Our Health, Our Community
HEALTH & WELLNESS SURVEY

Technical Notes

Our Cowichan
COMMUNITIES HEALTH NETWORK

island health

Data Processing

Data processing involved a series of steps to translate the raw electronic questionnaire format to a useable format that included a comprehensive list of indicators for analysis. A series of steps were conducted to clean the file to check for inadvertent errors, inconsistencies, duplicate records and geography assignment. Several measures were taken to ensure each participant was apart of the target population and had completed a sufficient amount of the survey to be included in the final analysis.

Duplicate records were identified and manually reviewed based mainly on postal code, age, gender, community name and sexual orientation; duplicates with the highest item non-response were removed. Legitimate records could have been inadvertently removed if two unique records were identical for these demographic variables; however, efforts were made to analyze further variables to ensure accuracy. Moreover, surveys where the participants provided answers to less than 17.5% of eligible core questions were removed from the dataset along with surveys where the respondent indicated their age was less than 18. Surveys where the respondent did not provide sufficient information to identify the British Columbia regional health authority in which they live were also removed. Standard health geographies (Health Service Delivery Area or HSDA, Local Health Area or LHA, and Community Health Service Area or CHSA) were derived based on the respondent's postal code or community of residence.[1]

Sample Weighting

Weights were calculated using auxiliary socio-demographic data for the entire target population obtained from the 2021 Canadian census to adjust for over and under-representation of different subgroups of the target population. This helps adjust for coverage inadequacies that result in the survey sample differing from the target population. For example, women were more likely than men to respond to the survey. Yet the two groups make up about the same proportion in the population. Because the survey sample over-represented women and under-represented men, a weight was used to compensate for the skewedness.

A custom tabulation was obtained from Statistics Canada. Census population counts were compiled for the following variables for each standard health geography (CHSA, LHA, census regional district): age group (18-44, 45-64, 65-74, 75+) and gender identity (man, woman), education (high school or less, post-secondary below bachelor level, bachelor level or above). The Census and OHOC files were linked to obtain both sample size and population counts for each stratum. The sample weight for each individual in a stratum equals the population count divided by the sample size in that stratum.

Limitations of the data

Sampling errors occur when estimates obtained from the sample differ from results we would obtain from a complete census of the population under similar conditions using the same questionnaire, processing methods etc. Given the OHOC survey consists of individuals who self-selected and volunteered to participate, sampling errors due to selection bias must be carefully considered before generalizing estimates obtained from the sample to the target population[1]. While weighting by known population socio-demographic characteristics obtained from the 2021 Census may reduce some of the self-selection and coverage bias, it is unlikely to correct for it entirely. This is especially true if the indicators of interest (e.g., physical activity) are not highly correlated with the socio-demographic characteristics used to calculate the

[1] The number and boundaries of CHSAs are periodically updated based on the most recent Census data.

weights (see the description of weight calculation). As a result, inferences about the general population should be made with caution. Since the estimates obtained from the survey are based on a sample, there is variability in the values obtained in the sense that a different sample could result in different results. The amount of uncertainty increases as the sample size decreases. While unreliable estimates with high sampling variability due to small sample size were suppressed, estimates with moderate variability - especially for many CHSAs - are presented. All CHSA level estimates should be interpreted with caution not only due to sampling variability but also because small samples are more likely to be unrepresentative of the general population.

Data Suppression

Efforts were made to not release estimates that are highly variable given small sample sizes. Coefficients of variation were calculated for each stratification level for each indicator in the webpage. Estimates with coefficients of variation greater than 33.3%, equal to zero, or missing were considered unreliable and were suppressed in the dashboard. Additionally, numerators below 20 participants and denominators below 30 participants were suppressed. Statistics Canada uses similar cut-offs in national surveys like the Canadian Community Health Survey. Data were also suppressed for standard health geographies where 25% or more of the population consists of First Nations peoples based on the 2021 Census; therefore, Penelakut and Thetis Island CHSA was suppressed. Suppression rules are indicated 'suppressed' noted on the graph percentages.

Suggested Citations

Survey Results

Island Health and Our Cowichan Communities Health Network (2025). Our Health Our Community Health and Wellness Survey. Prepared by Island Health Authority.