

FIT3179 Week 9 Homework

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Lab: 5 (Wednesday 8am – 10am)

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Creating map relevant to Visualisation 2 domain

URL (GitHub): https://github.com/Helenaaxx/FIT3179/tree/main/Week_9_Homework

URL (HTML): http://127.0.0.1:5500/Week_9_Homework/homework.html

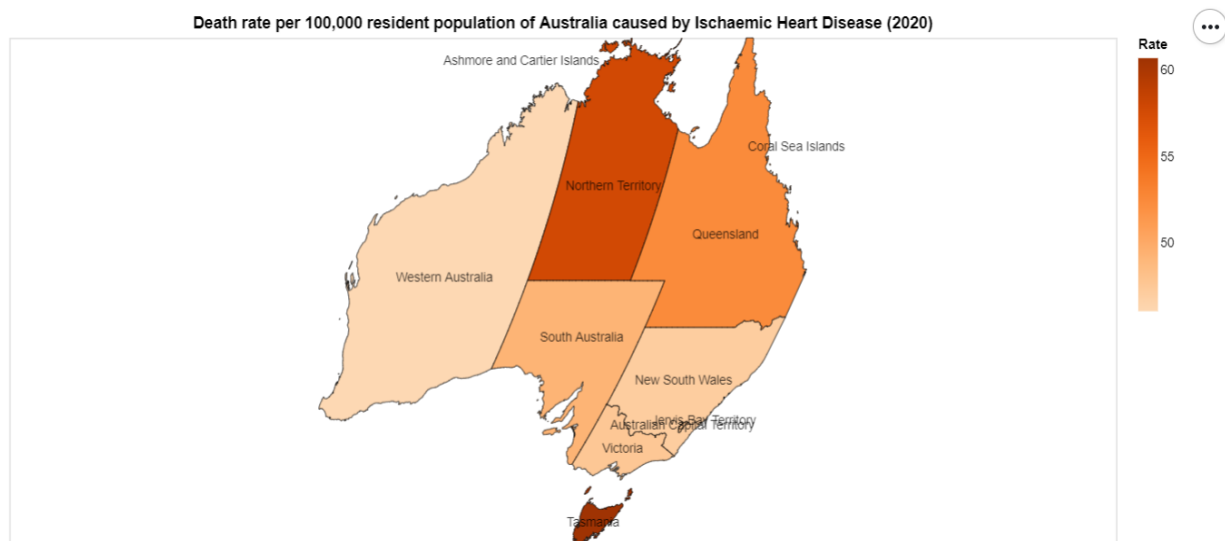


Figure 1: Screenshot of Choropleth map: “Deaths caused by Ischaemic Heart Disease in Australia (2020)”

- **Domain (for visualization project 2):** Cause of Deaths in Australia
- **Domain (for homework):** Deaths caused by Ischaemic Heart Disease in Australia in year 2020
- **Datatype:** Choropleth Map
- **Data source:** <https://www.abs.gov.au/statistics/health/causes-death/causes-death-australia/2020#data-download>
- **Author/ Department:** Australian Bureau of Statistics
- **What:**
Choropleth map is used to show geographic region data by having attribute per region. In this case, it is comparing the death rate of Ischaemic Heart Disease between different states in Australia.
- **Data Attribute:**
 - Quantitative Attribute: Death rates due to Ischaemic Heart Disease in Australia (2020)
 - Nominal/ Categorical Attribute: States in Australia
- **Why:**

- To find correlation, as well as identify outliers (in this case, to investigate whether there are specific states that have abnormally high death rate or low death rate). By comparing map of different years, trend can be analysed as well.
- **How:**
 - **Marks:** geographic regions
 - **Channel:** Colour luminance for quantitative attribute
- **Data transformation:**

The “Rate” in the dataset is an age-standardised death rate such that it shows death rate per 100,000 estimated resident population caused by Ischaemic Heart Disease in Australia.
- **Justification of type of map idiom used:**

Choropleth map is chosen because it can be used to show quantitative data (death rate) using colour luminance as channel. The higher the death rate of a state, the darker the colour of the area of the state, and this can be used to identify outlier (explained in “Why”). Proportional symbol map is not chosen because in this case, there is no need to show spatial distribution. Dot map is not chosen because there is no density to be shown as we are comparing the rates only.