SUSTAIN / Sustained Monitoring

What are the top priorities for integrating sustained monitoring in Belgium?

CURRENT GAPS
What are the key gaps in our current monitoring framework (e.g., resources, data frequency)?"

SOLUTIONS
What solutions can help integrate sustained monitoring into BeBOD

PRIORITIES
What are the most critical steps to take first

+15Y, no for young ble under 15

Frequency

More up-to-date mortality data

up to date date (harmfuk) alcohol use & determinants of use eg HIS

data cover nsity ately

Sticky stack

Sticky stack

Sticky stack

IMPROVE / Data gaps

How can we improve what we have?

CURRENT GAPS
What critical data gaps (e.g., socioeconomic, vaping) exist in our analysis

SOLUTIONS
How can we address these gaps? Are there partnerships or datasets we can use

PRIORITIES
Which gaps should we prioritize filling and why

Lifecourse view

Alternative tobacco products consumption (e-cigarette, nicotine pouches, etc)

Time and Timing issues: when started, duration of intensive use, timing of efforts to quit

Previous binge drinking behavior

Socioeconomic insights

Collection of representative exposure data

socio-economic focus

age-related estimates?

comparable data with SOCOST 1

Costs of exposure to secondhand (and thirdhand?) smoking

good overview use healthcare for alc problems (GP, early intervention, CGG, emergency??

Costs of prenatal exposure?

Cost of former smokers who keep vaping and former smokers who stopped and don't use e-cigarettes.

Intergenerational use and coping mechanisms

Costs of dual users (smoking/vaping) vs. smokers.

But dual use is difficult to quantify

tack

Sticky stack

Sticky stack

Sticky stack

EXPAND / Extend scope

What new substances or non-health factors should we consider, and why?

CURRENT GAPS
What additional substances or non-health factors are missing from our scope?

SOLUTIONS
How can we expand our scope effectively without overloading resources

PRIORITIES
Which new elements should take precedence (e.g., illicit drugs, violence)

le off en risk s: quit -> start ating?

environmental health threats (air polution, PFAS,...)

xpand th illicit drugs?

Impact social norms / social and cultural factors

association smoking/alcohol

Stick

Sticky stack

Sticky stack

IMPACT / Foster evidence-informed policymaking

How can we strengthen the link between burden assessments and policymaking

CURRENT GAPS
What are the barriers to translating burden data into actionable policies

SOLUTIONS
What tools or frameworks (e.g., HIA) could help overcome these barriers

PRIORITIES
What should be the first steps to strengthen the link between burden and policy

Complexity of the Belgian political system

Lack of knowhow in prevention sector about estimating cost-effectiveness of measures/interventions?

Training /guidelines?

Collaboration with NGOs to write the conclusions and think about policy implications

strengthen collaboration with boarder countries

Alcohol lobbying

Tensions between the revenue from tobacco taxes and the economic costs of tobacco use?

Communicate (again) when the topic is in the news. (eg. alcohol in traffic)

Public health lobbying

Focus on costs and cost savings to get attention of politicians

focus on lost of productivity and absenteeism

Project evolutions of the total value of taxes vs. economic costs. Is it feasible?

Form alliances different stakeholders to influence policy am

Communication strategy / specialist

foresight exercise

Sticky stack

Sticky stack

Sticky stack

The team

Brecht Devleesschauwer

Sarah Nayani

sciensano

Nick Verhaeghe

UNIVERSITEIT GENT

Pieter Vynckier

Masja Schmidt

Agenda

Introduction & Round table

Key findings

Challenges and lessons learned

VAD research agenda

Discussion

Follow-up committee members

.be

Preventieplatform

FARES
Fonds des affections respiratoires asbl

VLAAMS INSTITUUT GEZOND LEVEN

Wallonie
familles santé handicap
AVIQ

ULB UNIVERSITÉ LIBRE DE BRUXELLES

I-CHER
INTERUNIVERSITY CENTRE FOR HEALTH ECONOMICS RESEARCH
UNIVERSITEIT GENT VUB

Fondation contre le Cancer

UZ LEUVEN

Observatorium voor Gezondheid en Welzijn Brussel

Observatoire de la Santé et du Social Bruxelles

COMMISSION COMMUNAUTAIRE COMMUNE

VAD
VLAAMS EXPERTISECENTRUM ALCOHOL EN ANDERE DRUGS

IRSS

VRGT

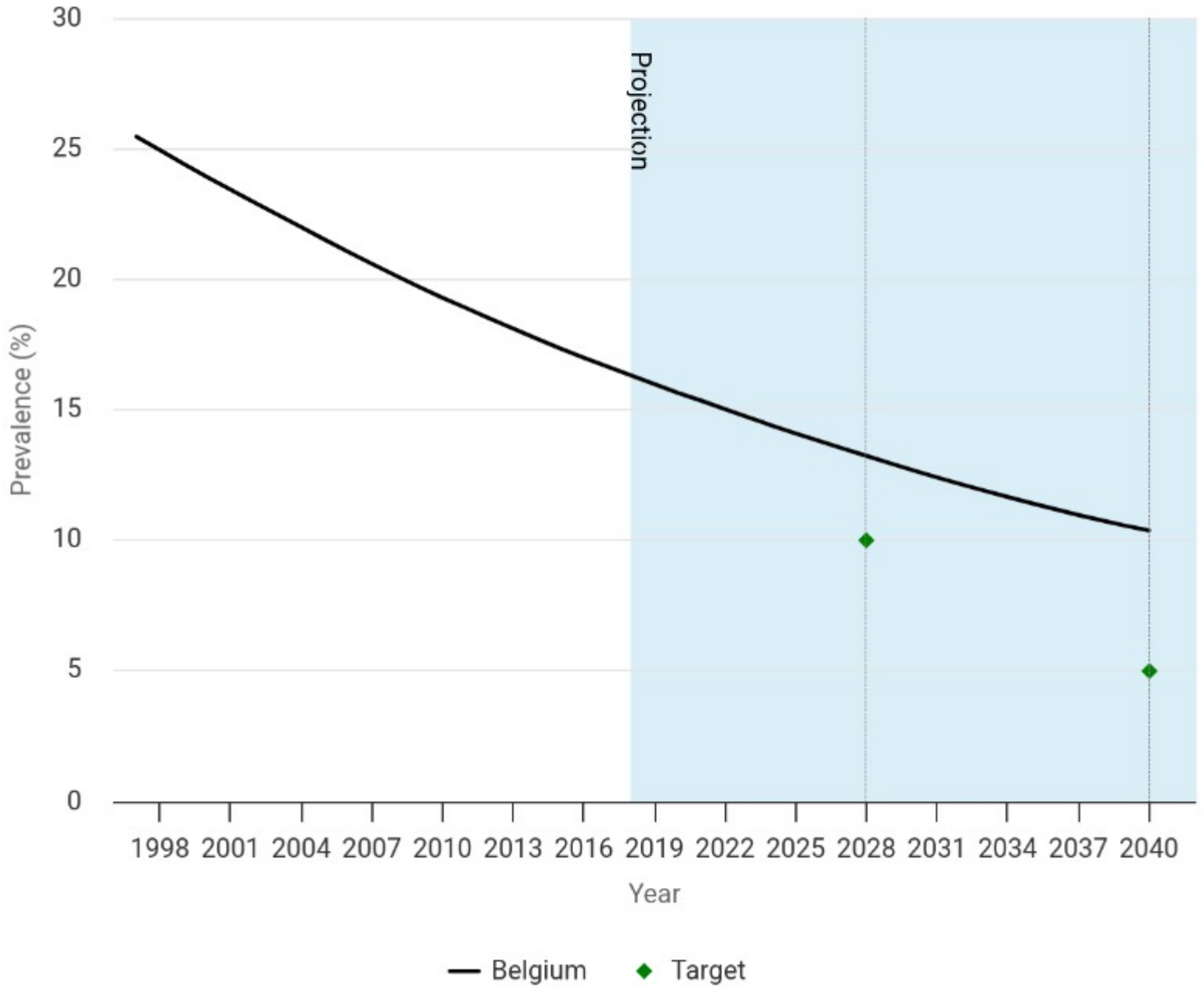
logo ANT
GEZONDHEID TROEF

Universiteit Antwerpen

Summary of key findings

Belgium will miss targets set in the Inter-federal Stragety

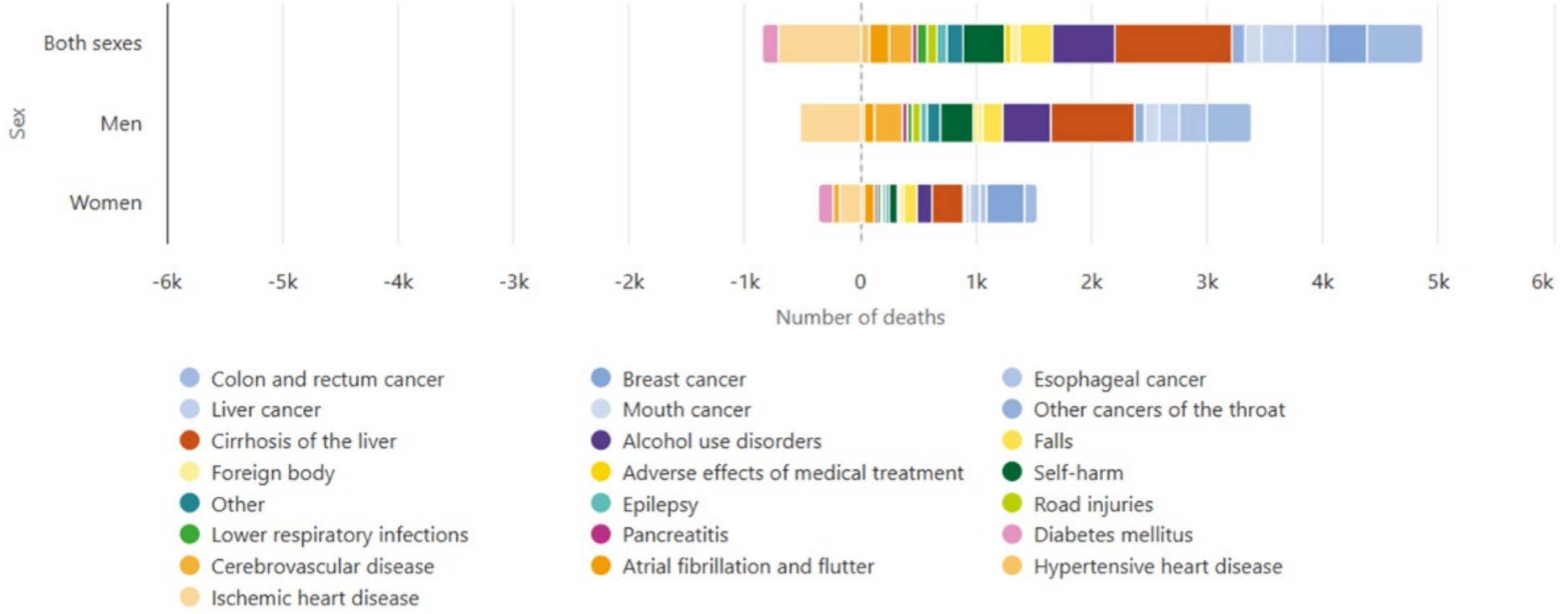
- National targets for daily smoking will not be achieved without policy action
- Projections under “business as usual” show a continued decline



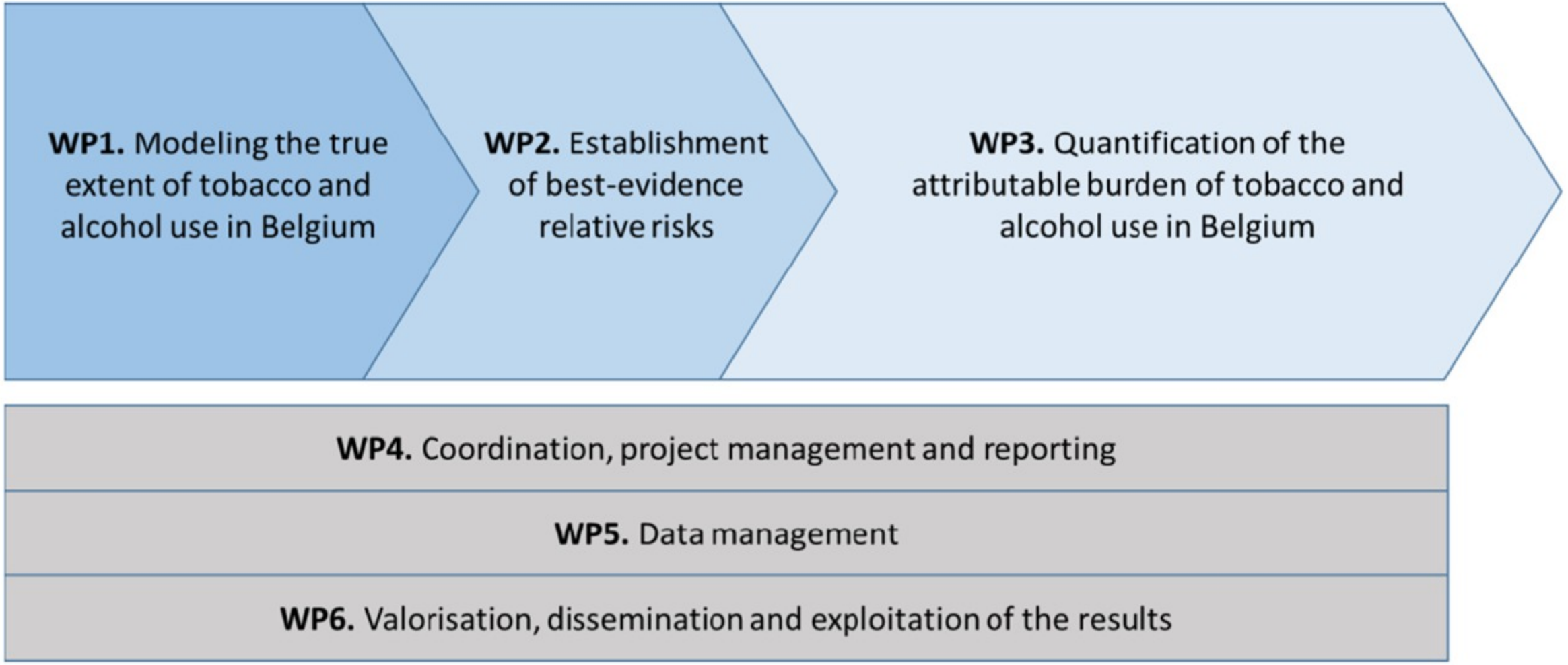
Most of alcohol-related deaths occur in males

Distribution of alcohol-attributable deaths, by cause for each sex, Belgium, 2021

Source: Own calculations based on data from Statbel [1]

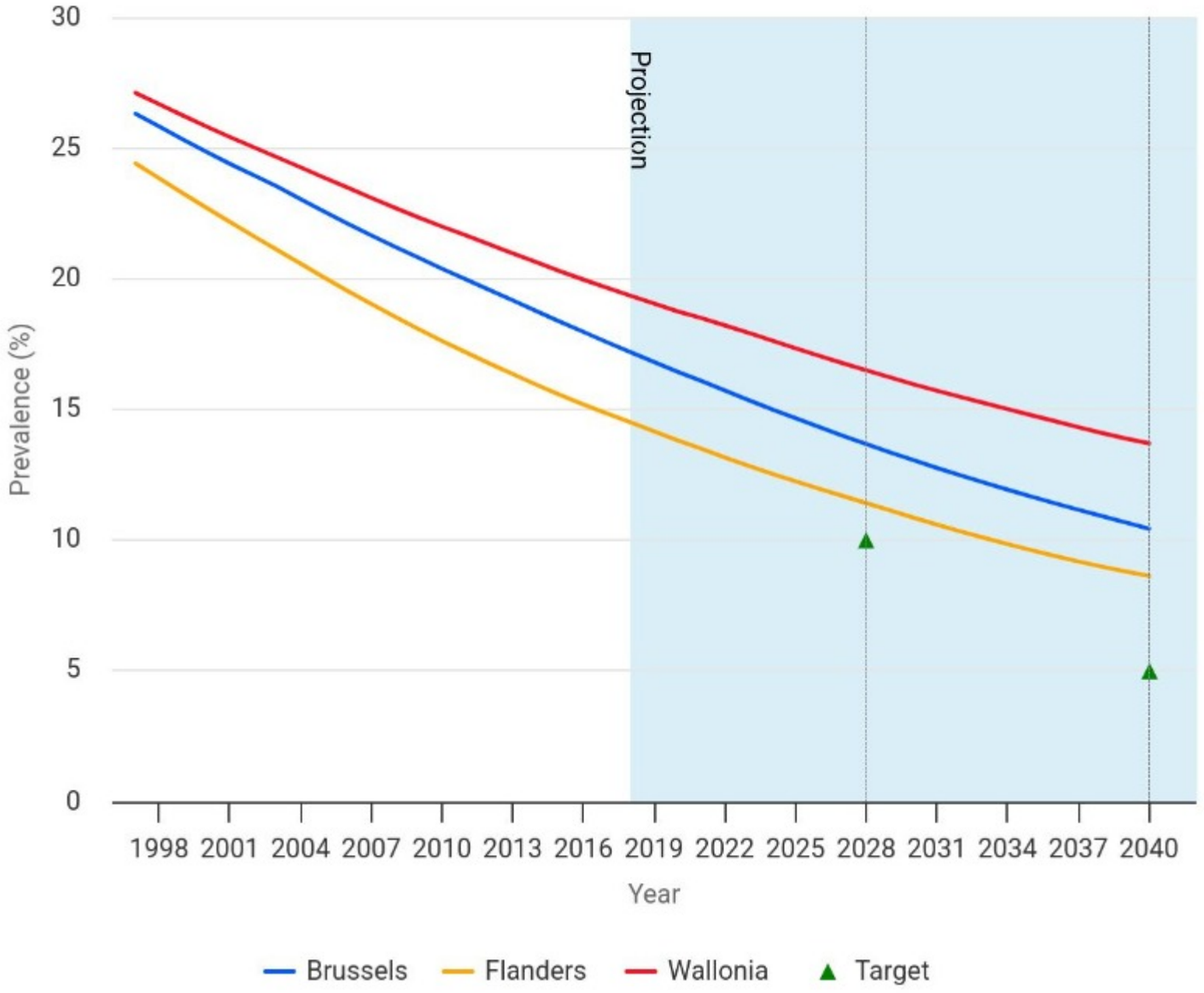


Workpackages



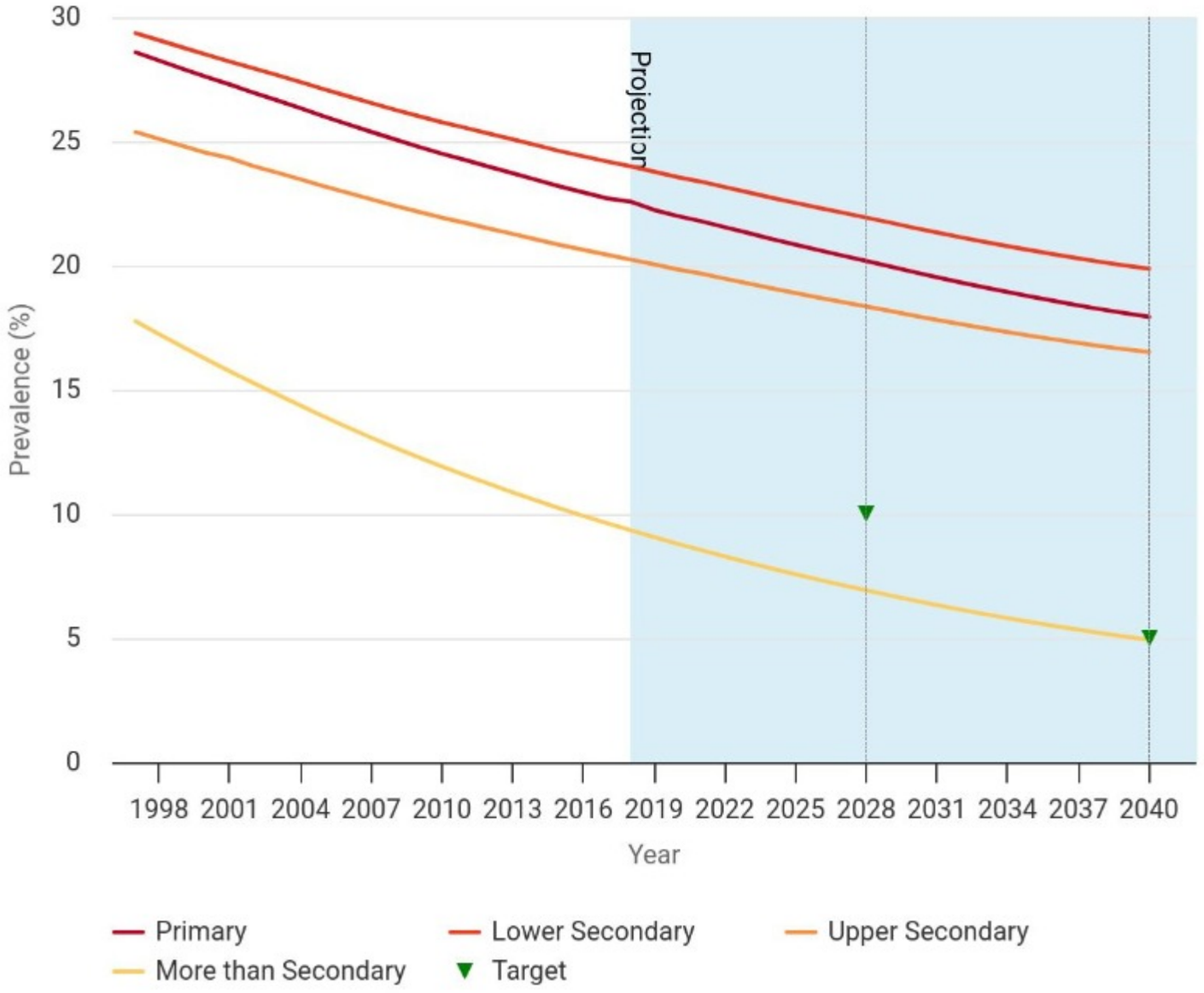
Smoking is decreasing but remains highest in Wallonia

- The prevalence of daily smoking is projected to decrease across all regions but remains highest in the Walloon Region and lowest in the Flemish Region.

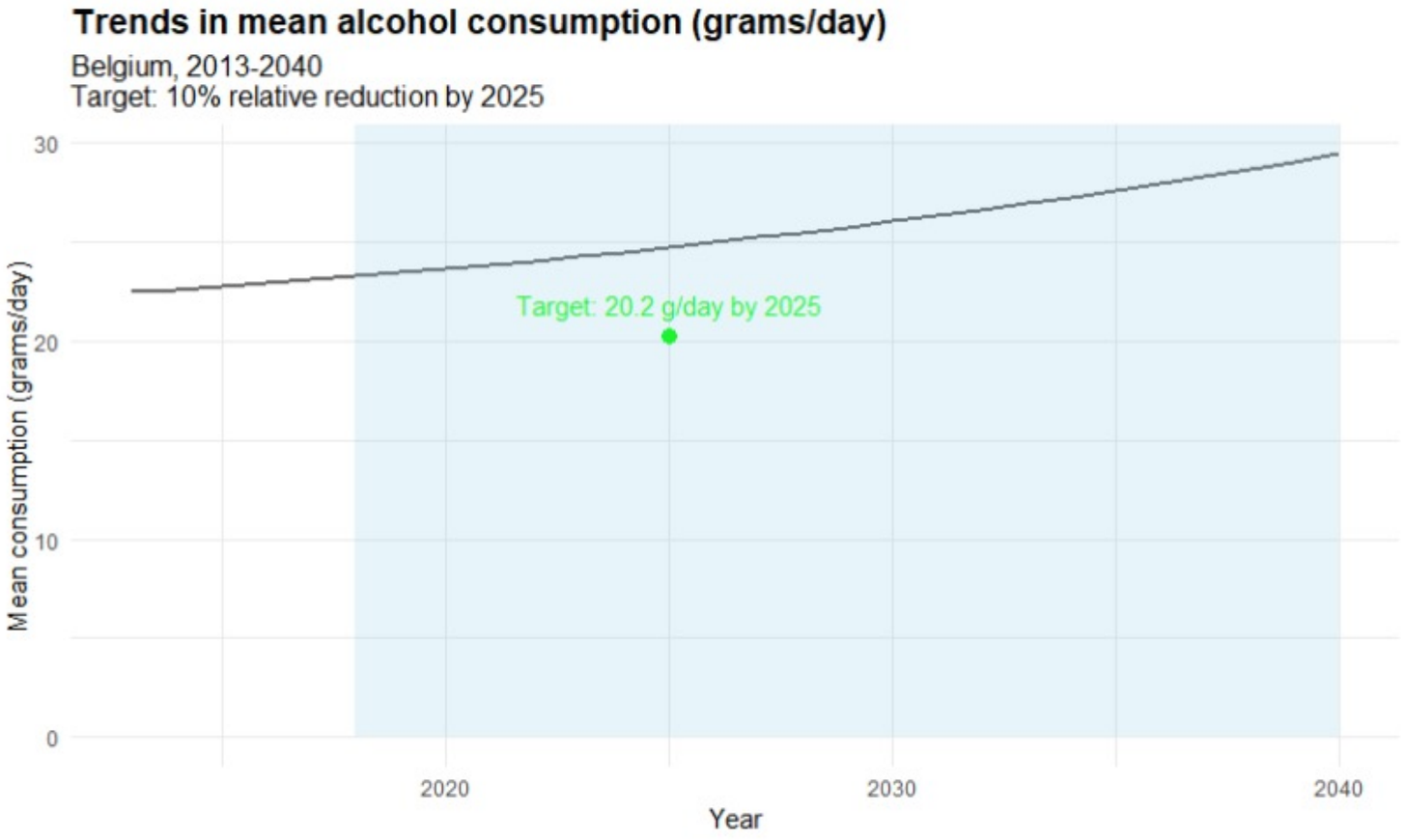


Inequalities are wide and will persistent in 2040

- Inequalities exist in tobacco use by educational status
- Those with a greater than secondary education smoke at less than half the rate of those without
- Inequalities will continue to widen over the coming years



Belgium will not meet global targets for alcohol consumption



2013-2040

mean consumption of alcohol will increase

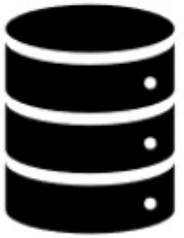
20.2g/day

national reduction to meet global target

10%

relative reduction by 2025

Challenges encountered



Data limitations and fragmentation

- Combining different sources with varying methodologies,
- Self-reported data vs lack of individual consumption data --> under-reporting
- Lack of annual data

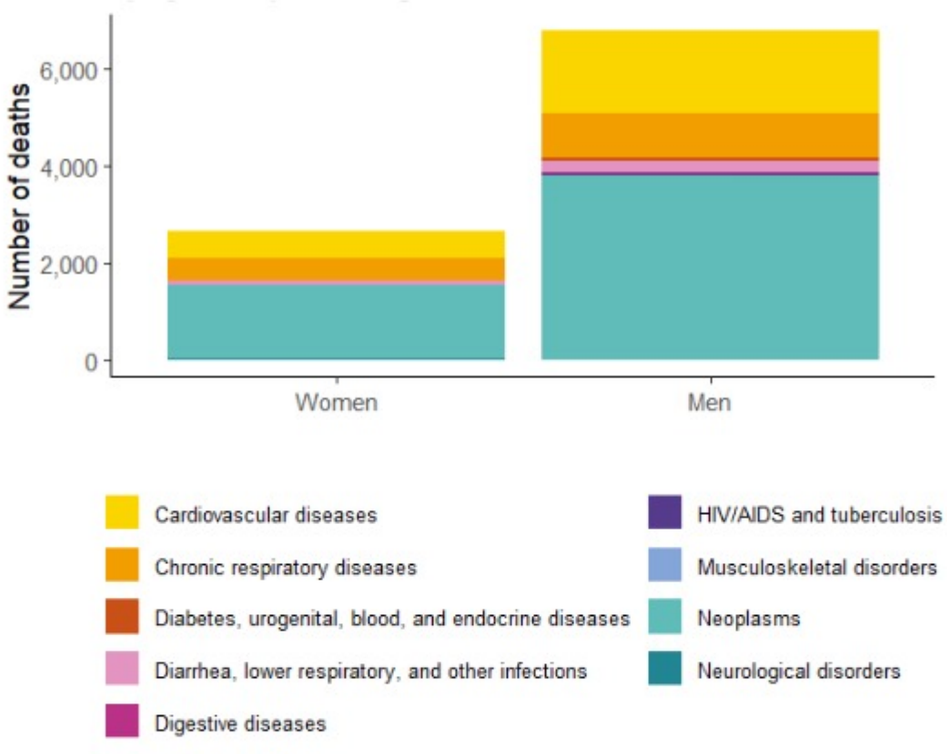
Burden framework implementation

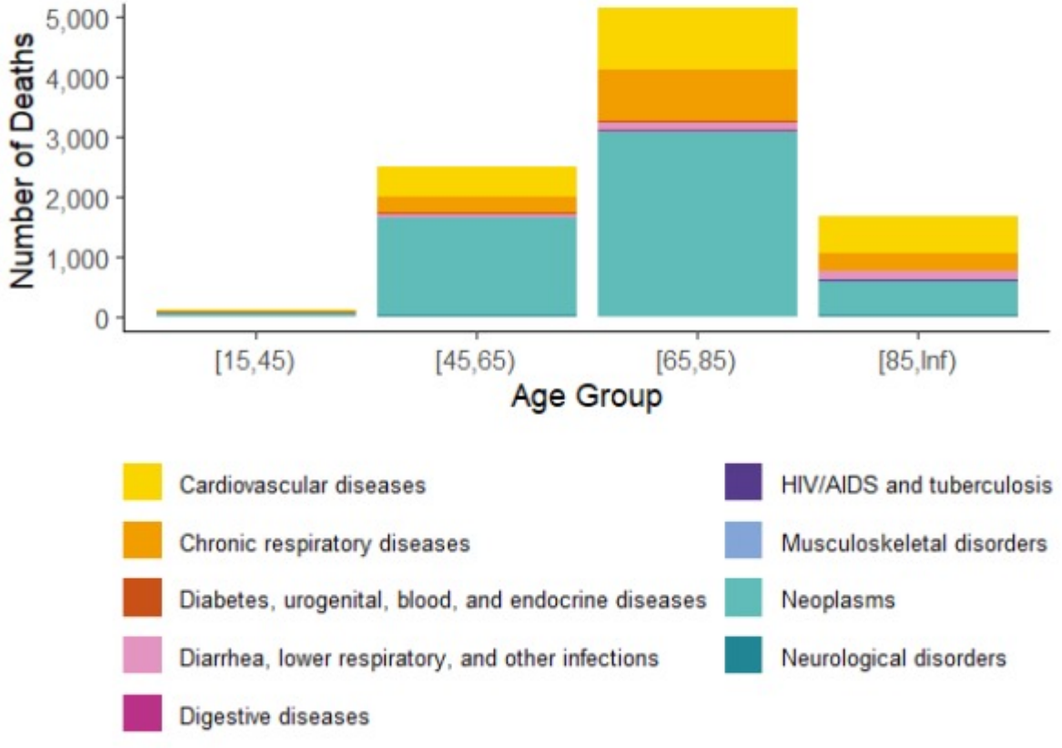
- Assumptions regarding input data
- Tailoring estimates to BEBOD
- prioritizing diseases

Translating Burden data into Policy Action

- Bridging the gap between burden estimates and policy implementation remains a challenge.

Most smoking-related deaths occur in males and in old age





UNIVERSITEIT GENT

FACULTEIT GENEESKUNDE EN GEZONDHEIDSWETENSCHAPPEN

SUBOD Improved monitoring of the disease burden attributable to substance use

Improved monitoring of the disease burden attributable to substance use

Final follow-up committee

17/02/2025

Most alcohol-related deaths occur in males

4,022

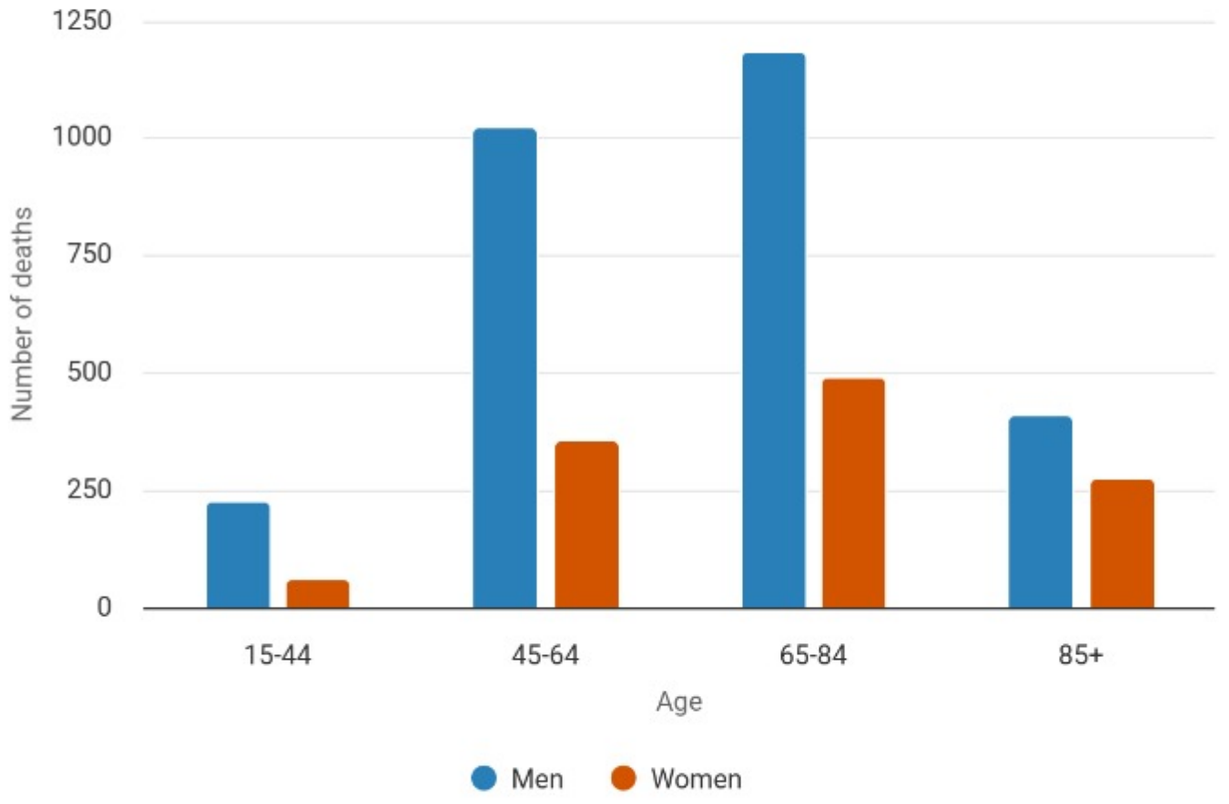
deaths in 2021 due to alcohol consumption

3.6%

of total deaths that year

71%

of alcohol related deaths occurred in men



Most smoking-related deaths occur in males

9,362

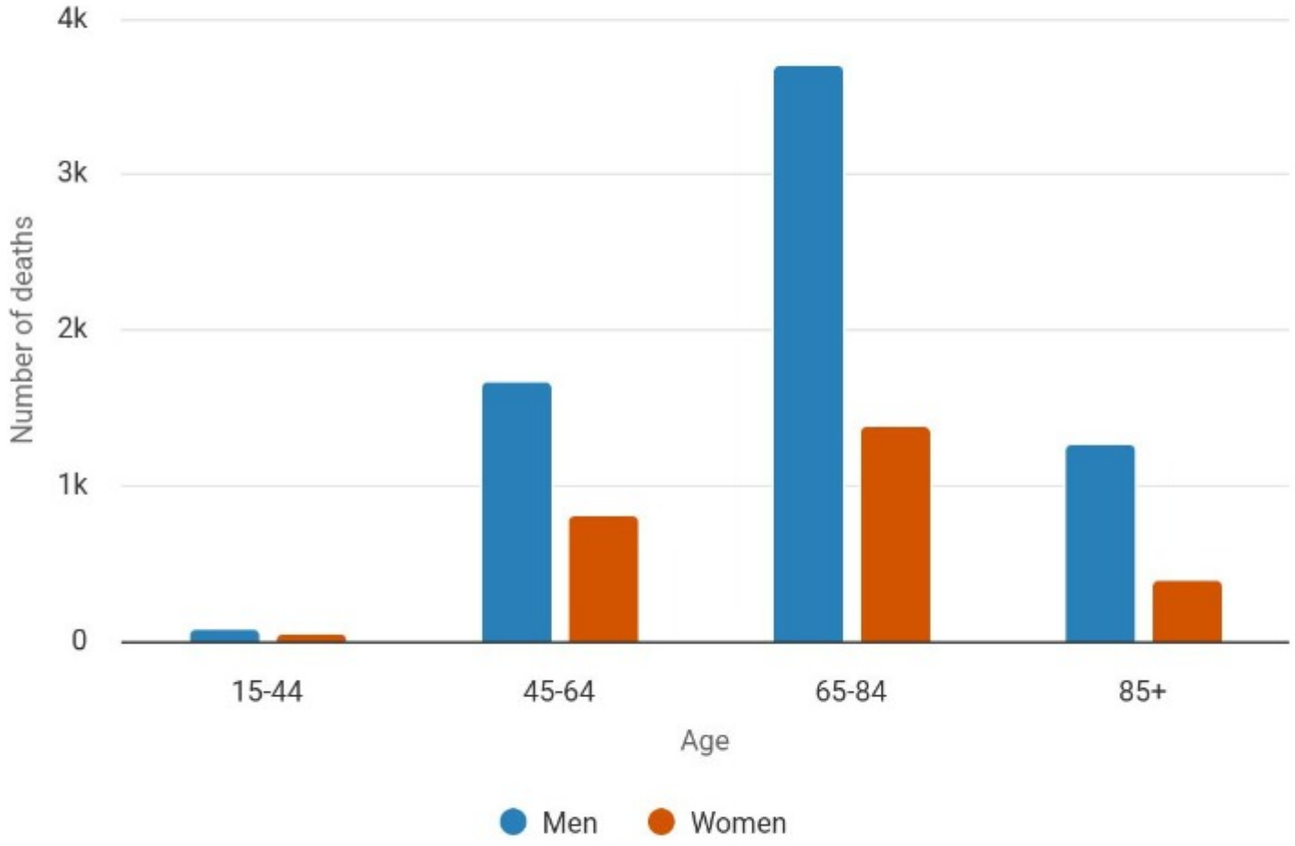
deaths in 2021 due to tobacco consumption

8.3%

of total deaths that year

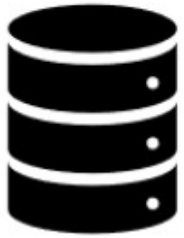
M > F

of tobacco-related deaths occurred in men



Challenges encountered and lesson learned

Lessons learned



Improve data measurements

- Use triangulation of multiple data sources to correct self-reported estimates (e.g sales data)
- importance of data linkages (HIS-LINK)

Improve disease attribution methods

- Improve statistical models to better estimate risk attribution (e.g modelling strategy, process to identify and select risk-outcome pairs
- Set priorities

Knowledge translation

- Burden estimates provide a strong evidence base for policy
- Data-driven decisions help in setting **clear and measurable policy targets**

VAD research agenda

Discussion committee members

MIRO BOARD

Reflect on the following questions to develop policy recommendations addressing the economic and health burden of tobacco and alcohol use in Belgium.

What's next?

The way forward

Continuation via BeBOD

- **Regular Updates & Data Integration :**
    - Updating figures when new mortality or exposure data become available (eg. HIS 2025)
    - Updating shiny app
- **Expanding Beyond Tobacco & Alcohol**
    - High BMI
    - Dietary risks

Cost estimation - tobacco

15%

Daily smokers in Belgium

57% - 43%

Men smoke more than women

€533.861.010

Annual direct medical cost for daily smokers

Cost estimation - tobacco

20%

Higher cost for daily smokers versus non-smokers

27%

Higher costs for former smokers versus non-smokers

Table 3. Adjusted incremental healthcare costs related to smoking behaviour

	RR[a]	Standard error	*P*-value	95% CI	Attributable cost
Model 1					
Never smoked (reference)	1	-	-	-	-
Daily smoker	1.24	0.08	0.006	1.06–1.44	444.43
Occasional smoker	1.17	0.13	0.26	0.90–1.52	275.73
Former smoker	1.21	0.06	0.004	1.06–1.38	529.91
Model 2					
Never smoked (reference)	1	-	-	-	-
Daily smoker	1.18	0.08	0.03	1.01–1.38	364.18
Occasional smoker	1.19	0.13	0.18	0.92–1.52	305.54
Former smoker	1.20	0.06	0.002	1.07–1.37	517.82
Model 3					
Never smoked (reference)	1	-	-	-	-
Daily smoker	1.20	0.08	0.03	1.02–1.41	393.50
Occasional smoker	1.27	0.13	0.07	0.98–1.63	412.85
Former smoker	1.27	0.06	<0.001	1.13–1.43	647.73

a: Rate ratio; expected value of the coefficient with never smoked as reference.
Model 1: adjusted for age and gender.
Model 2: adjusted for age, gender, educational level, and preferential reimbursement.
Model 3: adjusted for age, gender, educational level, region, preferential reimbursement, and alcohol use.

Cost estimation - alcohol

77%

Regularly consume alcohol

25%

Higher costs for former drinkers versus abstainers

€711.288.900

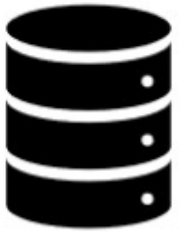
Annual direct medical cost for former drinkers

Challenges & lessons learned - costs

Lessons learned

- Further policy attention is needed
- Interventions to increase cessation is crucial
- Large economic burden of alcohol and tobacco

€1.2 billion yearly



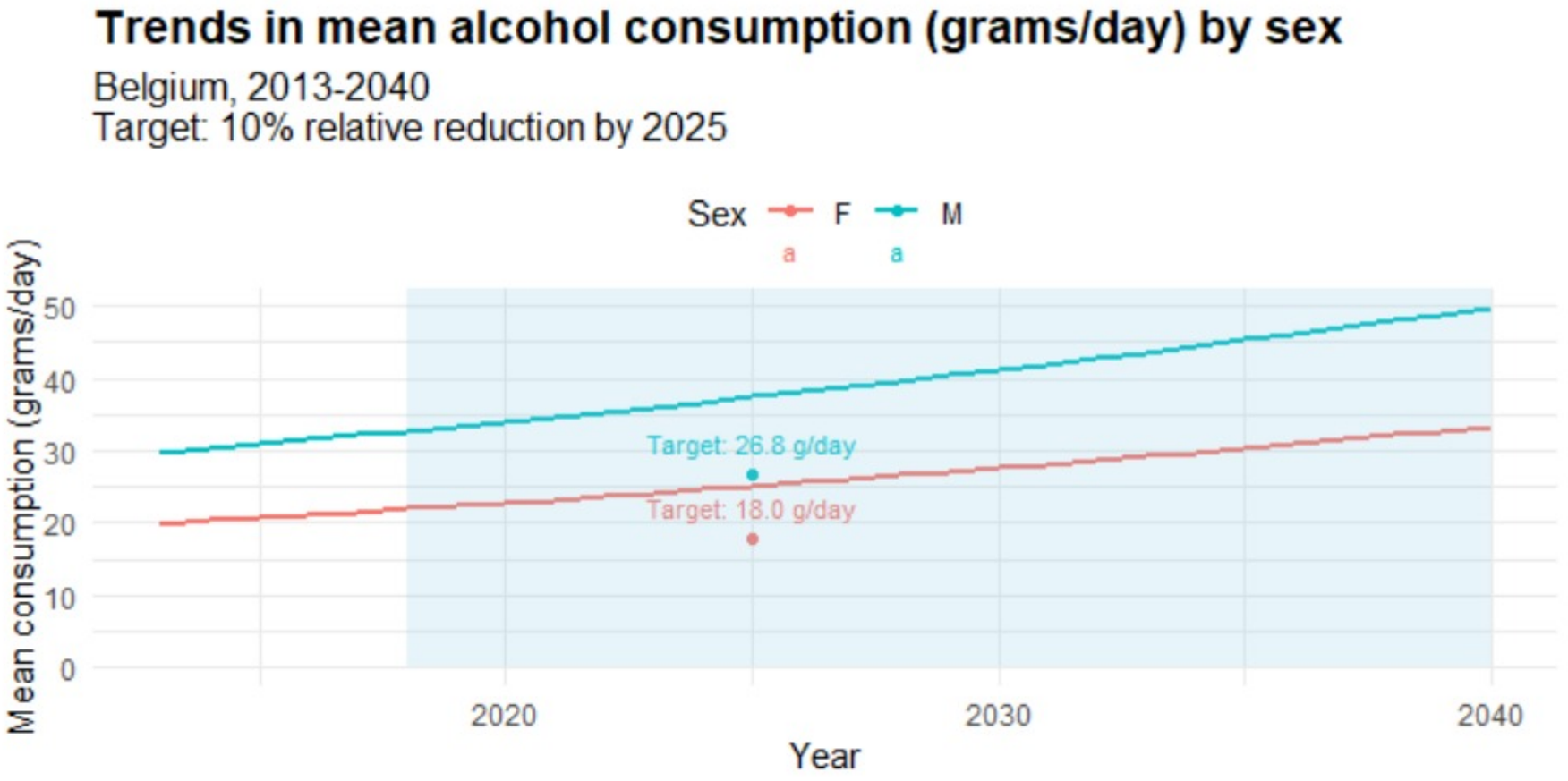
Data limitations

- Self-reported data
- cross-sectional study design may not adequately capture relationship costs
- Focus on global overview

The way forward

	SUBOD				SOCOST2			
								
Tobacco	V	V	X	X	X	X	V	V
Alcohol	V	V	X	X	X	X	V	V
(Online) gambling	X	X	X	X	V	V	V	V
Illicit drugs	X	X	X	X	V	V	V	V
Psychoactive medication	X	X	X	X	V	V	V	V

Belgium will not meet global targets for alcohol consumption



2013-2040

mean consumption of alcohol will increase in both sexes

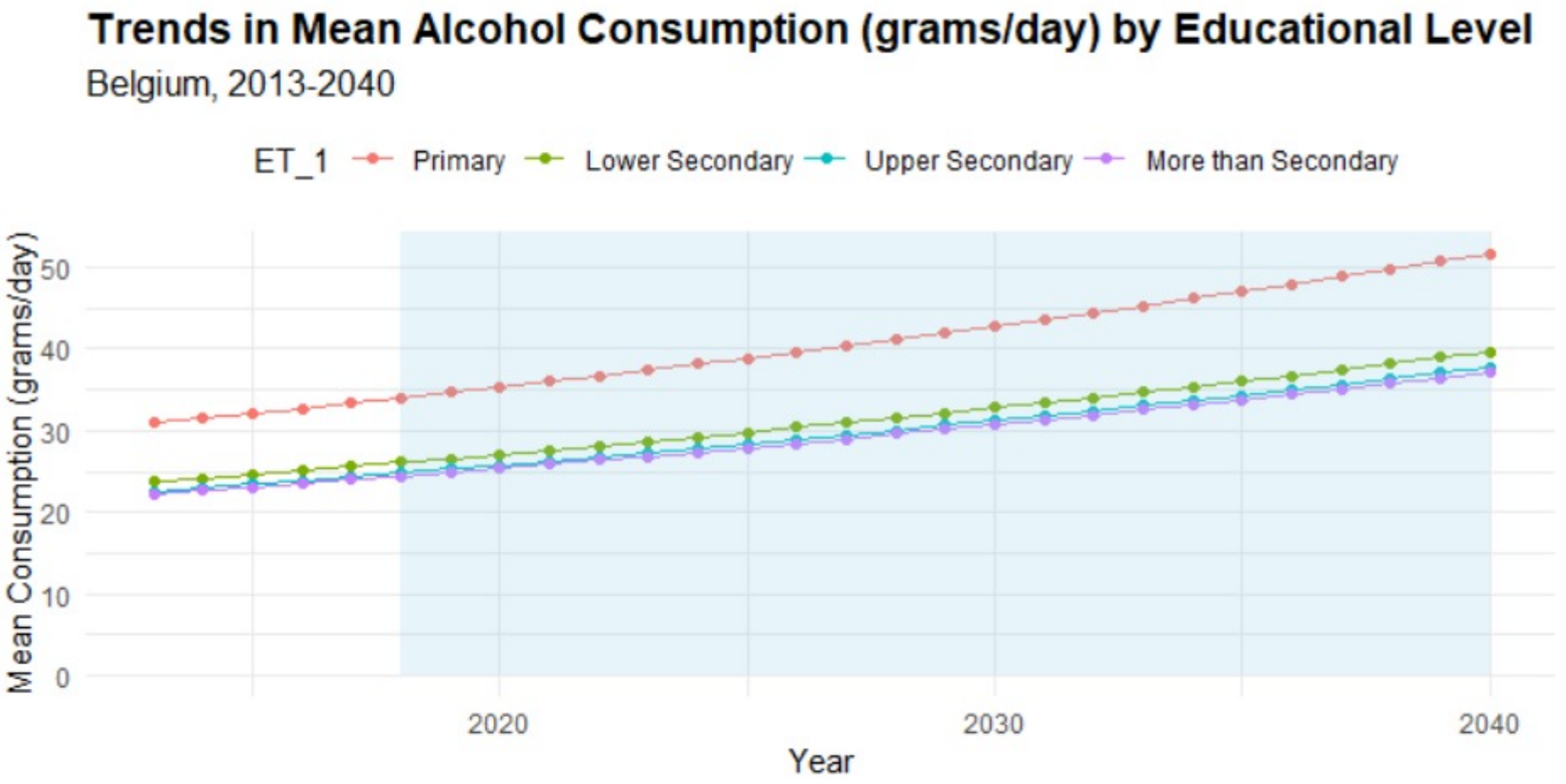
26.8g/day vs 18g/day

reduction to meet global target

10%

relative reduction by 2025

Inequities across educational status will persist over time



2013-2040

mean consumption of alcohol will increase across educational level

Primary

consumption level in will remain the highest

VAD-onderzoeksagenda alcoholpreventie

Over welke alcoholthema's is meer onderzoek nodig?

Totstandkoming VAD-onderzoeksagenda alcoholpreventie

VAD

Preventie
Methodiekontwikkeling
Alcohol

Noden?
Hiaten in de kennis
Hiaten in onderzoek

Onderzoeksplatform middelengebruik

Onderzoekers
Praktijk
Beleid

Onderzoeksagenda Alcoholpreventie

VAD-onderzoeksagenda alcoholpreventie = 2 lijsten

Lijst 1: bevat onderzoeksvragen op basis van kennishiaten in de **literatuur**.

- Synthese literatuur vanuit bestaande kennisagenda's Nederland
  - Trimbos-instituut: Kennisagenda Alcoholpreventie (2020 en 2023)
  - IVO: kennissynthese verslaving aan middelen (2023)
- Beperkte literatuurstudie (reviews 2023, grijze literatuur, VAD-documenten,…)
- Cijfers en monitors België en Vlaanderen
- Input VAD stafmedewerkers

=> 162 onderzoeksvragen uit literatuur

Onderzoeksvragen uit literatuur volgens 7 thema's

Alcoholgebruik in de Belgische bevolking: trends, monitoringonderzoek, definities	• Hoe kunnen nieuwe onderzoeksmethoden en -technieken (e.g. prognostisch modelleren, epigenetica, …) ingezet worden om risicogroepen van alcoholgebruik te identificeren en te karakteriseren?
Schade door alcoholgebruik: individuele en maatschappelijke schade	• Wat is de relatie tussen overmatig alcoholgebruik en lichamelijke (e.g. kanker) en/of mentale aandoeningen (e.g. depressie), en wat zijn verschillen naar geslacht, leeftijd en opleidingsniveau?
Risico- en beschermende factoren van alcoholgebruik: persoonsgebonden factoren en omgevingsinvloeden	• Hoe kunnen de beschermende factoren van de verschillende stadia van alcoholgebruik geïmplementeerd worden in alcoholpreventie voor de algemene Vlaamse bevolking
Beleidsmaatregelen: prijs, marketing, beschikbaarheid, etikettering	• Wat is de impact van prijsacties op alcohol in de horeca en in winkels in België op de verkoop van alcohol en op de gebruikspatronen van alcohol?
Preventie en vroeginterventie in sectoren en voorlichting en educatie	• Hoe kunnen digitale technologieën bijdragen aan de effectiviteit en implementatie van vroeginterventie?
Alcohol en verkeer	• Wat zijn de meest effectieve methoden om bewustwording te vergroten over de risico's van rijden onder invloed van alcohol
Alcohol en sport	• Welke interventies zijn effectief in het verminderen van alcoholgebruik in sportkantines en bij sportwedstrijden?

Onderzoeksvragen uit praktijk volgens 4 thema's

Online uitwisseling

19 professionelen
preventie, zorg, beleid en onderzoek

46 kennishiaten

4 thema's
- Preventieve interventies
- Cijfers, monitoring, beleidsmaatregelen
- Raakvlak hulpverlening
- Andere

8 prioritaire kennishiaten

8 prioritaire onderzoeksvragen vanuit de praktijkuitwisseling

1. Hoe kan de **normalisering van alcohol** in de maatschappij en bij specifieke doelgroepen doorbroken worden?

2. Welke rol speelt de **media** bij het aanmoedigen en/of normaliseren van overmatig alcoholgebruik?

3. Wat is de invloed van directe en indirecte **alcoholmarketing** op de consument?

4. Hoe kunnen op jaarlijkse basis **belangrijke indicatoren over alcoholgebruik gemonitord** worden?

5. Hoe kan de **sociale norm van geen alcohol drinken** versterkt worden via universele preventie?

6. Wat is de beste aanpak in het werken naar **kwetsbare groepen** met alcoholverslaving: daklozen, gedetineerden, …

7. Wat zijn good practices om preventie beter af te stemmen op **specifieke doelgroepen** zoals 55+, studenten, kwetsbare groepen, …

8. Wat is de (financiële) impact van het aanbieden van **gratis water** in het uitgaansleven voor horecazaken en organisatoren.

Wat willen we bereiken met de onderzoekagenda?

- **Gerichter projecten indienen** voor onderzoeksprogramma's over alcohol en ad hoc input overstijgen.

- **Kansen voor onderzoek** over alcohol beter benutten (gekende programma's/fondsen maar ook bachelor/masterproeven,…)

- Onderzoekers **inspireren en warm** maken voor opzetten onderzoek over alcohol dat preventiewerk kan ondersteunen (bv. voor doctoraatsonderzoek, …)

- **Samenwerkingsverbanden** stimuleren

Waarvoor kan je de onderzoeksagenda gebruiken?

- Bij de keuze voor het **financieren van onderzoek**
- Bij de selectie van thema's voor het **opstellen van een onderzoeksprogramma**
- Bij het aansturen van **bachelor- en masterproeven of doctoraatsstudies**
- Bij de selectie van **praktijkgericht onderzoek** of vakspecifieke opdrachten voor studenten
- Bij het uitvoeren van **eigen onderzoek** van uw organisatie of uw onderzoeksgroep
- Bij het indienen van **onderzoeksvoorstellen in (internationale) onderzoeksprogramma's**
- Bij **beleidsadviezen of -beslissingen**
- Bij **uitwisseling** met collega-onderzoekers
- …

Bijdrage aan kennis alcohol

Oplossen lacunes in onderzoek alcohol

Ondersteuning van preventieve en beleidsmatige interventies

Implementatie van de onderzoeksagenda

- **Jaarlijks** onder de aandacht brengen voor zomervakantie en begin september bij **onderzoekers** (bachelor- en masterproeven)
- Communicatie naar Algemene cel drugsbeleid ter inspiratie voor thema's **Belspo oproep programma drugs**
- **Prioriteiten** bepalen voor **VAD**

Belspo programma drugs 2024:
Providing an evidence base for alcohol related issues

- An **evaluation of Tournée minérale** (one month without alcohol) is needed
- We need to better understand the **social norm** that supports and legitimizes drinking behaviour in Belgium, with a view to enable deconstruction and universal prevention of not drinking as the "new normal".
- **Low-alcohol and alcohol free drinks**: are these beverages substitutes to regular alcoholic drinks or consumed in complementarity?

VAD & bekendmaking onderzoek

Artikels VAD-website	• Toegankelijk • Nederlands
Nieuwsbrief onderzoek	• 6x per jaar • 1000 tal contacten, 40% opent • Onderzoek, oproepen, congressen
Onderzoeksdatabank	• 480 onderzoeksfiches • Meer dan 8.500 keer geraadpleegd • Lopend en afgerond onderzoek
VAD-vormingen	• Vormingsaanbod • 2-jaarlijkse uitwisseling onderzoeksplatform • Jaarlijkse VAD-studiedag: 21 november 2025

Meer info:

https://vad.be/catalogus/onderzoeksagenda-alcoholpreventie

https://vad.be/onderzoek

https://vad.be/onderzoek/databank

https://vormingen.vad.be/

else.dedonder@vad.be

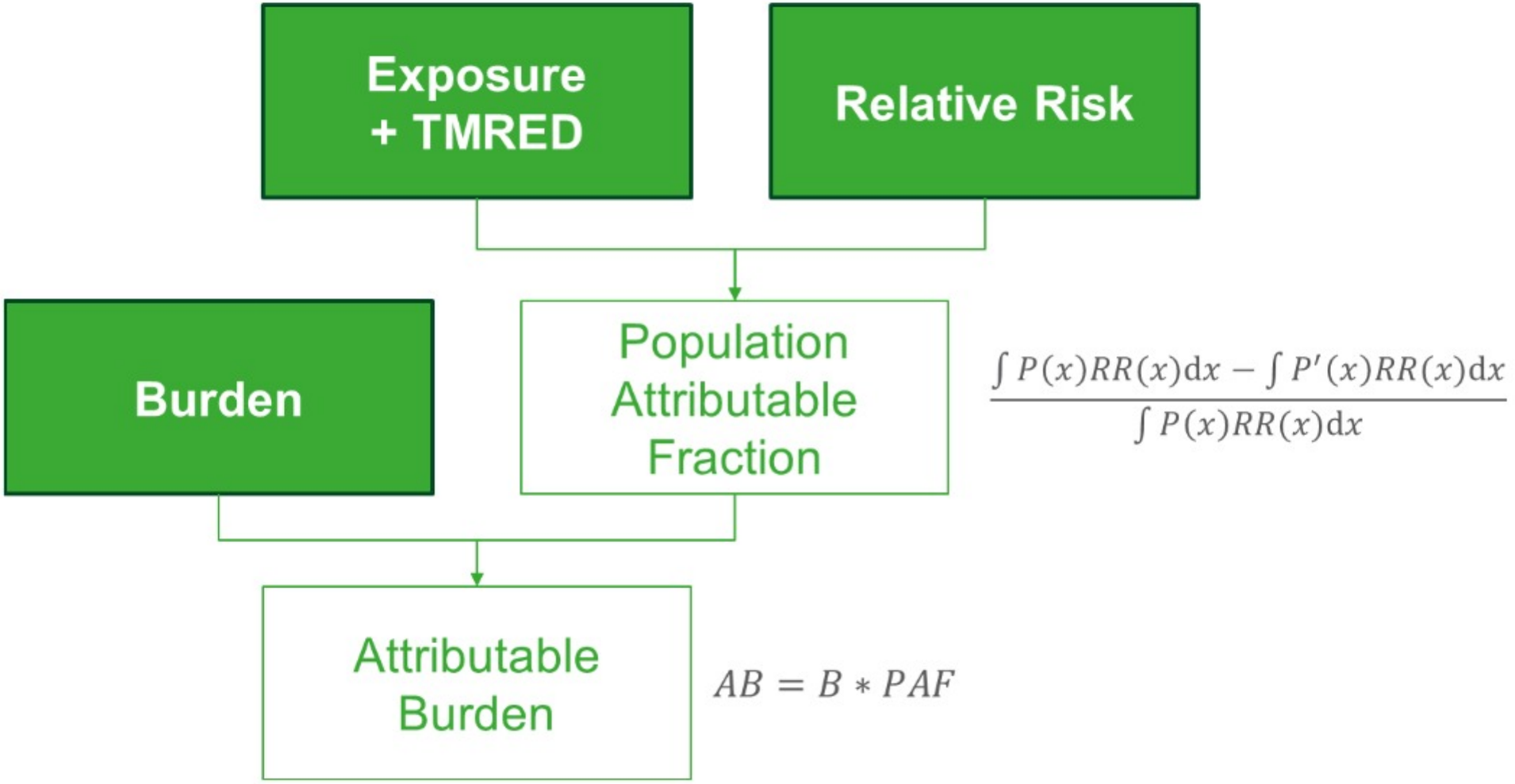
Methodology - costs

1. Define causal model
2. Fit regression model
3. Simulate counterfactual outcomes
4. Calculate causal effects and uncertainty

Healthcare costs (Y) ~ alcohol/tobacco status (X) + selected confounders (W)

Individual incremental costs attributable to alcohol/tobacco

Comparative risk assessment



$$\frac{\int P(x)RR(x)\mathrm{d}x - \int P'(x)RR(x)\mathrm{d}x}{\int P(x)RR(x)\mathrm{d}x}$$

$$AB = B * PAF$$

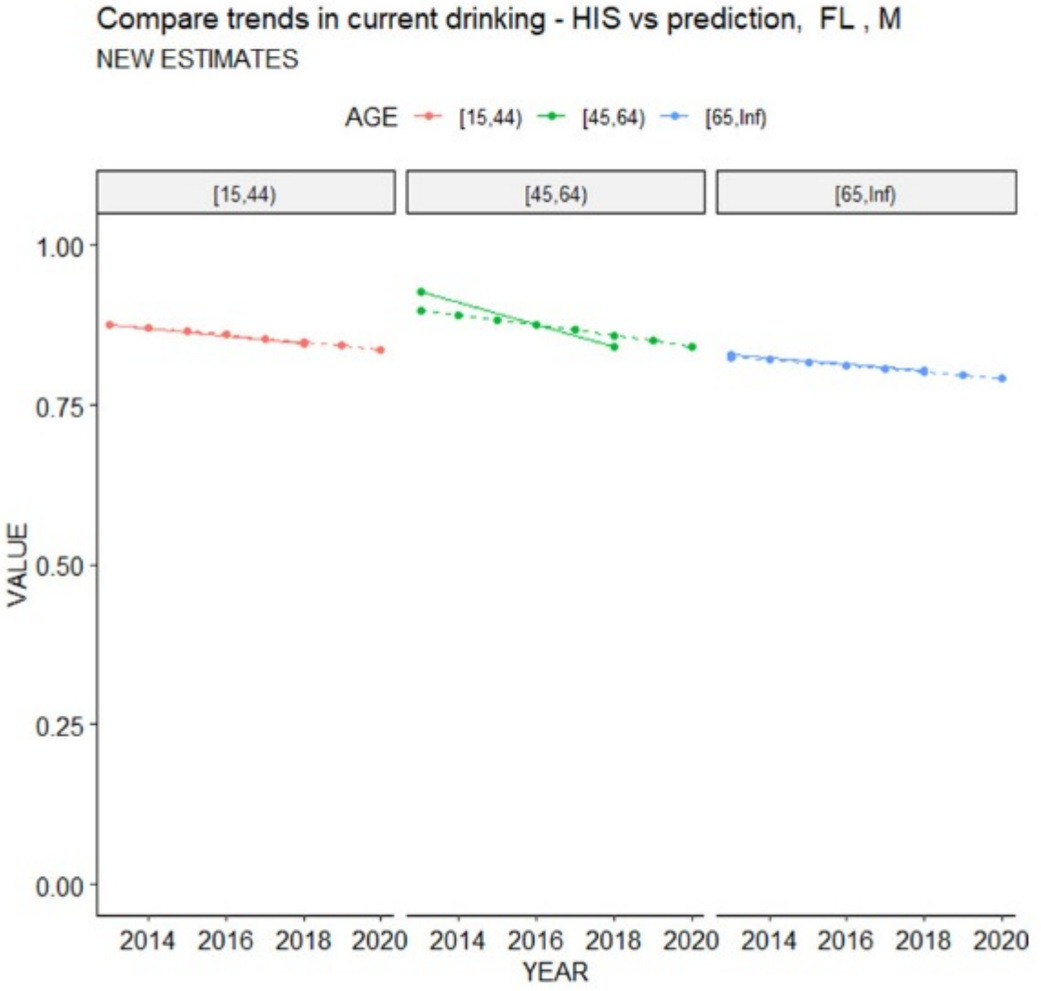
Time series of exposure data

1 **Data source:**

- Belgian Health Interview Survey (HIS)
  - Self-reported tobacco & alcohol use
  - Observed every 5 years

2 **Statistical Approach:**

- Integrated Nested Laplace Approximation (INLA) applied in a Bayesian Hierarchical Model (BHM)
  - Models observed data points to estimate annual trends by year, sex, age, region
  - Fast, uncertainty and smooths variations over time



Any questions?

Our results are available online

- **Estimates of the mortality and years of life lost attributed to risk factors :**
  https://burden.sciensano.be/shiny/risk
- **Estimates can be downloaded from:**
  https://zenodo.org/communities/bebod/records?q=&l=list&p=1&s=10&sort=newest
- **Latest publication :**
  https://doi.org/10.1093/eurpub/ckae211

Read the factsheet at Healthybelgium.be