

Harnessing the power of the *Victorian Women's Health Atlas* for spatial learning and gender equality awareness

Jenny Ward

Health and gender equality are recognised as fundamental to human and societal wellbeing. Secondary school is an ideal setting to introduce these concepts to young adults, however there is currently a lack of readily available teaching resources that align with the Victorian curriculum and enable students to access and interpret local area data. The *Victorian Women's Health Atlas* has the potential to change that. Women's Health Victoria is partnering with the Geography Teachers' Association of Victoria to develop curriculum resources for *Year 10: Geographies of human wellbeing*. These lessons are designed to enable students to draw on a wealth of local area spatial data while engaging with concepts of health and gender equality. A pilot is currently underway to inform final release of the resources by Semester 2, 2020.

What is the atlas?

The *Victorian Women's Health Atlas* presents more than 50 health and socioeconomic indicators on a single, easy-to-use platform. The Atlas maps sex-specific data for each local government area (LGA), supported by a gender analysis. Powerful in-built features enable users to explore and highlight spatial patterns, gender inequalities, geographic differences, trends over time and benchmark data between local areas, regions and the state. Maps and fact sheets can be downloaded from the site.

The Atlas is freely available at:
victorianwomenshealthatlas.net.au

Who developed the Atlas and why?

Women's health and wellbeing is different from men's health and wellbeing across the life cycle, and gender inequality affects women in all areas of their lives. Access to up-to-date, reliable, gendered data is critical to improving health outcomes and is an important tool in program and policy design and evaluation.

The Atlas is a ground-breaking interactive tool developed by Women's Health Victoria (WHV), in collaboration with other statewide and regional women's health services and Family Planning Victoria. It is designed to assist in the identification of gender impacts on key health areas, to inform decisions about service design, emerging priorities and program planning and monitoring. One of the drivers for developing the Atlas was to overcome the need for individual women's health services to compile and maintain their own local data books, such as those shown in Figure 2.



Figure 1: Victorian Women's Health Atlas logo



Figure 2: Many individual women's health services have had to compile and maintain their own local data books. The Women's Health Atlas helps to centralise this data.

The Atlas enables users to:

- access and interact with a one-stop online hub for key Victorian health data
- use sex-disaggregated data to identify the different health outcomes and barriers experienced by women and men
- contextualise these differences using the gender analysis provided
- identify opportunities to improve women's health at the local level and contribute to greater gender equality

- generate tailored gendered fact sheets for each health indicator with data from the local, regional and state levels
- compare each LGA against neighbouring areas and Victoria and visualise the variation.

Where does the data come from?

Datasets are sourced from many different agencies for mapping in the Atlas. This includes many datasets obtained by custom request that are not readily available elsewhere. The data is curated and processed by WHV, including determining the range classification (the data values to be represented by each map colour).

There are two colour ranges used on the Atlas. Traffic light colour ranges imply value and are used to show progress towards or away from health promotion or equality targets, with green being 'better' and red being 'worse', e.g. Family Violence, Perceptions of Safety.

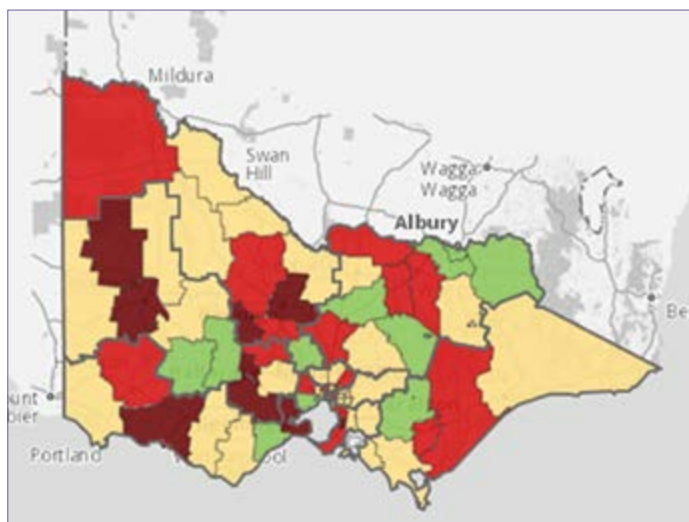


Figure 3: Traffic light colour ranges imply value and are used to show progress towards or away from health promotion or equality targets e.g. Family Violence, Perceptions of Safety

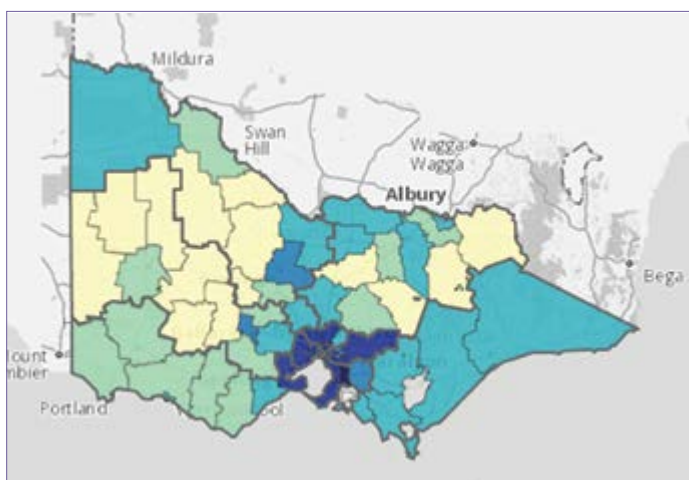


Figure 4: Blue/green colour ranges do not imply value and are used for demographic indicators, e.g. Population, Age, Born in Australia

Each dataset is uploaded to the Atlas website with the support of technology partner Spatial Vision. The end result is a single platform that brings otherwise scattered data together – with standardised displays, user controls and outputs. Minimal training is required to use the Atlas. This, combined with the engaging interactive format, lends itself to self-directed data discovery and interpretation.

Content and features

The content is grouped into six priority health areas identified by the Victorian women’s health sector:



Figure 5: The six priority health areas

Menu driven map navigation

- Step 1: Choose priority health area – e.g. Sexual and Reproductive Health.
- Step 2: Choose indicator – e.g. Teenage Birth.
- Step 3: Choose measure – e.g. Rate.

The default display is a statewide view – with female data selected – for the most recent time period.

The value ranges for each map colour are shown in the legend (to the lower right of the map) (Figure 6).

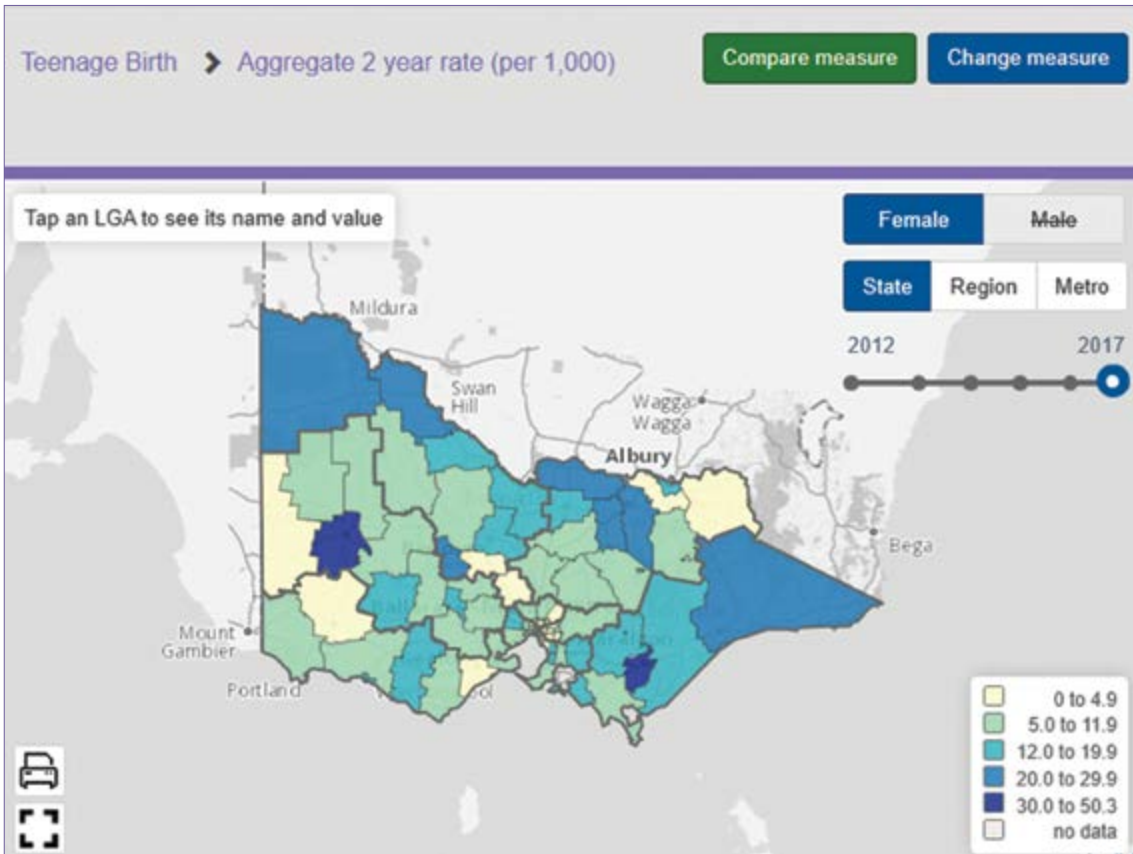


Figure 6: The default display opens with a statewide view and the most recent data displayed

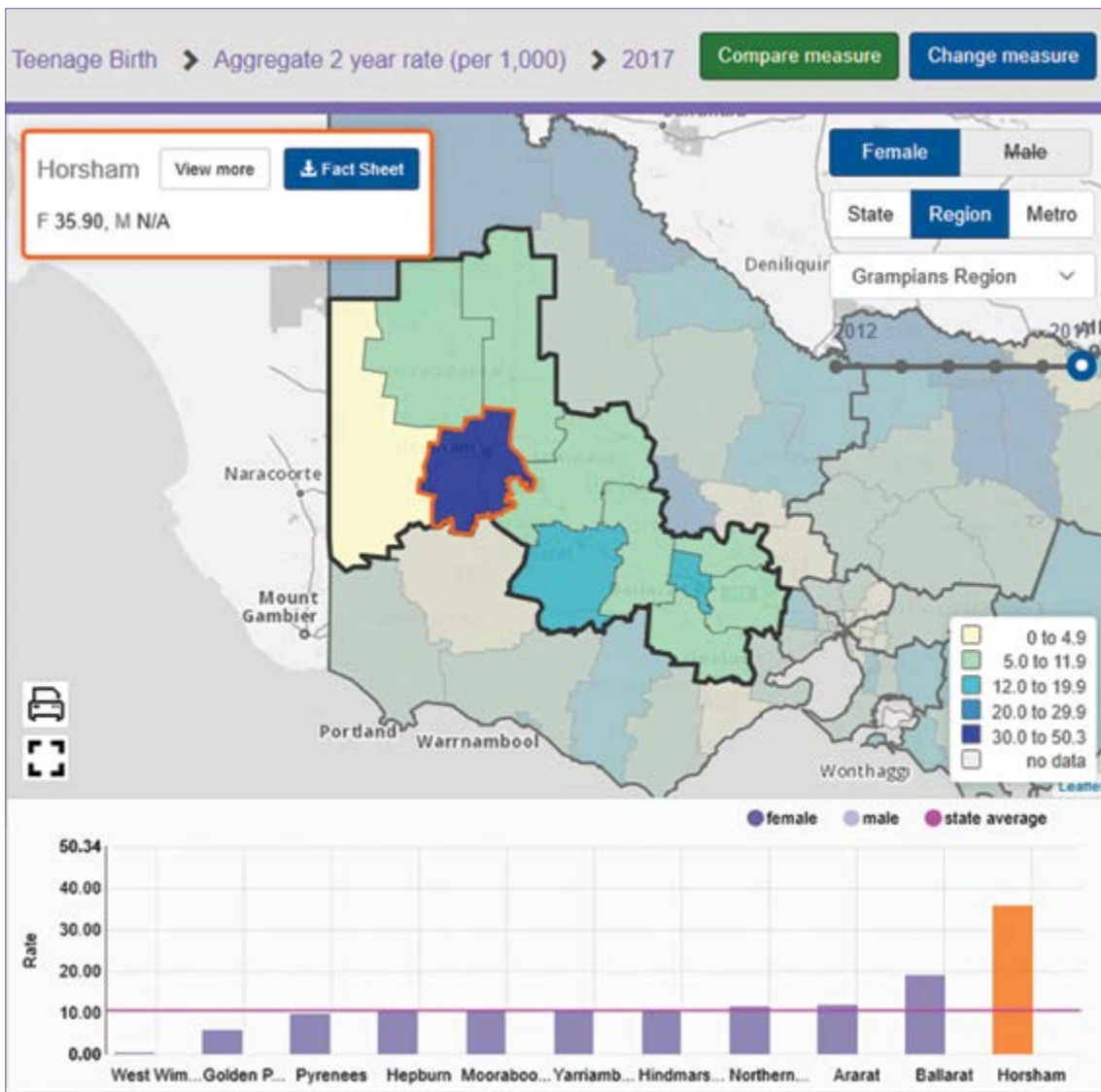


Figure 7: This view shows the Grampians region with Horsham highlighted

Map features

The Female/Male button allows the user to toggle between Female data map and Male data map (if available). The Timeslider control allows users to easily view maps for previous time periods. Simply move the slider to a different year and the map will update accordingly.

Users can alter the zoom between Statewide, Metro and Region (choose from a list). Below the map, a bar chart ranks the values for all LGAs represented by the map – sorted lowest to highest by female (if selected) or male (if selected).

Clicking on any LGA highlights it in the map and bar chart, and opens a ‘View more’ window, as in the example in Figure 7 – Grampians Region – with Horsham highlighted. Note that at region zoom level, the LGA names appear in the bar chart.

Text fields

Text fields beside each map provide important context including: statewide totals and trends, brief gender analysis, data processing notes (including any limitations) and the data source. The text is regularly reviewed and updated to maintain relevance and accuracy.

LGA ‘View More’ feature

‘View more’ opens a multi-year data table and graph for immediate visualisation of trends.

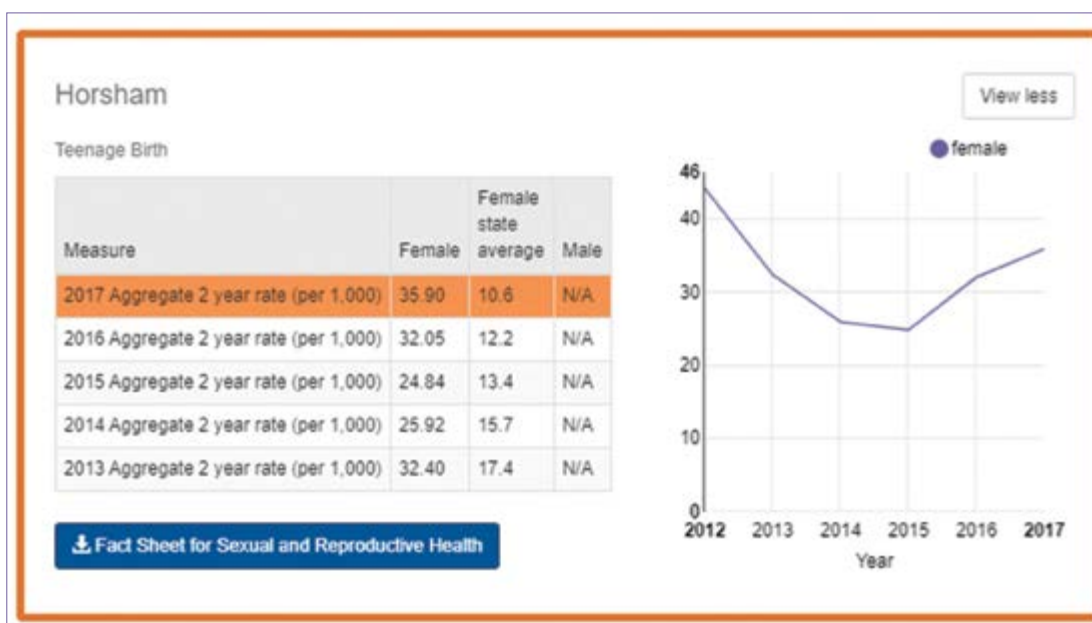


Figure 8: Multiple data sets over time can be seen in ‘View more’



Figure 9: LGA fact sheets can be downloaded

LGA fact sheets

Each LGA has a set of six fact sheets – one per priority health area. These contain data tables with up to five years of data for each of the indicators within that priority health area. A shortcut to the LGA factsheets (bypassing the maps) is available from the home page.

Melton		Metro West Average		State Average		
F	29.46	F	26.2	F	20.8	
M	26.58	M	29.0	M	18.1	
					All	19.4

Figure 10: LGA data is displayed alongside region and state averages for easy benchmarking, as in this example: Chlamydia > 2018 > Rate (per 10,000) > Melton LGA

Figure 11: Maps and their related text can be downloaded

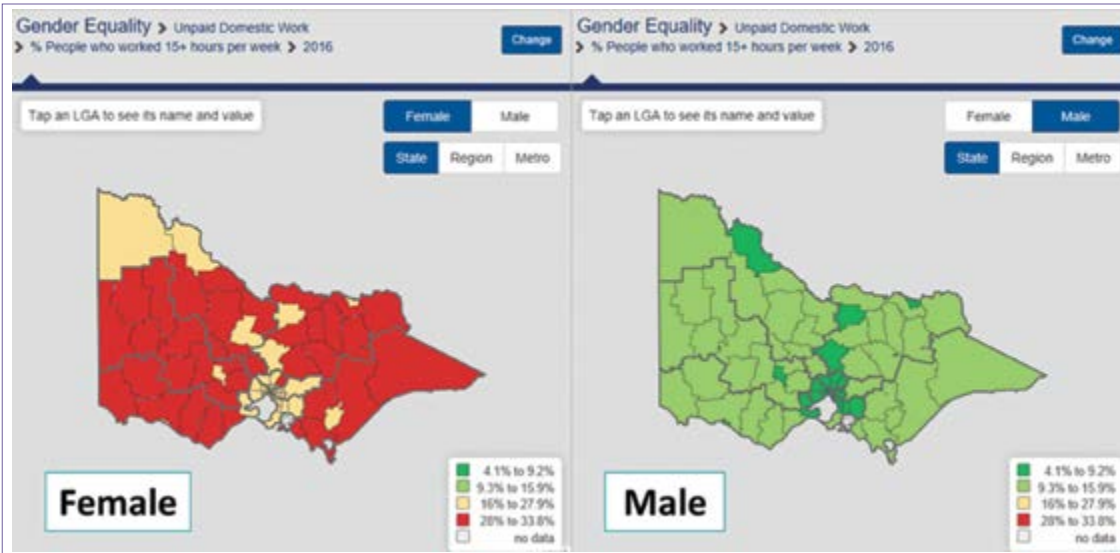
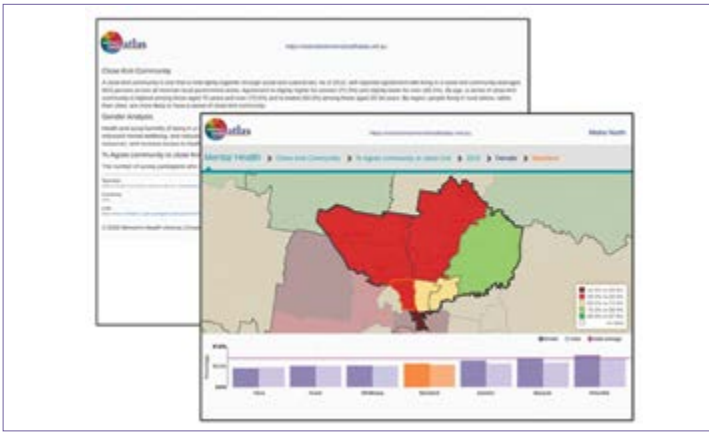


Figure 12a: Unpaid Domestic Work – female compared to male

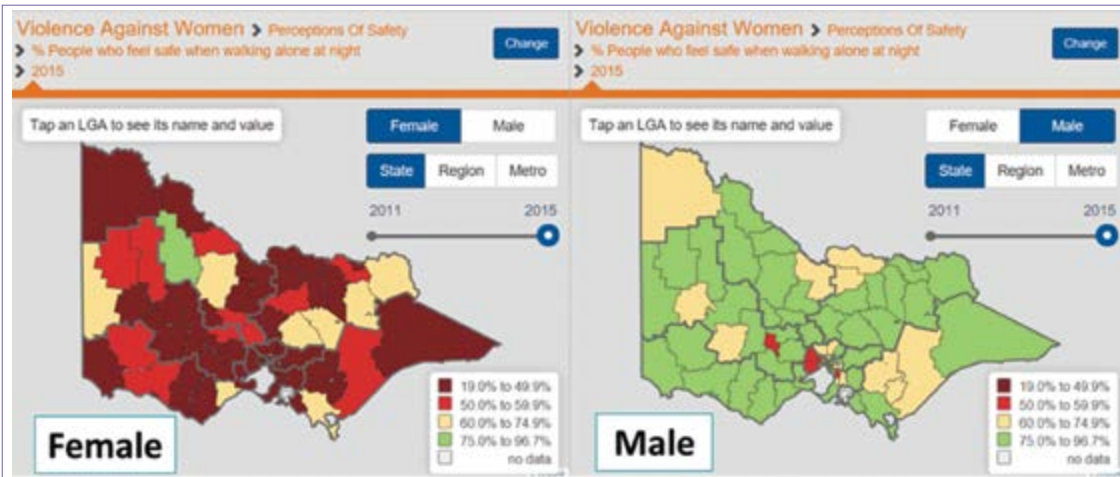


Figure 12b: Perceptions of Safety – female compared to male

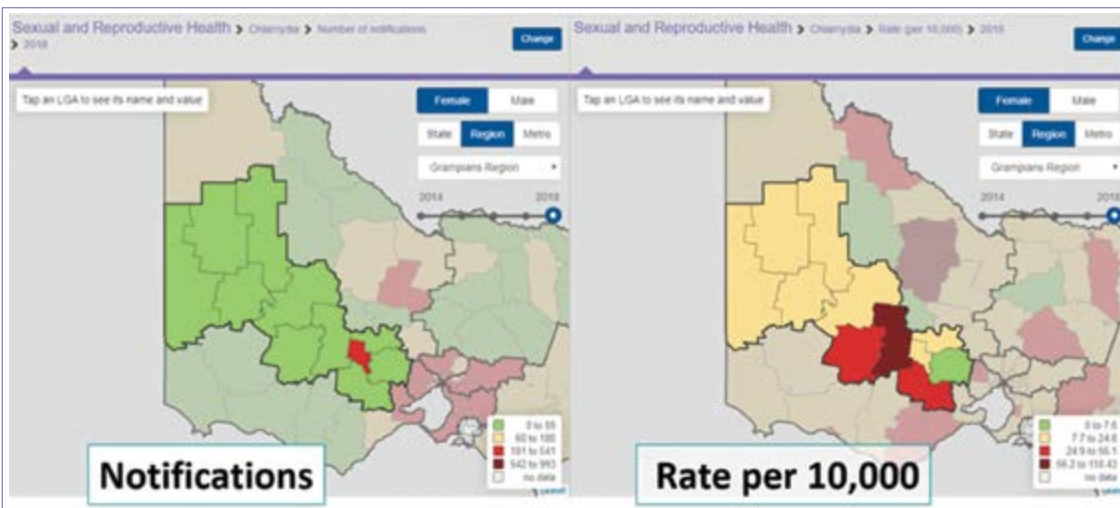


Figure 13: Maps showing data in counts and rate can tell very different stories

Map downloads

Any single map can be downloaded as a PDF – using the print icon to the lower left of the map. The download includes the formatted map, along with related text fields.

Compare Measure feature

This powerful feature allows the user to view any two maps side-by-side and is particularly useful to visualise:

1. Female data alongside male data for the same indicator e.g. Unpaid Domestic Work or Perceptions of Safety.
2. Differences between count and rate data for the same indicator.

‘Count’ is the number of new health events recorded – e.g. number of cases of Chlamydia notified.

‘Rate’ converts the count into a measure that is comparable between LGAs – e.g. number of cases notified per 10,000 people.

The picture can be quite different – as illustrated in the example for Chlamydia – Grampians Region (Figure 13).

An emerging tool for schools

Atlas alignment with secondary education

Features that may appeal for teaching and learning include:

- simplicity and ease of use
- Victoria-wide coverage by LGA, benchmarked against regions and the state
- a rich source of data not readily available elsewhere, available in different formats (maps and fact sheets)
- highly visual, spatial learning format
- lends itself to inquiry-based learning, discussion of issues, map interpretation
- availability of trend data and ability to view maps side by side
- students can access at school or at home – it could even spark household discussion
- free, and available now.

Alignment with the Geography curriculum

The Atlas has strong and clear connections to the Victorian Curriculum: Geography in at least two areas:

- Year 10: Geographies of human wellbeing, and
- Year 7: Place and liveability

Some of the content, however, may be better suited to upper secondary school education – e.g. Sexual Assault, Self-Harm.

Curriculum resource development

Women’s Health Victoria is partnering with the Geography Teachers’ Association of Victoria (GTAV) to develop a series of lessons connecting the Atlas content with the *Year 10 Geographies of Human Wellbeing* curriculum.

The first three lessons are:

- Introductory lesson: Navigating the Victorian Women’s Health Atlas.
- Inquiry 1: How can community connections improve wellbeing?
- Inquiry 2: How do perceptions of safety vary across Victoria between men and women?

Additional lessons are planned for development as resources permit:

- Inquiry 3: What are the gender indicators that help explain spatial patterns of wellbeing?
- Inquiry 4: Investigating your LGA – how does it measure up?
- Inquiry 5: Action to improve health and gender equality across Victoria.

Outcomes for students

The content enables students to engage with a wealth of Victorian spatial data to increase their awareness and understanding of how health and gender inequality impacts society, their local community and their own lives. A better understanding of the intersections between gender and health will enable young men and women to identify actions to address health disparities.

The resources in this series can be utilised as part of a whole-of-school approach to Respectful Relationships Education (RRE). Best practice involves integrating gender equity learning into the entire curriculum and the school’s overall approach to teaching and learning. However, there are limited resources currently available that bring a gender lens to specific parts of the school curriculum like Geography.

There may be opportunities to link the Atlas content with additional secondary curriculum streams in the future – e.g. *Health and Physical Wellbeing*, *Health and Human Development*.

2020 Geography resource trial

A pilot is underway in Term 1, 2020 for Victorian teachers to trial the new lessons prior to final publication. The aim is to have the final versions publicly available to all teachers in Semester 2, 2020.

For more information about the pilot, please contact the GTAV. In the meantime, teachers are invited to visit the Atlas site and explore the content and features. User feedback is welcome any time via the Online User Survey (surveymonkey.com/r/73Z926D).

Jenny Ward is an Information Officer at Women’s Health Victoria and has over 30 years’ experience providing information and library services in the academic and health sectors. Her current role includes curating and updating the Victorian Women’s Health Atlas. She is passionate about the availability of sex-disaggregated data to support statewide women’s health policy, health promotion and gender equality work.