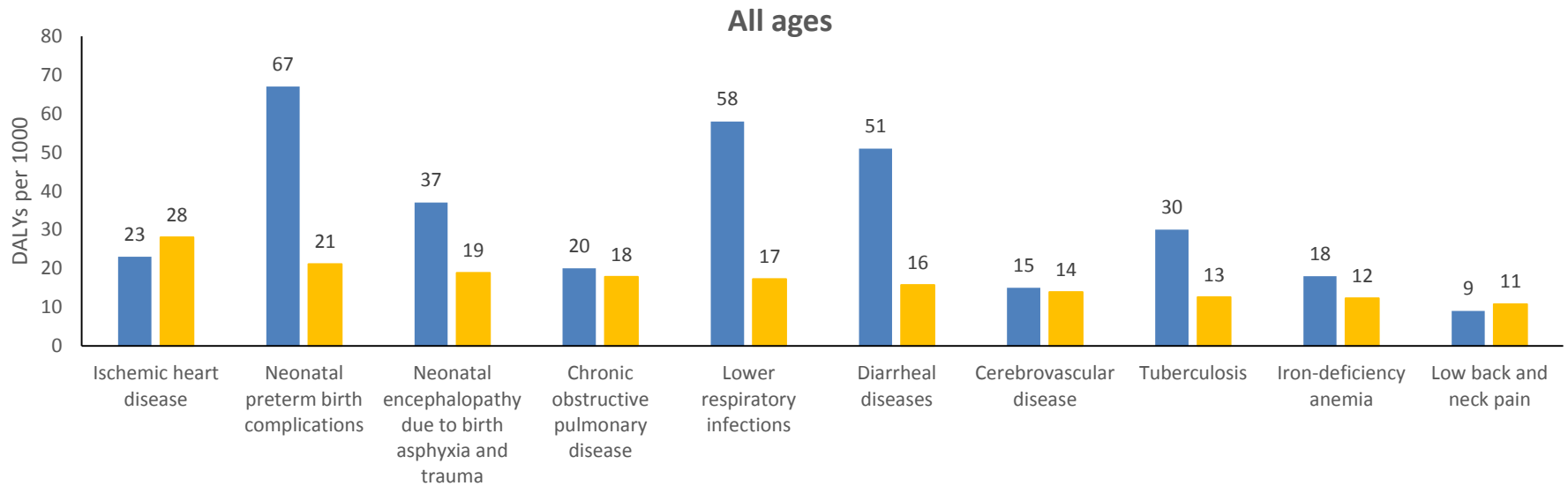
India
Both sexes, All ages, DALYs

1990 rank

2015 rank

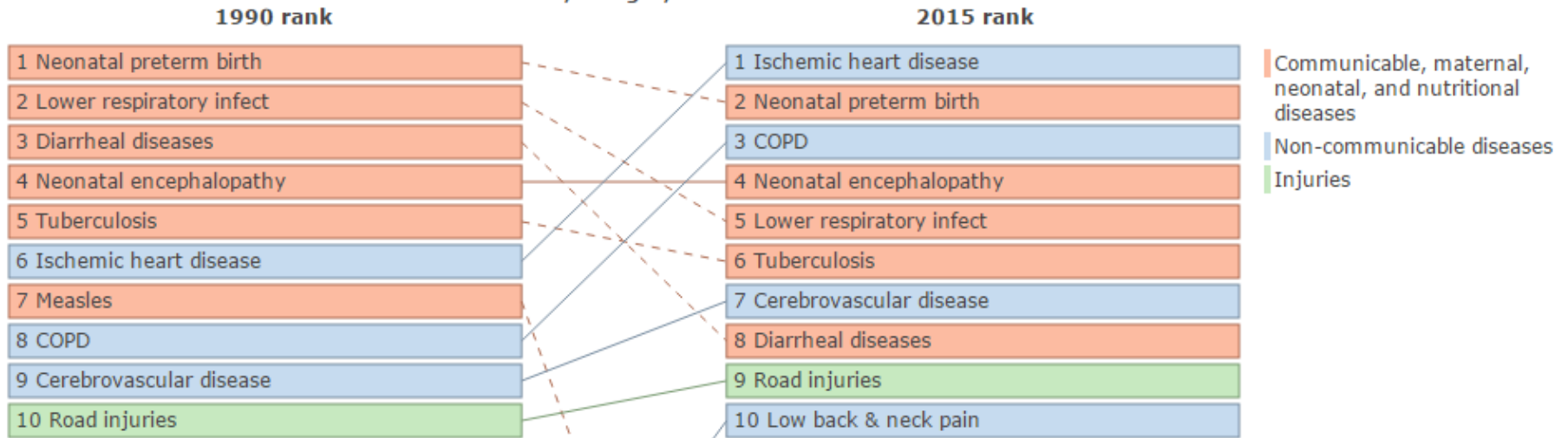


Top Causes for DALYs Rate in India: 1990 & 2015

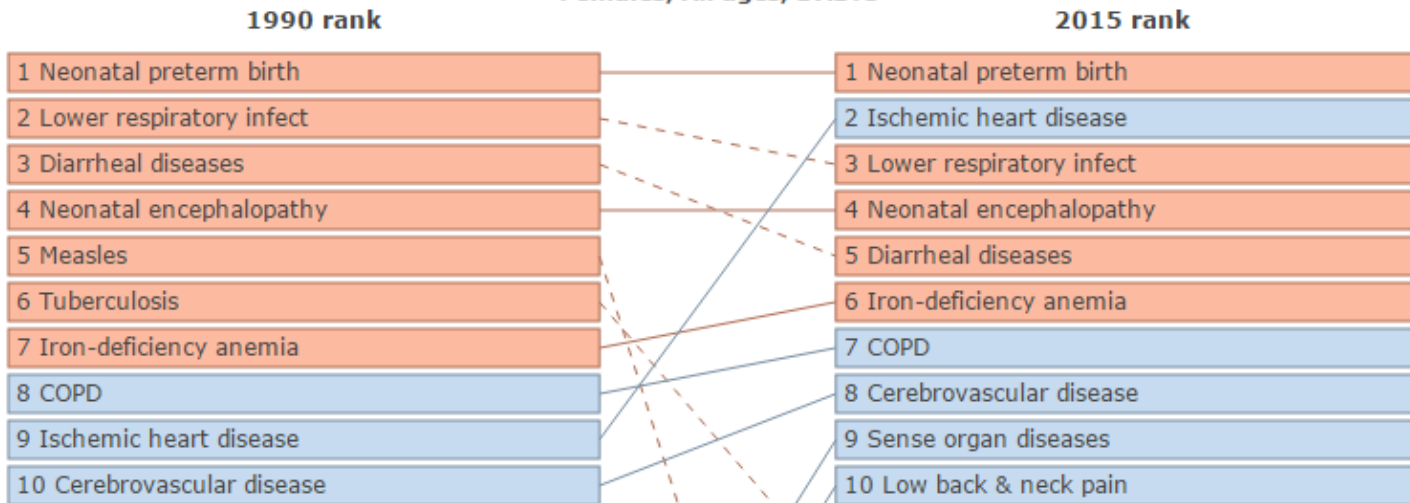


Top Causes for DALYs: Males and Females in India

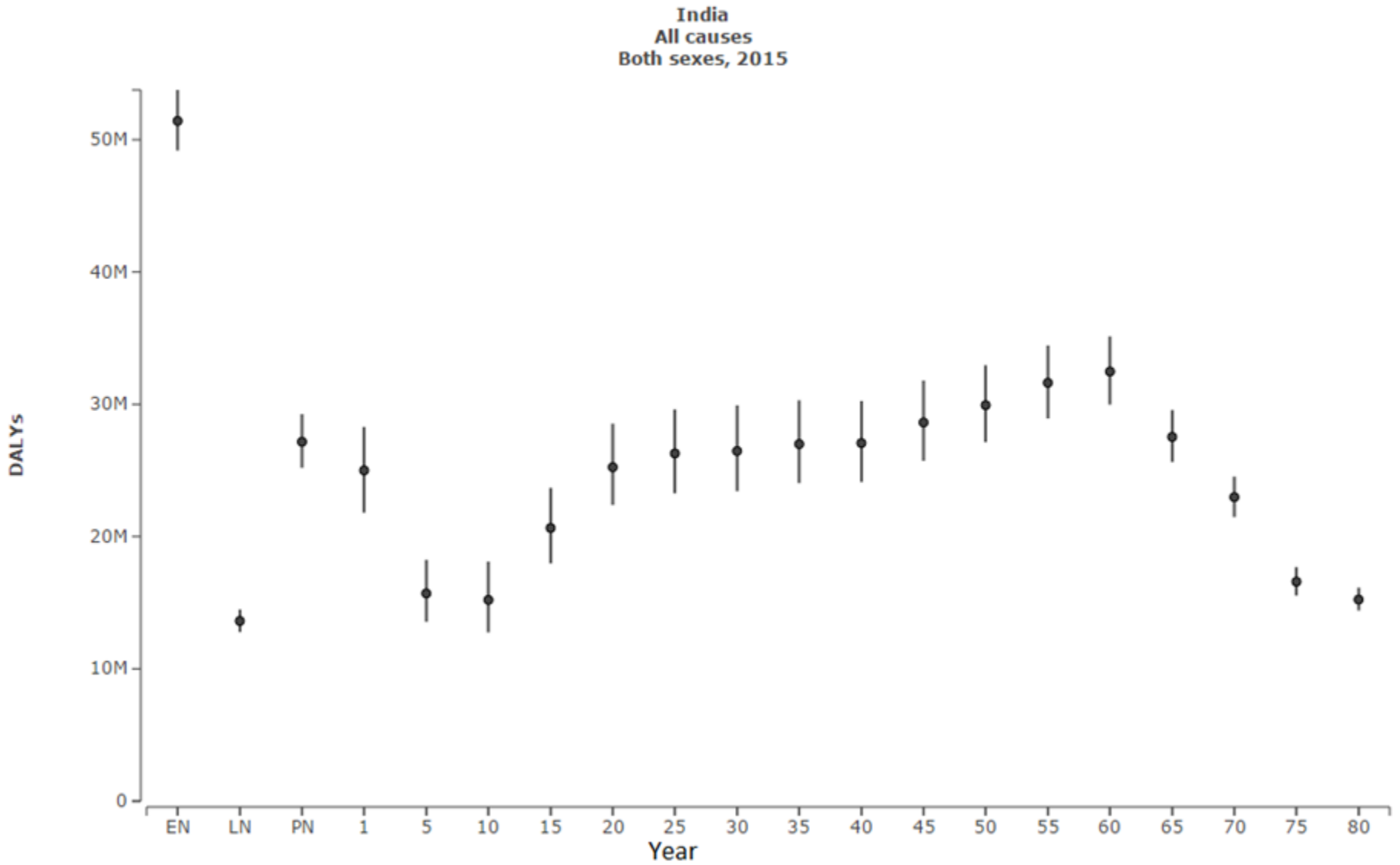
India Males, All ages, DALYs



India Females, All ages, DALYs



Age Pattern of DALYs in India: 2015

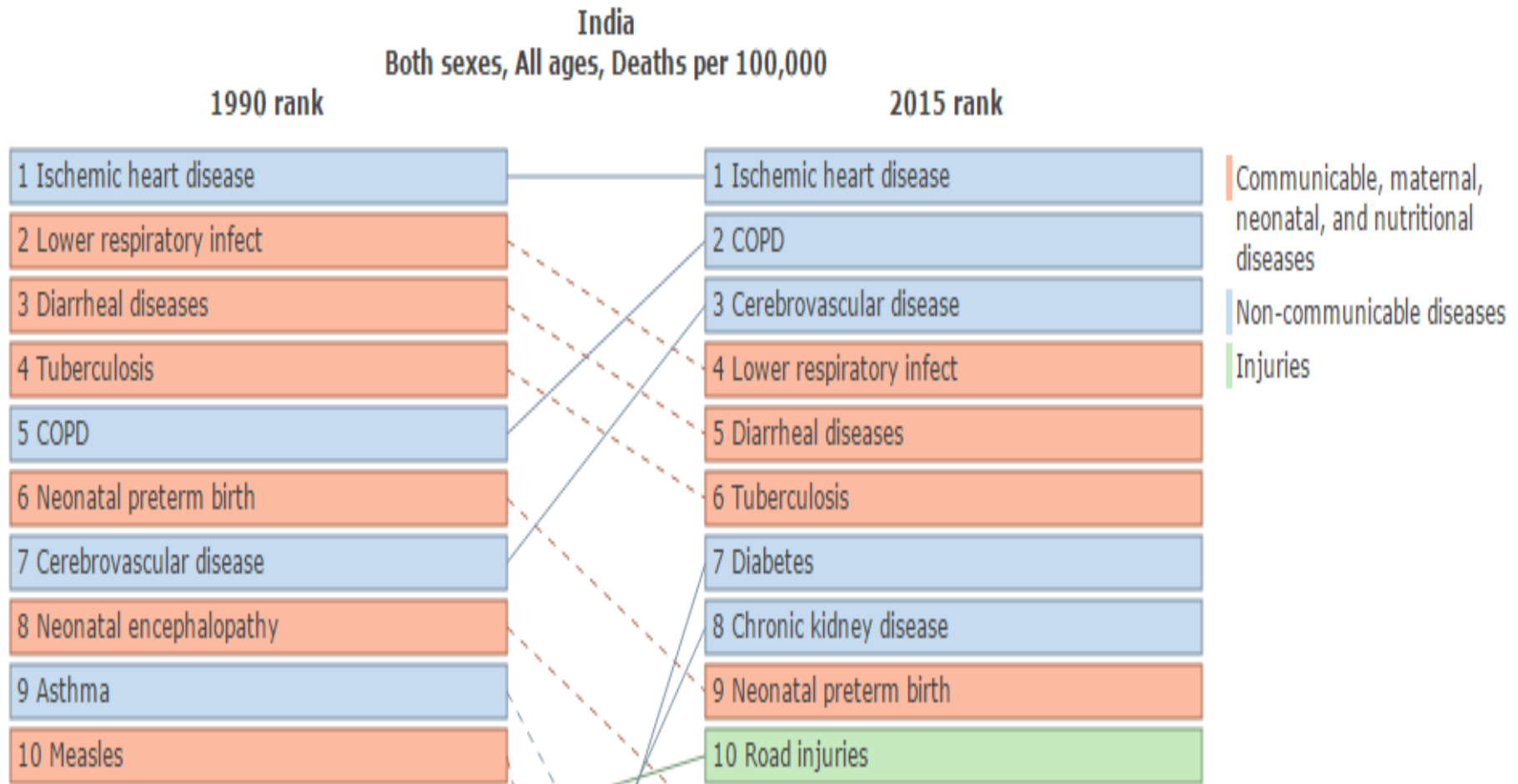


Causes of DALYs Across Countries: 2015

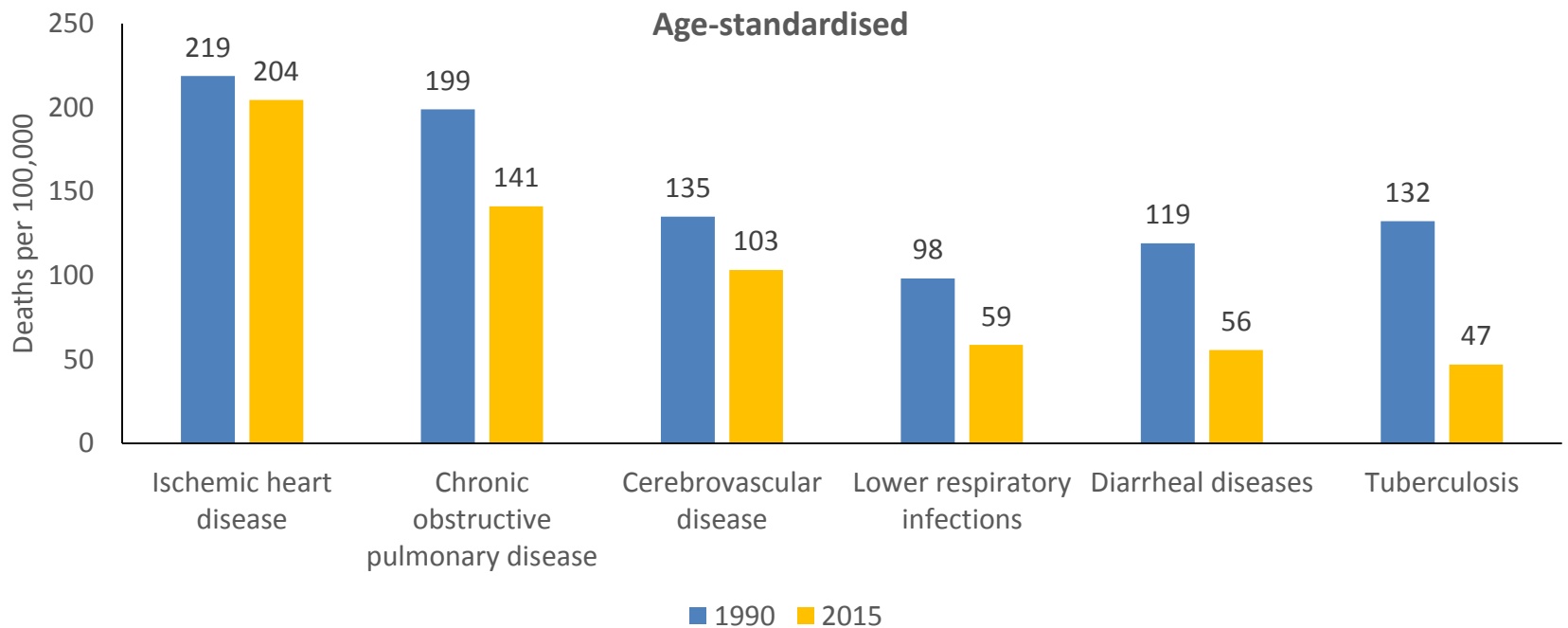
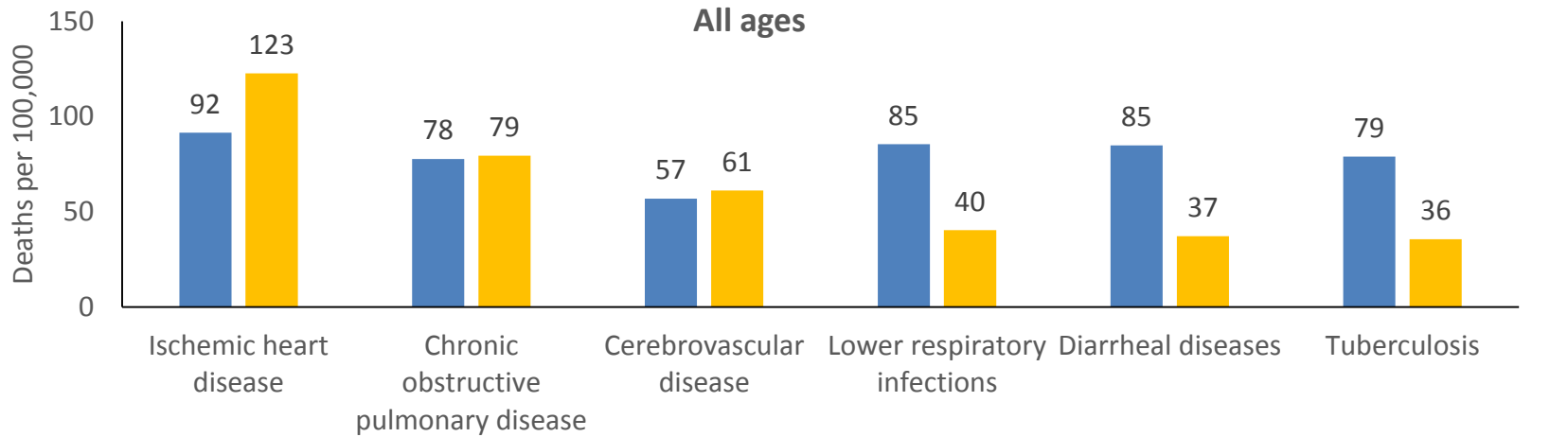
Both sexes, All ages, 2015, DALYs

	India	Brazil	China	Sri Lanka
Ischemic heart disease	1	1	2	1
Neonatal preterm birth	2	17	22	17
Neonatal encephalopathy	3	28	34	36
COPD	4	12	4	10
Lower respiratory infect	5	10	17	14
Diarrheal diseases	6	37	90	53
Cerebrovascular disease	7	3	1	6
Tuberculosis	8	61	47	46
Iron-deficiency anemia	9	15	15	12
Low back & neck pain	10	5	3	3
Sense organ diseases	11	8	6	5
Road injuries	12	4	5	11
Diabetes	13	7	10	2
Depressive disorders	14	6	9	9
Congenital anomalies	15	14	13	15

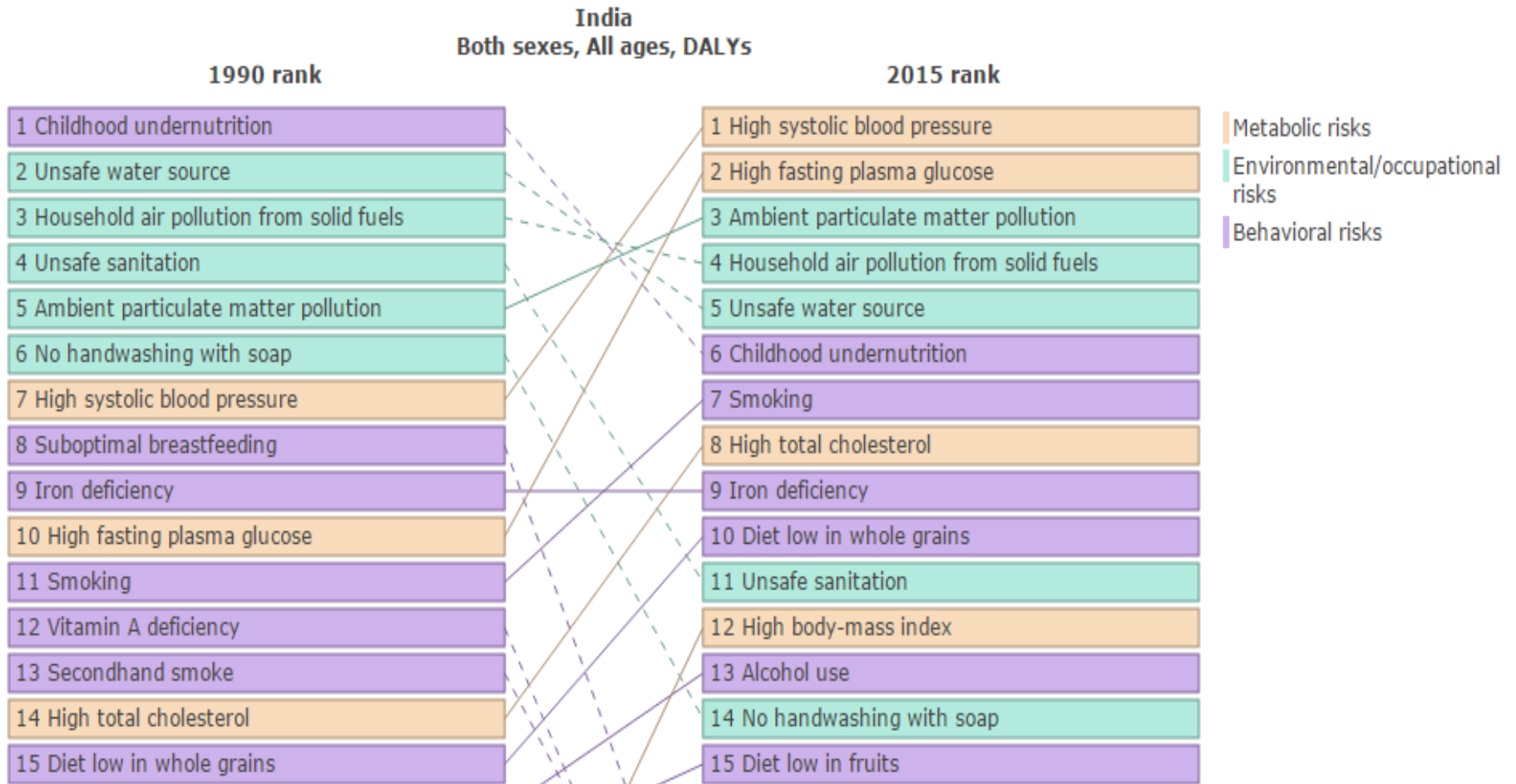
Top 10 Causes for Deaths in India: 2015



Top Causes for Death Rate in India: 2015

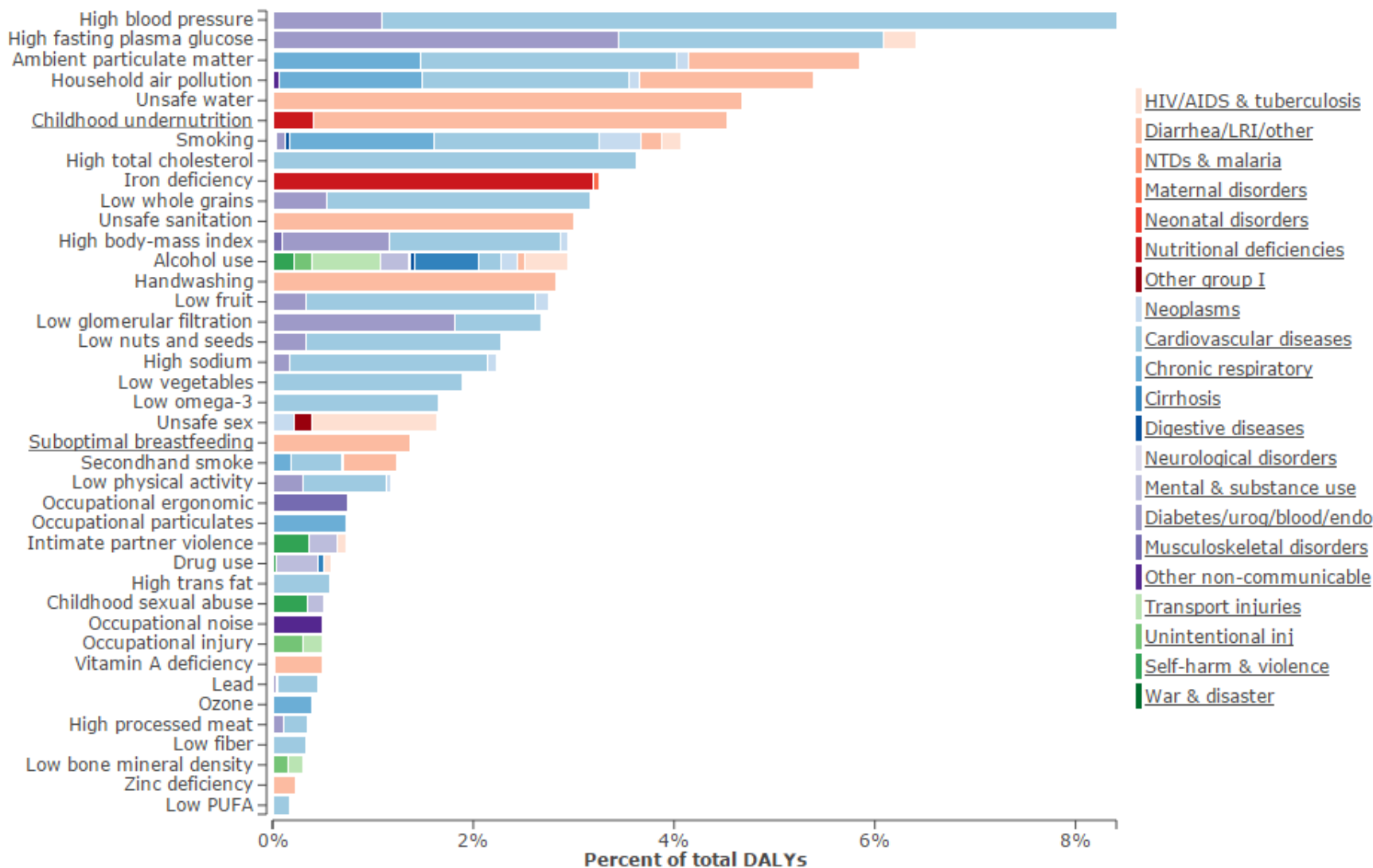


Risk Factors Causing Health Loss in India: 1990 to 2015



Risk Factors Contribution to Causes of Health Loss in India: 2015

India, Both sexes, All ages, 2015



Population of Indian States



State-level Disease Burden Estimates

- Joint effort of ICMR, PHFI and IHME, in collaboration with the Ministry of Health and Family Welfare
- Robust scientific methods of GBD approach would be utilized as relevant for the states of India
- Use the GBD approach to compute estimates for burden of diseases and risk factors for the Indian states
- Disaggregated findings by age groups, sexes, rural-urban populations
- Use of co-variates to strengthen estimates when data are scanty
- Identify major data gaps that could be improved over time
- Work with many hundreds of collaborators across the states of India

State Level Estimates

- . All available sources of data on mortality, causes of death, morbidity and risk factors will be used.
- . Smokeless tobacco included as a risk factor
- . Sample Registration System verbal autopsy data.
- . Twelve GBD India Expert Groups formed to guide this work, which include over 150 technical experts representing about 90 institutions

State Level Estimates (contd)

- meetings of the expert groups in February 2017 for more substantial state-level findings
- followed by another set of physical meetings in the middle of 2017.
- Launch of the state level study results on November 2017