

Environmental Health & Wellbeing Survey 2002

SUMMARY OF FINDINGS

*Environmental Health & Wellbeing Survey
of residents in the Castalloy Environs, 2002*



**Environmental Health Branch
South Australian Department of Human Services**

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SUMMARY OF FINDINGS

As a result of requests from the Plympton community, a health and wellbeing survey was undertaken during September and October 2002. The survey participants were drawn from two groups; Area 1 (the control group) and Area 2 (the study group of interest). Area 1 comprised a random selection of adults who reside in the suburbs of Kurralta Park and Marlestone. This area was chosen because of its socio-economic comparability to the Plympton area. Area 2 participants comprised a random selection of adults who reside within 500m of Castalloy Limited, a light alloy casting facility.

The survey was undertaken in a rigorous scientific manner. The survey questions were administered using computer-assisted telephone interviews. The name “Castalloy” was not included in any of the questions or response options presented to the respondents by the trained interviewers. In order to ascertain an unbiased result participants were randomly selected with all interviews undertaken by professional interviewers to ensure quality data collection. The participation rate was 68%. The data were weighted, (using ABS census data) by age, gender and probability of selection in the household to the Statistical Local Areas (SLA) from where the sample was selected. This ensures that the responses are representative of the whole area in terms of demographics.

The demographic characteristics of the two groups were similar, ensuring confidence in the comparability of the two populations. Most questions about quality of life indicated similarity between the two groups. Self-reported rating of general health and rating quality of life did not exhibit any differences between the two groups. Smoking status was comparable between the two groups. Area 2 participants were more likely to report that their health was “somewhat worse” at the time of interview compared to one year previously.

The study participants were asked if they had been told by a doctor that they had various medical conditions. Area 2 reported a higher prevalence of high blood pressure, but there was no difference between the two groups in terms of other medical conditions including stroke, cancer, respiratory problems, or heart disease. The higher rate of high blood pressure in Area 2 can be explained by the higher proportion of older people in that region. Various self-reported symptoms were also queried in the survey including itchy eyes, nausea, headaches, breathing difficulties, chest tightness, hay fever attacks, disturbed sleep, skin rashes etc. There were only two symptoms that differed in prevalence, namely cough (higher proportion in Area 2) and vomiting (higher proportion in Area 1). Each of these differences is considered to be accounted for by chance alone as there is no consistency between related variables.

The majority of respondents reported that their health was not seriously affected by various environmental factors including perfume, traffic pollution, household chemicals or workplace chemicals. However, people from Area 2 were more likely to report that “workplace chemicals” seriously affected their health than people in Area 1.

Odour and noise were identified as significant issues for those living close to Castalloy. Both odour and noise caused more annoyance to Area 2 residents than those from Area 1, and were more likely to disturb sleep. Odour also disrupted outdoor activities. Headaches, nausea and irritability were more likely to “never” be considered caused by odour among residents of Area 1 compared to residents from Area 2.

The survey results indicated no evidence of an association between illness and living close to Castalloy. However, 52% of respondents overall considered that there were environmental factors that might put community health and wellbeing at risk. This group of 248 respondents were questioned further about the environmental factors. The majority (194 = 78%) of these respondents belonged to Area 2 and, of this sub-group, 182, or 94% considered industry and/or factories to be the most likely cause compared to 22, or 41% of the sub-group from Area 1. The respondents from Area 1 who reported such environmental factors were more likely to have become aware of the problem in the last year and were less likely to see/smell or hear the problem during a usual week than those from Area 2. Interestingly when asked how much the problem had affected their health the majority of respondents from both areas considered the effect had been “not at all” or “slight”, but this was more frequent a response in Area 1. (79% in Area 1 compared with 63% in Area 2). Similarly, when asked how much the problem had affected the health of other household members, 77% of Area 1 respondents replied ‘not at all or slight’ compared with 57% of Area 2 respondents.

Area 2 residents were more likely to consider the possibility of moving house (as a consequence of the environmental problem) as being “moderate, high or extreme” than residents from Area 1. Similarly residents from Area 2 were more likely to consider the effect upon the value of the property to be “moderate, high or extreme”. The environmental problem was more likely to affect the general enjoyment of life for those who live in Area 2. Differences in lifestyle between the two groups included a higher rate of avoidance of outdoor activities for those from Area 2.

CONCLUSION

The survey results indicate that there is no evidence of an association between illness and living close to Castalloy.

However, people living within 500 m of Castalloy were more likely to report an impact from environmental noise and odour upon their wellbeing and lifestyle. They were more likely to report that they avoided outdoor activities, and were more concerned about the need to move and the value of their property than residents living further away from Castalloy. People residing close to Castalloy were also more likely to be aware of an environmental factor that they believed was putting the health and wellbeing of their community at risk.

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