



STATE OF THE ART

IMPACT

Indicators for monitoring policies on controlled substances and behaviours

Promotor(s): Prof. Dr. Brecht Devleesschauwer
Prof. Dr. Guido Van Hal

Substance use, policy evaluation and monitoring, stakeholder engagement

5-6 keywords

Introduction

Substance use and related behaviours, including tobacco, alcohol, gambling, and illicit drugs, remain major contributors to disease burden and social harm worldwide (GBD 2019 Risk Factors Collaborators, 2020). The Centres for Disease Control and Prevention (CDC) emphasises the importance of systematic policy evaluation to inform and enhance policy development, implementation, and effectiveness.

The IMPACT project, coordinated by Sciensano in collaboration with the University of Antwerp, aims to establish an integrated and sustainable framework for the routine evaluation of policy measures on controlled substances and behaviours in Belgium. It will achieve this through:

1. Co-creating and implementing a stakeholder-driven indicator framework to monitor and evaluate policy measures on tobacco, alcohol, gambling, and illicit drugs;
2. Developing a framework to predict the potential impact of these policy actions on disease burden and population health, and producing recommendations for evidence-based policymaking; and
3. Ensuring sustainability and institutional integration of the framework, and co-developing long-term policy recommendations and an impact plan with the follow-up committee and stakeholders.

State of the art

1. Key research hypotheses in the field of the research project :

- Which indicators are most suitable for monitoring and assessing the effectiveness of such policies across the policy cycle?
- How can an integrated and flexible framework be co-created to routinely evaluate policies on controlled substances and related behaviours in Belgium?

2. Main findings and existing gaps of past research

Past initiatives in Belgium have provided valuable insights into substance use behaviours and their health impacts. National surveys such as the Belgian Health Interview Survey (BHIS) and Drug vibes project have generated reliable prevalence data for smoking, alcohol use, gambling and illicit drugs (Sciensano, s. d.-a, s. d.-c, s. d.-b), while recent interfederal strategies have addressed tobacco, alcohol, illicit drugs and gambling (Cellule Général de Politique de Drogues, s. d.-a, s. d.-b, 2022b, 2022a). Recent initiatives, including the SUBOD project, have strengthened national monitoring by producing estimates of deaths attributable to alcohol and tobacco use, disaggregated by region, sex and age group (Nayani et al., 2025). The economic impact of those risk factors was also calculated (Vynckier et al., 2025). These efforts build on the Belgian National Burden of Disease Study (BeBOD), launched by Sciensano in 2016 to generate transparent, locally rooted estimates of population health. BeBOD currently provides DALY estimates for 38 health outcomes and related risk factors such as tobacco and alcohol use. The next step is

to use these estimates to inform policy modelling and evaluation, with a sustainable, integrated policy evaluation framework (De Pauw et al., 2025).

In Belgium, existing policy evaluations primarily focus on verifying the implementation status of specific action points outlined in policy plans, often in a binary manner. This approach offers limited insight into the effectiveness of policies and does not assess their measurable impact on population health or related outcomes. As a result, evaluations tend to remain largely descriptive rather than evidence-based. While surveillance and epidemiological monitoring systems have improved, comprehensive assessments of policy implementation, effectiveness and equity impacts are still limited in Belgium.

In contrast, several countries have made progress towards continuous monitoring and evaluation of substance use policies through tools such as the International Alcohol Control Policy Index (Casswell et al., 2022), the IARC Handbook on Alcohol Policy (IARC, 2025), and the WHO Alcohol Policy Playbook and Best and Quick Buys, which promote standardized, evidence-informed approaches to policy evaluation for member states for tobacco and alcohol control (World Health Organization, s. d.-a, 2024). Health Impact Assessment (HIA) has also become an established method internationally to anticipate and assess the health consequences of policies and to inform decision-making (World Health Organization, s. d.-b). In Belgium, however, both structured indicator frameworks and the systematic application of HIA remain limited in the field of substance use policy.

The IMPACT project addresses this need by co-creating and testing an integrated indicator framework to regularly evaluate substance use policies in Belgium, thereby bridging existing data systems and supporting sustainable, evidence-based policymaking.

3. New research contributions

The IMPACT project aims to co-create, implement and evaluate an integrated and sustainable indicator framework to support the routine evaluation of policies addressing controlled substances and related behaviours in Belgium. Building on existing national and international experiences, the project will combine qualitative and quantitative research methods to develop a scientifically robust and policy-relevant monitoring system.

Through a participatory approach involving scientists, policymakers and other stakeholders, IMPACT will identify and prioritise indicators for monitoring and evaluating policy implementation, effectiveness and equity. A Delphi consensus process will be used to select and validate these indicators and to assess their feasibility and cost–benefit.

In parallel, the project will initiate the use of health impact assessment (HIA) modelling to predict the future effects of health and social policies on substance use, facilitating data-driven decision-making and prospective policy evaluation.

To ensure sustainability, the methodological framework developed through IMPACT will be embedded within the Belgian National Burden of Disease Study (BeBOD). This integration will establish a lasting structure for continuous policy monitoring and modelling across all phases of the policy cycle design,

implementation and evaluation while promoting reusability and adaptability for future policymaking in Belgium.

4. Discussion on what is expected in terms of policy maker recommendations

The IMPACT project aims to disseminate its results to the scientific community, policymakers, stakeholders and the general public. A follow-up committee composed of key stakeholders involved in policy development and implementation will be established and regularly consulted to ensure that results are relevant, timely and accessible. The committee will include representatives from the Minister of Public Health and Social Affairs, the Ministry of Health, the health authorities of Brussels, Flanders and Wallonia, as well as partners from civil society and research institutes.

Interaction with stakeholders will be maintained through regular meetings of the follow-up committee, supported by issue and policy briefs summarising findings and implications. These materials will also be disseminated through the project website and direct communication channels. Each work package will contribute to a final report containing policy recommendations, synthesising evidence and practical guidance to inform future policy planning and evaluation on controlled substances and related behaviours in Belgium.

Bibliographic overview

- Casswell, S., Huckle, T., Parker, K., Romeo, J., Graydon-Guy, T., Leung, J., Byron, K., Callinan, S., Chaiyasong, S., Gordon, R., MacKintosh, A. M., Meier, P., Paraje, G., Parry, C. D., Pham, C., Williams, P. P., Randerson, S., Schelleman-Offermans, K., Senge, G., ... Harker, N. (2022). Benchmarking alcohol policy based on stringency and impact: The International Alcohol Control (IAC) policy index. *PLOS Global Public Health*, 2(4), e0000109. <https://doi.org/10.1371/journal.pgph.0000109>
- Cellule Général de Politique de Drogues. (s. d.-a). *Politique en matière de jeux de hasard en Belgique* (p. 22). http://organesdeconcertation.sante.belgique.be/sites/default/files/documents/20180702_imcvgdrugs_cimdrogues_jeux_note_de_vision.pdf
- Cellule Général de Politique de Drogues. (s. d.-b). *Stratégie interfédérale pour une politique globale et intégrée en matière de drogues 2024-2025*. https://organesdeconcertation.sante.belgique.be/sites/default/files/documents/strategie_interfederale_fr.pdf
- Cellule Général de Politique de Drogues. (2022a). *STRATÉGIE INTERFÉDÉRALE 2022-2028 POUR UNE GÉNÉRATION SANS TABAC* (p. 96). Cellule Général de Politique de Drogues. https://organesdeconcertation.sante.belgique.be/sites/default/files/documents/2022_12_14_strategie_interfederale_tabac_et_annexe_final_fr.pdf
- Cellule Général de Politique de Drogues. (2022b). *STRATÉGIE INTERFÉDÉRALE EN MATIÈRE D'USAGE NOCIF D'ALCOOL 2023-2028*. https://organesdeconcertation.sante.belgique.be/sites/default/files/documents/20220323_strategie_interfederale_consommation_nocive_dalcool_note_de_base_fr_7.pdf
- De Pauw, R., Claerman, R., Gorasso, V., Nayani, S., Scohy, A., Van Den Borre, L., Wellekens, J., & Devleesschauwer, B. (2025). *Belgian national burden of disease study. Guidelines for the calculation of DALYs in Belgium* (No. D/2025.14.440/87; p. 286). Sciensano. https://www.sciensano.be/sites/default/files/bebod-daly-protocol-20250528_clean.pdf
- IARC. (2025). *Alcohol Policies IARC Handbooks of Cancer Prevention Volume 20B* (Vol. 20B). <https://publications.iarc.who.int/653>

- Nayani, S., Guariguata, L., Pauwels, A., Schmidt, M., Gorasso, V., & Devleesschauwer, B. (2025). *Belgian National Burden of Disease Study. Guidelines for the calculation of risk factor attributable burden*.
<https://doi.org/10.13140/RG.2.2.27898.40648>
- Sciensano. (s. d.-a). *Health Interview Survey* [Text]. Sciensano.Be. Consulté 27 septembre 2022, à l'adresse
<https://www.sciensano.be/en/projects/health-interview-survey>
- Sciensano. (s. d.-b). *Improved monitoring of the disease burden attributable to substance use* [Text]. Sciensano.Be.
 Consulté 6 février 2025, à l'adresse <https://www.sciensano.be/en/projects/improved-monitoring-disease-burden-attributable-substance-use>
- Sciensano. (s. d.-c). *The Belgian Survey on Drugs* [Text]. Sciensano.Be. Consulté 8 octobre 2025, à l'adresse
<https://www.sciensano.be/en/projects/belgian-survey-drugs>
- Vynckier, P., Schmidt, M., Nayani, S., Guariguata, L., Devleesschauwer, B., & Verhaeghe, N. (2025). The economic burden of smoking in Belgium : Incremental healthcare costs and lost productivity. *European Journal of Public Health*, 35(1), 108-113. <https://doi.org/10.1093/eurpub/ckae211>
- World Health Organization. (s. d.-a). *'best buys' and other recommended interventions to address noncommunicable diseases (NCDs)* (No. WHO/NMH/NVI/17.9). <https://iris.who.int/bitstream/handle/10665/259232/WHO-NMH-NVI-17.9-eng.pdf?sequence=>
- World Health Organization. (s. d.-b). *Health impact assessments*. Consulté 7 mars 2025, à l'adresse
<https://www.who.int/tools/health-impact-assessments>
- World Health Organization. (2024). *Empowering public health advocates to navigate alcohol policy challenges : Alcohol policy playbook* (No. WHO/EURO:2024-5624-45389-76520). World Health Organization. Regional Office for Europe. <https://www.who.int/europe/publications/i/item/WHO-EURO-2024-5624-45389-76520>