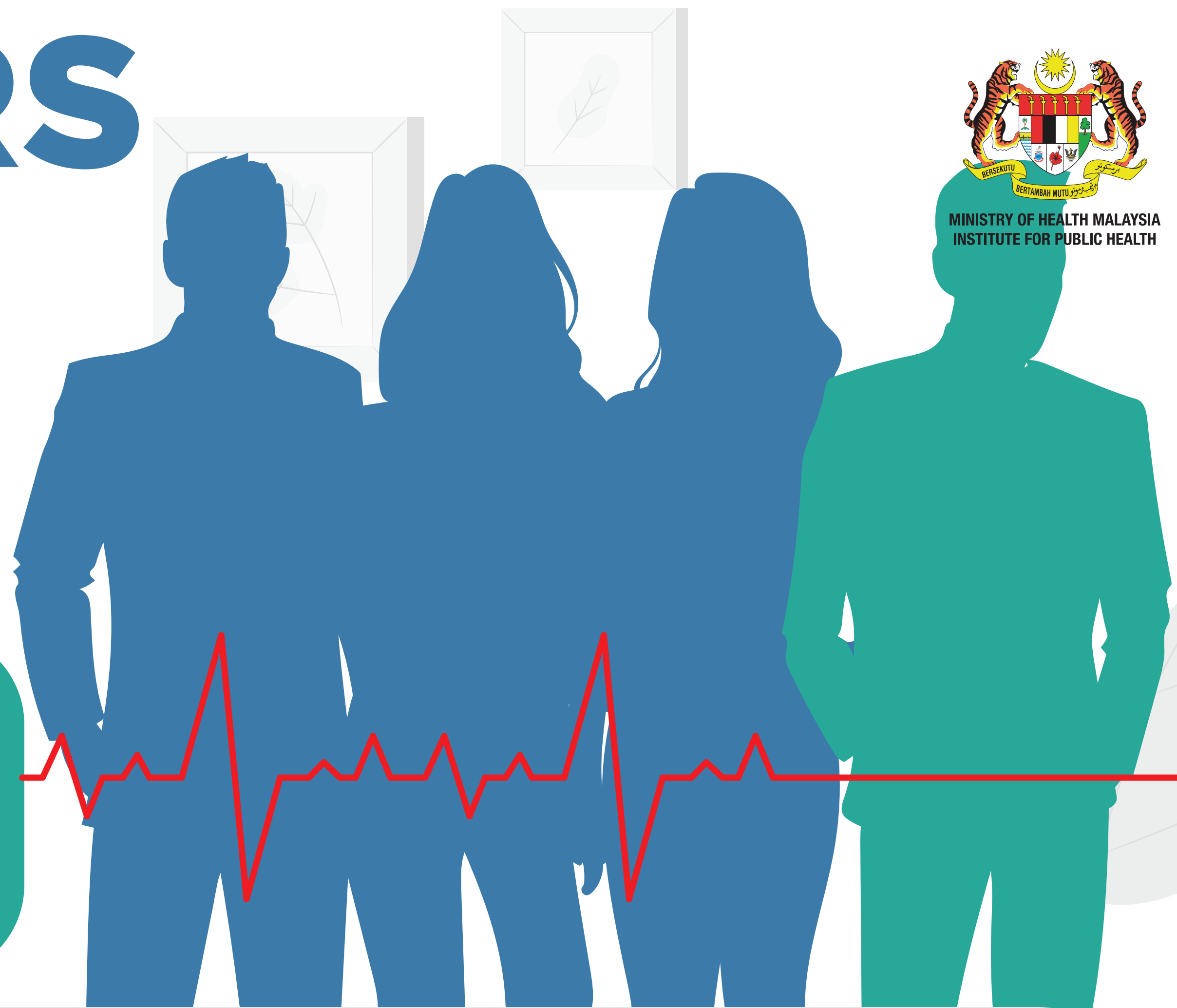


ESTIMATING YEARS OF LIFE LOST

UNDERSTANDING THE BURDEN OF DISEASE IN MALAYSIA

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INTRODUCTION

- Years of Life Lost (YLL) is a measure used to evaluate the impact of disease on population health. Monitoring mortality rates and analysing YLL helps us identify health trends and allocate healthcare resources effectively¹.
- In Malaysia, there have been limited numbers of large-scale studies on YLL. Therefore, this study aimed to estimate YLL caused by diseases in the country.

METHODS

- A descriptive epidemiological study
- All deaths in 2018, including age, sex and cause of death and ICD-10 codes were obtained from the Department of Statistics Malaysia.
- The diseases were categorised into three broad groups (communicable, maternal, neonatal and nutritional diseases; non-communicable diseases and injuries) and a list of 113 specific diseases was used.
- Data analysis was conducting using Microsoft Excel template and IBM SPSS version 26, where YLL and rates were calculated.

$$\text{YLL} = \text{DEATH} \times \text{LIFE EXPECTANCY}$$

RESULTS

- In 2018, 172,031 deaths in Malaysia resulted in a total of 3.5 million YLL.
- More than 72% of all deaths were caused by Group II: non-communicable diseases, followed by Group I: communicable, maternal, neonatal and nutritional diseases (17%) and Group III: injuries (11%).
- Top 10 leading YLL accounted for 59% of premature deaths.
- Eight of the 10 leading causes of YLL were non-communicable diseases.

Figure 1. Years of life lost (YLL) and YLL rates (per 1000 population) by age and gender in Malaysia, 2018.

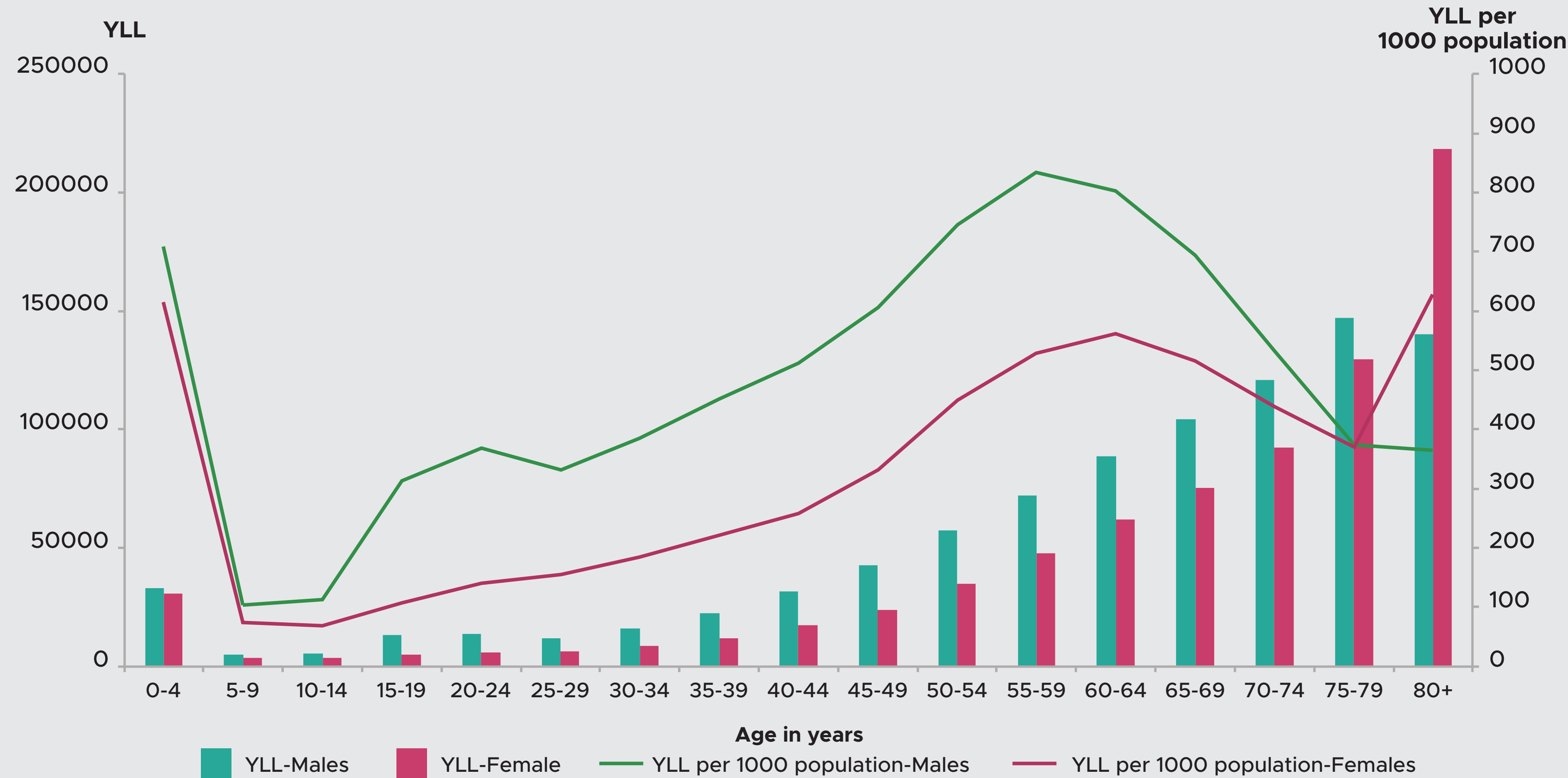
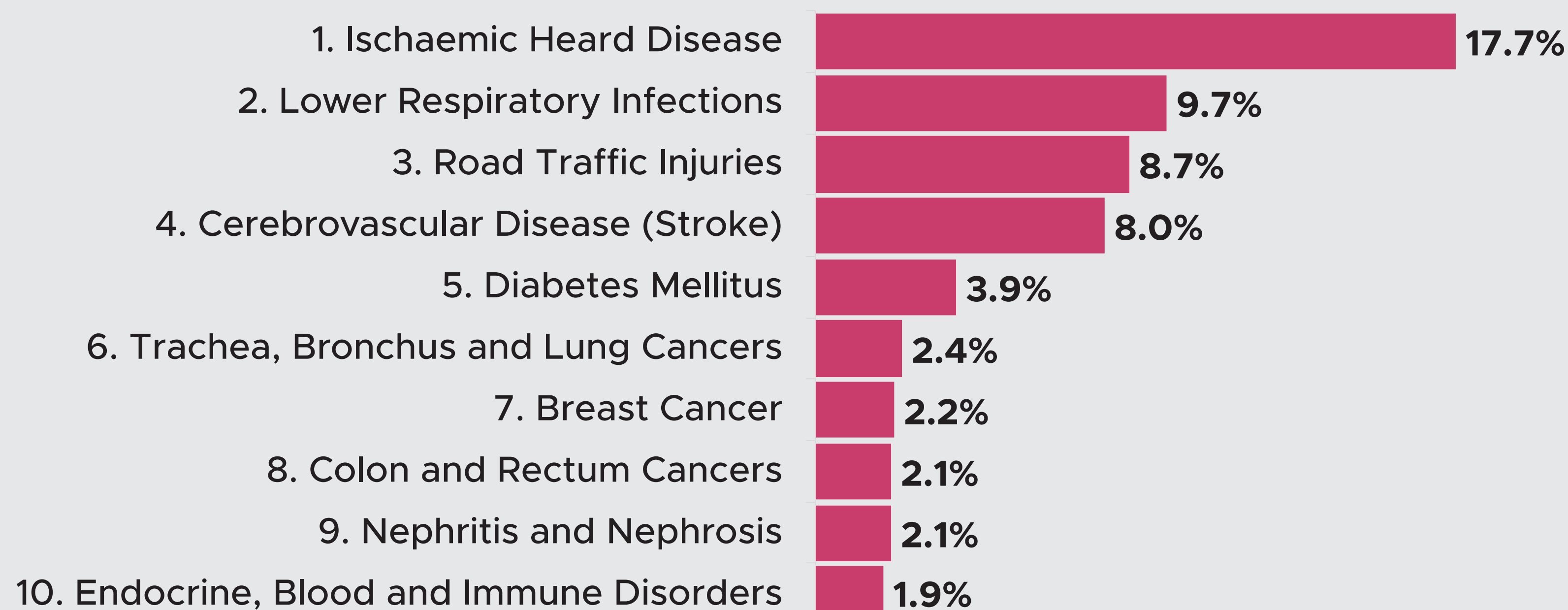


Figure 2. Top 10 leading cause of YLL by specific diseases, Malaysia, 2018.



DISCUSSION

1. In 2018, ischaemic heart disease topped YLL in Malaysia.
 - Consistent trends showed a rise from 11.9% in 2009² to 17.7% in 2018.
 - Addressing risk factors, including obesity, diabetes, hypertension, and high cholesterol is crucial in curbing this disease's impact.
2. Lower respiratory infections, such as pneumonia and influenza, ranked second in YLL.
 - Despite advancements, these infections remain a notable concern and warrant targeted preventive measures.
 - Promoting influenza vaccination, particularly among the older population, can mitigate these infections.
3. Road traffic injuries shifted from the leading cause in 2009 to top three in 2018.
 - This decline results from effective road safety programs³.
 - Challenges persist, especially among motorcyclists, emphasising the need for sustained road safety efforts.

IMPLICATIONS OF THE STUDY

1. Non-communicable diseases need immediate action, urging prioritisation of prevention and strategies such as screenings.
2. Addressing non-communicable disease risks requires comprehensive approaches, including early detection and healthier lifestyles.
3. Collaboration with various stakeholders is crucial for effective solutions, impacting health challenges such as road traffic injuries.
4. The study has wide-reaching effects on economics, society and health guide informed decisions and cost-effective prevention for marginalised groups.

CONCLUSION

1. The study analyses YLL to highlight significant disease areas requiring attention in health policy.
2. Non-communicable diseases emerge as a key concern in Malaysia, driving the disease burden.
3. Findings provide guidance for effective non-communicable disease interventions and healthcare resource allocation.

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