# **EPIBEL**

EPidemics and Inequalities in BELgium from the Plague to COVID-19: what can we learn about societal resilience?

DURATION 15/12/2020-15/03/2025 BUDGET 841.788€

PROJECT DESCRIPTION

In search for societal resilience in the wake of COVID-19 four leading Belgian research centres are investigating the complex interactions between Epidemics and Inequalities in Belgium from the Plague to COVID-19: EPIBEL : AIPRIL – the Antwerp Interdisciplinary Platform for Research into Inequality (Tim Soens, EPIBEL coordinator), UGent Quetelet Centre for Quantitative Historical Research (Isabelle Devos), UCL Center for Demographic Research and the UAntwerp Centre for Urban History (Hilde Greefs).

Its overarching goal is to map and explain inequalities in the impact of epidemic outbreaks. COVID-19 demonstrated that some people are more likely to suffer in their health and their material wellbeing than others. However, as the pandemic is still unfolding, our understanding of these inequalities is still limited. What is more, we ignore how this social bias in impact will eventually affect societal resilience – the way societies are able to absorb the shock and adapt to prevent similar shocks in the future.

However, COVID-19 is not the first epidemic outbreak which hit the world. Hence, EPIBEL systematically compares COVID-19 with five previous epidemic outbreaks: the 1918/19 'Spanish' Flu, the 1866 cholera epidemic, dysentery in 1692/93 and plague in 1438/39 and 1556/59. All of these were perceived by contemporaries as major outbreaks. As a result they are well documented and resulted in the formulation of epidemic policies with lasting impact.

This is translated in five central objectives, each corresponding to a specific WP:

• WP1 analyzes the role of socio-demographic and -economic inequalities in COVID-19 mortality. Who died as a result of the pandemic? EPIBEL will match individual all-cause mortality data with individual-level data from the National Register; censuses and the civil register with death certificates. Through demographic and spatial analyses EPIBEL will be able to characterize and map COVID-19 deaths according to a whole range of variables (age, gender, nationality, income, education level).

Belgium COVID-19: excess mortality (18/03-26/04/20 vs. 2016-19) UCL-DEMO



 WP2 investigates inequalities in epidemic mortality during and after previous epidemic outbreaks. Through HISSTER (for 1866 and 1918/19) and STREAM (for 1692/93) EPIBEL can rely on a number of exceptional datasets from Belgium's rich statistical heritage which have to be expanded and fine-tuned for the selected episodes of epidemic disease. For a sample of individual cities and rural regions, the social profile of the victims will be analyzed based on causes of death-registers, parish registers, church accounts and cadastral data (POPPKAD). This will be complemented by a spatial analysis of differential local living conditions.







- WP3 investigates the interaction between economic and health inequalities before, during and after epidemic outbreaks in the past. Its main focus is the labour market. Combining statistical data on the labour market with a more in-depth analysis of wage administrations and income distribution, indices of employment will be reconstructed, distinguishing minimally between the number of people employed, the wage-mass, the type of employment, and the average earnings per employee.
- Poverty might well be the "final wave" of COVID-19. WP4 investigates the capacity of social care and welfare systems to mitigate the effects of past epidemic outbreaks on the poor and least privileged groups in society. Combining statistical data on poverty with archival research on local providers of social care, EPIBEL will assess A) the organisation of welfare provisioning; B) the volume and nature of support; C) the number and societal profile of the recipients and D) the public debate on welfare policies related to epidemic outbreaks.
- Finally, WP5 informs policy-makers on the importance of inequalities when promoting societal resilience. By comparing policies and institutional arrangements during several epidemic outbreaks, WP5 will investigate the effectiveness of hygienic, economic and social policies and their (re)distributing capacities. The qualitative analysis in this WP will proceed in different steps, by close-reading of regulations as well as reports of a diverse set of policy makers, institutions and pressure groups.

#### Expected results and impact:

Integrating COVID-19 in the longer history of epidemics in Belgium/the Southern Low Countries, EPIBEL will provide research and policy with five key instruments:

(1) an up-to-date overview of major epidemic outbreaks in the history of Belgium/the Southern Low Countries

(2) a socio-demographic and socio-economic profile of epidemic mortality from the Plague to COVID-19

(3) an atlas of epidemic outbreaks and inequalities

(4) indices on employment and social care before, during and after epidemic outbreaks

(5) a policy matrix detailing policies and institutional arrangements and their impact on mortality and resilience.

Results will be communicated through scientific papers as well as sixmonthly policy briefs.

Moreover, EPIBEL will translate its results in showcases and tools for different audiences, from (secondary) schools over health professionals to family historians.

This way EPIBEL will provide Belgium with a pandemic memory, raising both the preparedness for future pandemics and the awareness that taking into account inequalities is crucial to mitigate impacts and prevent catastrophic outcomes.

#### CONTACT INFORMATION

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LINKS

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### **BELGIAN SCIENCE POLICY**

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## B2/202/P3/EPIBEL