Kerala: Disease Burden Profile, 1990 to 2016

How much did the under-5 mortality rate change from 1990 to 2016?
Under-5 mortality rate, both sexes combined, 1990-2016

What caused the most deaths in different age groups in 2016?
Percent contribution of top 10 causes of death by age group, both sexes, 2016

India: Health of the Nation’s States – The India State-Level Disease Burden Initiative.
Proportion of total disease burden from:
Premature death: 54.8% | Disability or morbidity: 45.2%

What caused the most years of life lost, by sex, in 2016?
Top 15 causes of YLLs, ranked by percent for both sexes combined, 2016

What caused the most years lived with disability, by sex, in 2016?
Top 15 causes of YLDs, ranked by percent for both sexes combined, 2016

*COPD is chronic obstructive pulmonary disease.
*Sense organ diseases includes mainly hearing and vision loss.
How have the leading causes of death and disability combined changed from 1990 to 2016?
Change in top 15 causes of DALYs, both sexes, ranked by number of DALYs, 1990–2016

Leading causes of DALYs 1990
1. Ischaemic heart disease [7.1%]
2. Congenital birth defects [6.1%]
3. Preterm birth complications [6.1%]
4. Lower respiratory infections [4.8%]
5. Self-harm [3.7%]
6. COPD [3.7%]
7. Stroke [3.5%]
8. Diarrhoeal diseases [3.0%]
9. Neonatal encephalopathy [2.8%]
10. Sense organ diseases [2.7%]
11. Low back & neck pain [2.5%]
12. Tuberculosis [2.4%]
13. Migraine [2.1%]
14. Skin diseases [2.0%]
15. Road injuries [2.0%]
16. Diabetes [1.8%]
17. Depressive disorders [1.8%]
18. Chronic kidney disease [1.8%]
19. Falls [1.6%]
Other musculoskeletal disorders [1.6%]

Leading causes of DALYs 2016
1. Ischaemic heart disease [12.2%]
2. Sense organ diseases [4.6%]
3. COPD [4.4%]
4. Stroke [4.2%]
5. Diabetes [4.0%]
6. Low back & neck pain [3.8%]
7. Self-harm [3.4%]
8. Chronic kidney disease [3.2%]
9. Migraine [2.9%]
10. Road injuries [2.6%]
11. Depressive disorders [2.5%]
12. Other musculoskeletal disorders [2.4%]
13. Skin diseases [2.4%]
14. Falls [2.3%]
15. Preterm birth complications [2.0%]
16. Congenital birth defects [1.7%]
17. Diarrhoeal diseases [1.6%]
18. Lower respiratory infections [1.4%]
19. Tuberculosis [0.8%]
20. Neonatal encephalopathy [0.5%]

*Change not significant.
The percent figure in brackets next to each cause is DALYs from that cause out of total DALYs.

†COPD is chronic obstructive pulmonary disease.
‡Sense organ diseases includes mainly hearing and vision loss.
§Self-harm refers to suicide and the nonfatal outcomes of self-harm.

What caused the most death and disability combined across age groups in 2016?
Percent of DALYs by age group, both sexes, 2016

Proportion of total disease burden from:
- CMNNDs: 13.6% | NCDs: 74.6% | Injuries: 11.8%
What risk factors are driving the most death and disability combined?

Contribution of top 10 risks to DALYs number, both sexes, ranked by number of DALYs, 1990-2016

Risk factors 1990

1. Malnutrition* [17.4%]
2. Air pollution [9.3%]
3. Dietary risks [8.1%]
4. High blood pressure [7.9%]
5. Tobacco use [6.5%]
6. High fasting plasma glucose [5.9%]
7. High total cholesterol [4.0%]
8. WaSH† [3.3%]
9. Occupational risks [3.0%]
10. Impaired kidney function [2.8%]
11. High body-mass index [1.7%]

Risk factors 2016

1. High blood pressure [13.4%]
2. Dietary risks [11.2%]
3. High fasting plasma glucose [11.1%]
4. High body-mass index [7.6%]
5. High total cholesterol [7.0%]
6. Tobacco use [6.9%]
7. Air pollution [6.2%]
8. Impaired kidney function [4.8%]
9. Malnutrition* [4.4%]
10. Occupational risks [3.7%]
11. WaSH† [1.3%]

The percent figure in bracket next to each risk is DALYs from that risk out of total DALYs.

*Malnutrition is child and maternal malnutrition.
†WaSH is unsafe water, sanitation, and handwashing.

How did the risk factors differ by sex in 2016?

Percent of total DALYs attributable to top 10 risks, ranked by percent for both sexes combined, 2016

Females

High blood pressure
Dietary risks
High fasting plasma glucose
High body-mass index
High total cholesterol
Tobacco use
Air pollution
Impaired kidney function
Malnutrition*
Occupational risks

Males

High blood pressure
Dietary risks
High fasting plasma glucose
High body-mass index
High total cholesterol
Tobacco use
Air pollution
Impaired kidney function
Malnutrition*
Occupational risks

Percent of years of life lost and years lived with disability

*Malnutrition is child and maternal malnutrition.