Preliminary data on mesothelioma notifications in the proximity of the former Wunderlich asbestos plant, Gaythorne, and the James Hardie fibrolite plant, Newstead.

Data on mesothelioma notifications in the suburbs surrounding the Wunderlich asbestos plant at Bellevue Street, Gaythorne and the James Hardie fibrolite plant at Doggett Street, Newstead was obtained from the Queensland Cancer Registry. Notifications since the inception of the cancer registry in 1982 were extracted.

There is a well-established causal relationship between exposure to asbestos and mesothelioma. While the level of contamination will have declined since the closure of the plants (1983), mesothelioma has a long latency period (at least 20-40 years). The data extracted falls within this timeframe.

The address at time of diagnosis was used to explore proximity to the sites of interest. A radius of 1.5 kilometres around the sites was identified as an appropriate benchmark for this initial analysis.

The analysis identified 8 notifications of mesothelioma cases within a 1.5km radius of the Wunderlich site since 1982. All cases were male with the age range at time of diagnosis between 66 and 85 years. Three of the cases were diagnosed in the last ten years.

There were twelve notifications of cases within a 1.5 kilometre radius of the James Hardie site. Ten of these notifications were male and two were female. Age at time of diagnosis ranged between 56 and 85. Five of the cases were diagnosed in the last ten years.

This data presented in the figure below includes all notifications identified in the data extracted from the Queensland Cancer Registry. Male cases are represented by black dots and female cases by green dots.
Figure 1 Diagnosis address of mesothelioma notifications for selected suburbs including males (yellow) and females (green).

The data does not indicate an obvious pattern however this is a preliminary analysis and care needs to be taken in interpreting this data for the following reasons:

- Addresses used in the analysis are those at time of diagnosis. Residential history is not available in the Queensland Cancer Registry. Therefore, this analysis was unable to discriminate between cases that may have recently moved into the area, and those who have resided there since the time of exposure. Further, this data does not capture cases that may have left the area after being exposed.

- There has been substantial residential development and changing population density in the selected area. Many of the addresses identified are in areas in which there was no housing development at the time the plants were operational. This will need to be accounted for in subsequent analyses.

- A significant proportion of asbestos related disease is attributable to occupational exposure. From currently available data it is impossible to determine the occupational exposure of cases.

- While mesothelioma is a strong indicator of exposure to asbestos, there are other important asbestos related diseases that are not captured in this data.

- This preliminary analysis does not enable the comparison between the area of interest and other areas. This will be the focus of future analysis.

Scoping for more detailed analysis is currently being conducted. It is planned that data on other asbestos related disease and demographic data will be acquired to enable the calculation of disease rates for comparison with a reference population. This will provide a better understanding of whether there have been an excess number of cases above those that would be expected. Analysis will also be informed by information that may be obtained from other sources.