

5 QUESTIONS ABOUT THE CANADIAN HEALTH MEASURES SURVEY

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WHAT IS THE CANADIAN HEALTH MEASURES SURVEY (CHMS)?

The CHMS is a national survey led by Statistics Canada and launched in 2007 to collect important health information on Canadians. Health Canada leads the biomonitoring component focused on measuring environmental chemical exposures in Canadians.

The survey is carried out in an ongoing series of two year cycles. **Each cycle includes at least 5700 participants aged 3 to 79 years from an average of 16 sites across Canada.** The sampling strategy ensures that the CHMS is designed to be representative of the general Canadian population.



2

WHAT INFORMATION IS COLLECTED IN THE CHMS?

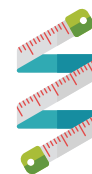
AT PARTICIPANT'S HOME:

- Collected by household interviewer and sampling or monitoring devices
- Information on nutrition, smoking habits, alcohol use, medical history, current health status, sexual behaviour, lifestyle, physical activity, environment, housing characteristics, and demographic and socioeconomic variables (*household questionnaire*)
- Tap water and indoor air sampling
- Physical activity monitoring (*accelerometer*)



AT MOBILE EXAMINATION CENTRE (MEC):

- Collected by MEC staff
- Information related to medication use, tap water, hearing, sun exposure, indoor air, and fish and shellfish consumption (*clinic questionnaire*)
- Physical measures such as height, weight, blood pressure, physical fitness, lung function, and vision
- **Blood and urine samples to evaluate environmental chemical exposure**, nutritional status, diabetes, cardiovascular health, musculoskeletal health, and infection markers



OVER 270 ENVIRONMENTAL CHEMICALS BY 2020:

- | | | |
|---------------------------------|-----------------------------|---|
| • metals | • acrylamide | • polycyclic aromatic hydrocarbons |
| • persistent organic pollutants | • flame retardants | • phthalates and alternate plasticizers |
| • volatile organic compounds | • perfluoroalkyl substances | • tobacco biomarkers |
| • environmental phenols | • pesticides | • other biomarkers |

Chemicals are cycled in and out of the survey based on a number of factors including low detection levels, regulatory priorities, and emerging concerns.



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WHAT IS HUMAN BIOMONITORING?

Human biomonitoring is the measurement, in people, of a chemical or the products a chemical makes when it breaks down. This measurement is usually taken in **blood or urine** and sometimes in other tissues and fluids such as hair, nails and breast milk.

Humans are exposed to environmental chemicals through soil, dust, air, water, food, and consumer products. The presence of an environmental chemical in people's blood or urine is an indicator of exposure and does not mean that it will cause health effects.



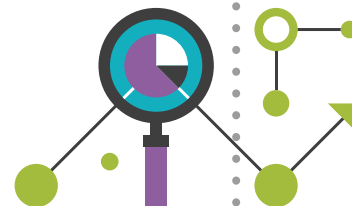
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HOW CAN I ACCESS THE CHMS BIOMONITORING DATA?

Health Canada has published reports presenting national biomonitoring data collected for each cycle of the CHMS. The reports also provide information on the survey methods used along with background information for each chemical or chemical group including uses, sources of exposure, health effects and relevant Canadian regulatory activities. The reports are available at www.health.gc.ca/biomonitoring.

Summary biomonitoring data are also available on the Government of Canada's Open Government portal. The dataset is available at www.open.canada.ca.

The complete CHMS datasets are available to scientists through Statistics Canada's Research Data Centres Program. To find a RDC near you, visit www.statcan.gc.ca/eng/rdc/network.



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WHERE CAN I GET MORE INFORMATION?

If you have any questions on the biomonitoring component of the CHMS, please contact:

HEALTH CANADA
HC.biomonitoring-SC.biosurveillance@hc-sc.gc.ca
www.health.gc.ca/biomonitoring

STATISTICS CANADA
infostats@statcan.gc.ca
www.statcan.gc.ca/chms

BIOBANK:

Blood, urine and DNA samples from consenting participants are stored for future health research projects. Researchers can request access to the CHMS Biobank.
www.statcan.gc.ca/biobank

