

BELCOHORT+

Bringing together existing population health data collections into a Belgian population-based cohort to evaluate dynamically the interaction between health, environment and society to support more targeted policy

DURATION
 01/02/2023 – 01/05/2026

BUDGET
 € 497 965

PROJECT DESCRIPTION



Population-based cohorts provide insights in pathways of disease and ill-health development through the longitudinal assessment of exposure-outcome relationships. Furthermore, they provide new information on the impact of major determinants of health in a changing context and provide a sound base for targeted policy, policy follow-up and evaluation of the health and social systems.

To address the challenges of understanding the determinants of common life-threatening and disabling conditions, large national population-based studies have been set up in several countries. In Belgium conceptual work on the setting up of a large cohort has been done in the framework of the BELCOHORT project, financed by Sciensano, which outlined pathways for the implementation of such a cohort in a Belgian context.

The aim of BELCOHORT+ is to set a further step towards such an initiative in Belgium by integrating existing databases, expertise and tools available in Sciensano to establish a population-based cohort that will be enriched with new subjects selected from the National Register. This infrastructure will serve as a pilot data collection for a much larger population cohort in the future. Apart from the collection of new survey data also an individual linkage with information from the crossroad bank of social security is foreseen and geospatial linkages with data on the social, physical and food environment. It will also be explored if data from physical examinations and biological samples can be added.

The specific objectives of the project are:

- Generate insights that will assist in methodological choices that will have to be made when developing a large population cohort in Belgium
- Provide a proof-of-concept on how existing population-based data collections, new data collections and administrative and environmental data can be valorized in setting up a population cohort
- Explore ways in which data from the cohort can be provided to research groups outside Sciensano
- Present a use case which shows the added value of a longitudinal and multidisciplinary data collection for answering policy relevant questions within this cohort in the domain of health and society, such as the relation between population mental health and labour market outcomes
- Develop a roadmap for the further development of a large population cohort in Belgium.



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A first step in the implementation of the project will be to harmonize the source databases. Next steps will include the re-invitation of the people from the historical data sources, the recruitment of new participants from the National Register, the organization of two new data collections and the implementation of individual and geospatial linkages. The integrated data will be used to demonstrate how longitudinal data on the labour market situation and the mental health of the population can be used to study research questions both on social causation (impact of transitions in labour market outcomes on the mental health and wellbeing) and social selection (impact of changes in mental health status on labour market outcomes). Finally, the project will focus on sustainability and develop in collaboration with all stakeholders a roadmap towards the development of a future population cohort in Belgium.

Through BELCOHORT+ valuable methodological experience will be acquired to set up a large population cohort in Belgium. The project will demonstrate barriers and opportunities for the use of administrative databases and environmental data in population-based studies. A maximum number of stakeholders, both academic researchers from all over Belgium and many different disciplines and experts who are involved in health policy, health planning and management of health care data will be involved in the consultations and discussions that will result in the roadmap which will be developed. This will ensure a large visibility of the project, especially in the main target group: decision makers, researchers, professionals involved in health planning and the management of health data. The roadmap that will be developed as a result of this exercise will actively be distributed to the people who participated, but also to other stakeholders.

Project outcomes will include a data infrastructure with procedures for data access and methodological guidance for data use, scientific outcomes with respect to the use case that will be developed and a roadmap for further steps towards a large population cohort in Belgium. The online project portal will be an important tool for the valorisation of the outcomes of the project but will also be used as an instrument for the implementation of the project. Results of the project will also be valorized through presentations on scientific congresses and scientific publications.



CONTACT INFORMATION

Coordinator

Dr. Johan Van der Heyden
Sciensano,
Epidemiology and Public Health
johan.vanderheyden@sciensano.be

LINKS

<https://www.sciensano.be/en/projects/bringing-together-existing-health-data-a-belgian-population-cohort-assess-interaction-between-health>