



Canadian Longitudinal Study on Aging
Étude longitudinale canadienne sur le vieillissement

Backgrounder: Canadian Longitudinal Study on Aging

The CLSA research platform

The Canadian Longitudinal Study on Aging (CLSA) is a large, national research platform on health and aging that allows researchers and decision-makers to answer critical questions on the biological, medical, psychological, social, lifestyle and economic aspects of aging, disability and disease.

The CLSA follows more than 50,000 men and women who were between the ages of 45 and 85 at the time of recruitment, for 20 years. Through its large size, comprehensive data collection and long-term design, the CLSA will enable research on the factors supporting healthy aging.

Data available to the research community

CLSA projects supported through the 2018 Catalyst Grant Funding Opportunity will analyze data collected at baseline from up to 51,000 participants. The available data include:

- Questionnaire and cognition data collected from 51,000 participants;
- Comprehensive physical assessment data, including images from retinal scans, bone density scans and carotid ultrasound, collected from approximately 30,000 participants;
- Biochemistry blood biomarkers collected from approximately 27,000 participants;
- Genome-wide genotyping data for approximately 10,000 participants; and
- Linked data on air quality, neighbourhood factors, greenness indicators and weather from the Canadian Urban Environmental Health Research Consortium (CANUE).

The CLSA data are available to approved Canadian and international researchers and trainees. The CLSA welcomes applications from graduate students and postdoctoral fellows who wish to use the data for their thesis research or for their postdoctoral projects.

Researchers interested in accessing the CLSA data can apply online by visiting www.clsa-elcv.ca. As of February 2019, applications are now being accepted for questionnaire and select physical assessment data from the second wave of data collection, known as Follow-up 1.

Data collection

- The CLSA recruited more than 50,000 people from across Canada to take part in the most comprehensive study of aging ever undertaken in Canada.
- Participants were aged 45 to 85 at baseline recruitment, which started in 2010 and was completed in 2015.

- CLSA participants undergo repeated waves of data collection every three years and will be followed for 20 years or until death.
- The second wave of data collection, known as Follow-up 1, was completed in 2018.
- Approximately 21,000 participants take part in telephone interviews, while roughly 30,000 participants take part in in-home interviews and data collection site visits.
- In-depth telephone or in-home interviews are used to gather information on a wide range of areas, including sociodemographics, general health, chronic health conditions, mental health, hearing, cognition, social networks, labour force participation, activities of daily living and caregiving or care receiving.
- At data collection sites, participants undergo cognitive and physical assessments, including height and weight measurements, vision and hearing tests, blood pressure and cardiovascular measures along with a bone density scan and strength and balance tests. They are asked to provide blood and urine samples.

The CLSA research platform

- To date, more than 150 projects have been approved by the CLSA data access committee. To learn more about the specific projects and find out how the CLSA platform is being used, visit [here](#).
- In addition, the CLSA infrastructure and research platform are used by more than 50 stakeholders and partners, which collaborate with the CLSA to enrich the data, improve methodology or use the study infrastructure for independent projects.
- In May 2018, the CLSA published its [first report on health and aging in Canada](#), which included baseline findings on a range of physical, mental and social aspects of aging based on data from the CLSA's more than 50,000 participants.

The CLSA team

- The CLSA was developed under the leadership of Dr. Parminder Raina (McMaster University) and co-principal investigators Dr. Christina Wolfson (McGill University) and Dr. Susan Kirkland (Dalhousie University).
- More than 160 researchers from 26 Canadian universities are involved in the CLSA, including experts in biology, genetics, clinical research, social sciences, economics, epidemiology and population health.
- Eleven data collection sites, four computer-assisted telephone interview sites, and four scientific enabling units are involved in the collection, storage and analysis of data.

Support for the CLSA

- The CLSA is a major strategic initiative of the Canadian Institutes of Health Research. Funding for the platform has been provided by the Government of Canada through the Canadian Institutes of Health Research and the Canada Foundation for Innovation. Additional support has been provided by several provinces, affiliated universities and research institutions across Canada.