



H-TEAM

95 95 95

TARGETS UPDATE



FAST-TRACK  
CITIES



UNIVERSITY OF AMSTERDAM



GGD  
Amsterdam  
Public Health Service

**'Getting zero new HIV infections' Amsterdam, the Netherlands**

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GGD Amsterdam, Dept. Infectious Diseases, Research and Prevention, Amsterdam UMC &  
University of Amsterdam Dept. of Social Psychology



# Outline

## The HIV epidemic and Amsterdam's response

- Starting points
- H-TEAM initiative
- Implementation
- Policy paper
- Lessons learned, challenges and priorities



# Basic premisses for Amsterdam

- Strong empirical tradition
- Long-standing cooperation between stakeholders
- National HIV & STI surveillance systems
- Free HIV & STI services
- Inclusive approach & services to all key populations
- Political/municipal commitment









# Political commitment



Global Web Portal  
*Ending the AIDS Epidemic by 2030*

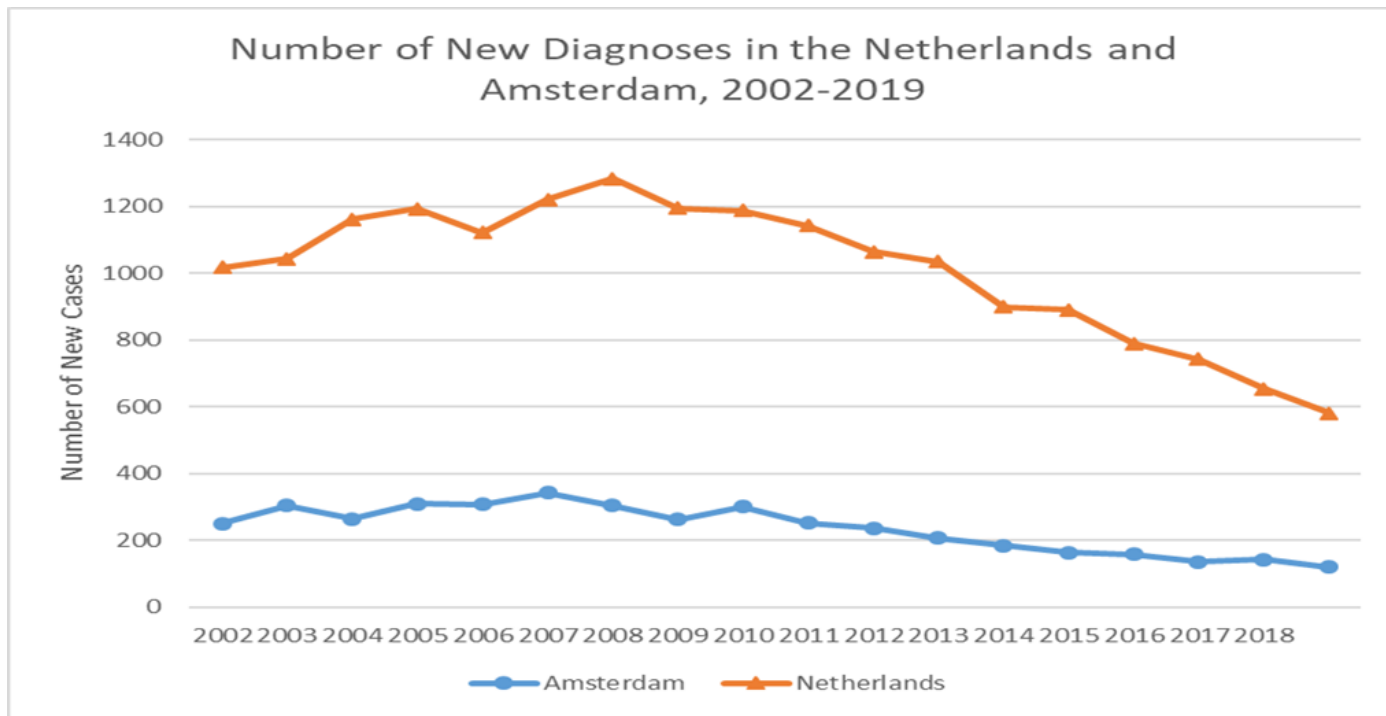
"AIDS is not over and there is no reason to lean backwards. But at the same time we should avoid despair, we have good reasons to be hopeful. Amsterdam will start at home by stepping up our efforts to ensure we will be an aids-free city in 2030. It is an acknowledgement of all that we have achieved in our response to HIV. In recent years Amsterdam met the UN 90/90/90 goals. These facts means a lot in terms of improving the lives of thousands of people.

But that is still not the case around the world. The reasons why so many people in the world are still denied treatment are almost never medical reasons. They are bigotry, homophobia, religious fanaticism, unjust economic systems, and indifferent governments. Our weapons are not just medicine and evidence, but more important, our ideals of freedom, open mindedness and social progress. We believe Amsterdam has a responsibility to share its experiences with other cities. If cities cooperate internationally (like in the fast track cities initiative) urban centers around the world will greatly benefit from exchanging success stories and lessons learned in striving for zero new infections. Amsterdam will do its part, let's do it together worldwide."



**Femke Halsema**  
Mayor of Amsterdam

# However, there are still new HIV diagnoses



## ..... and late diagnoses

Proportion presented late\* for care among newly diagnosed individuals in Amsterdam

- AIDS or CD4 count < 350 cells/mm<sup>3</sup>

Amsterdam, 2015

MSM                      36 %

Migrants                53 %

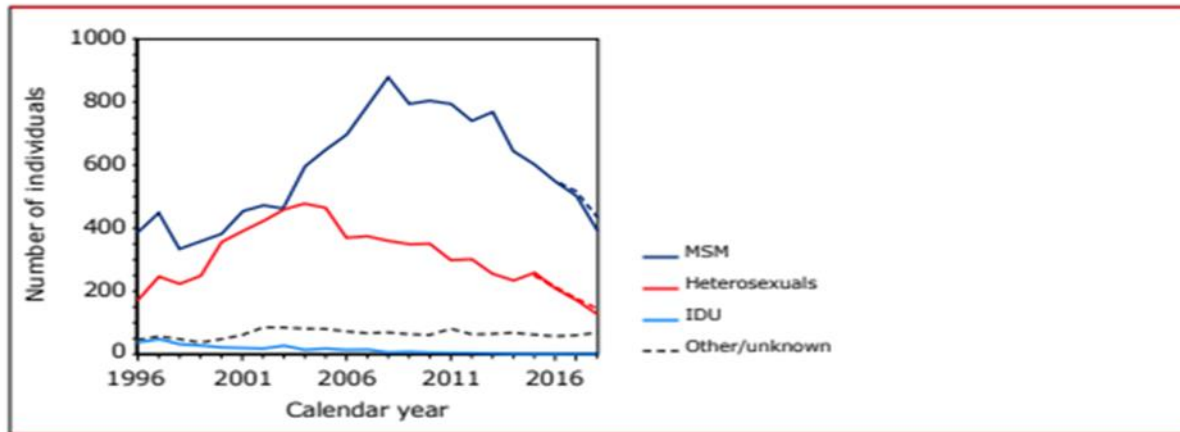
Other                     44 %

National, 2019

Overall 48% (2015: 67%)

# Characteristics of the epidemic in the Netherlands

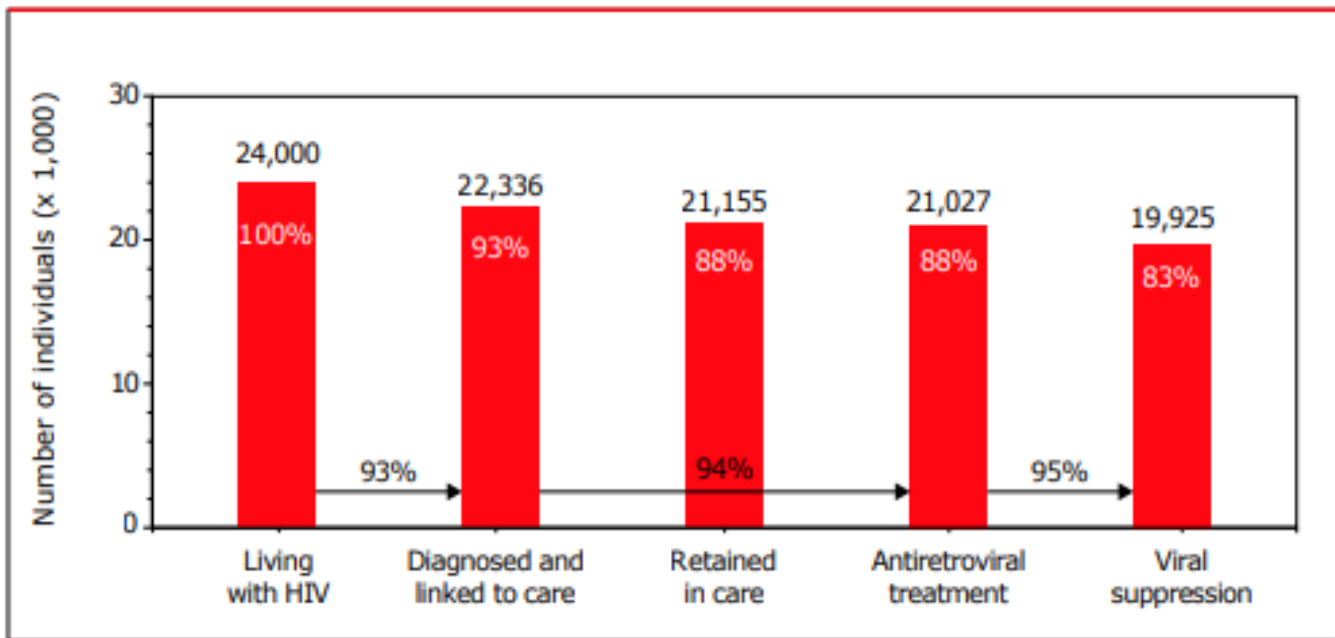
*Figure 1.2: Annual number of new HIV-1 diagnoses among adults, according to most likely mode of transmission. In 2018, men who have sex with men (MSM) accounted for 66% of new diagnoses, infections via heterosexual contact for 22%, infections via injecting drug use (IDU) for 0%, and infections via other or unknown modes of transmission for 12% of the annual number of new diagnoses. The dotted lines indicate the number of diagnoses after the projected backlog in registration of HIV cases (3% in 2017, 11% in 2018) is taken into account (See Box 1.1).*



*Legend: MSM=men who have sex with men; IDU=injecting drug users.*

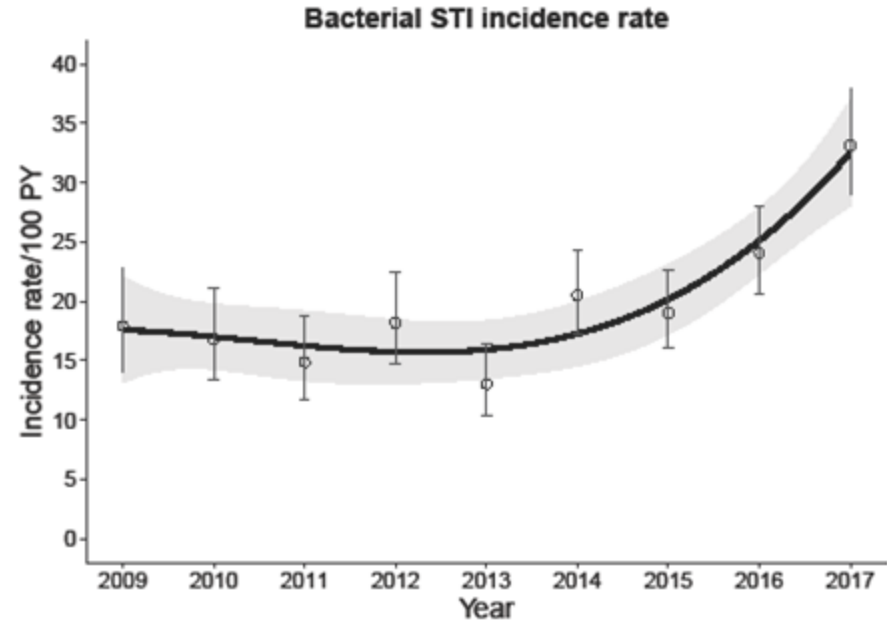
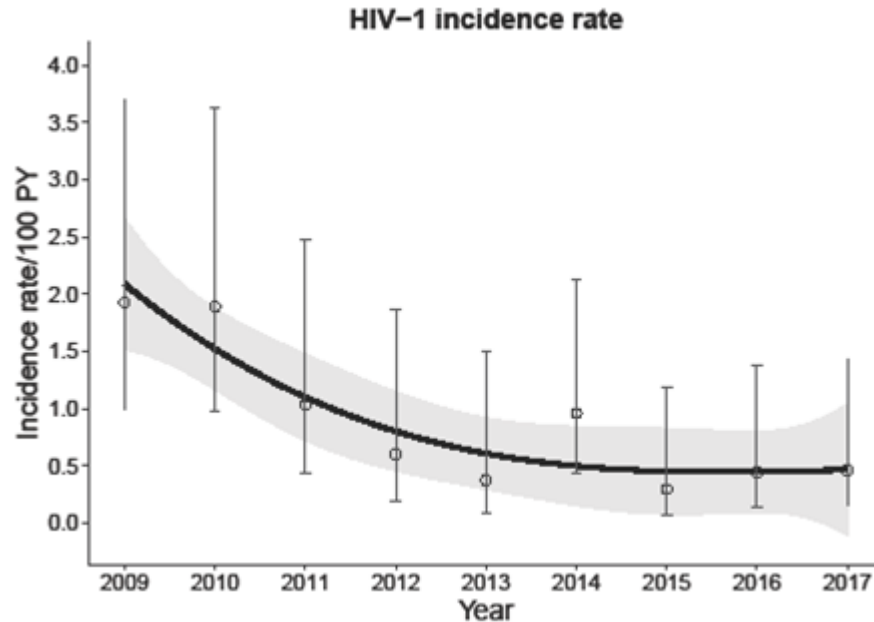


Figure 3: Continuum of HIV care for the total estimated population living with HIV in the Netherlands by the end of 2020, based on UNAIDS 95-95-95 goals for 2025: 93-94-95.



The **Amsterdam Cascade** of Care  
At the dashboard of fast track cities in 2020: **95-94-95**

# Diverging trends of incidence HIV versus STI



Amsterdam's approach  
to further fight  
the HIV epidemic in the city

## **The H-TEAM initiative**

HIV Transmission Elimination Amsterdam


Multidisciplinary stakeholder Co-Op

Start 2014



**H-TEAM**

# Getting to zero new infections

**Implementation &  
National roll-out of  projects**

**H-TEAM**

# National roll-out

## Rapid acute HIV trajectory pilot, 2015-ongoing



Campaign<sup>1</sup>



Mass-media campaign



Immediate start of ART



The Amsterdam Score<sup>2</sup>



Point-of-care HIV-RNA



1. [www.hebikhiv.nl/en](http://www.hebikhiv.nl/en)

2. Dijkstra BMC Infectious Diseases 2017, Lin JAIDS 2018





# Impact of acute HIV infection (AHI) pilot

- **Before** implementation of the AHI strategy  
Proportion of AHI of HIV diagnoses: **0.6%**  
**After** implementation: **11.0%**
- Median time between HIV diagnosis and viral suppression significantly decreased

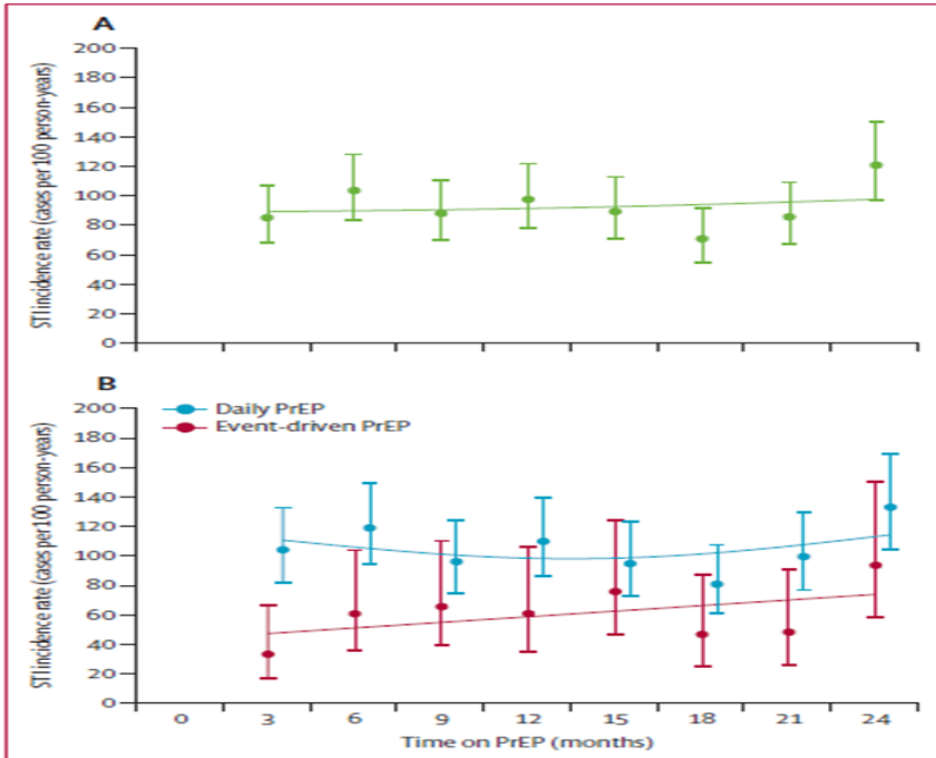
*Dijkstra et al, CID 2020*

AHI strategy implemented at STI clinics nationwide in 2020

# National roll-out

## PrEP (AMPrEP) demonstration project, 2015-2019

**Key finding: Stable STI incidence in the first 2 years on PrEP**



August 2019:  
National free PrEP program

AMPrEP's research findings contributed

- to advice of national implementation
- to (inter-)national PrEP guidelines

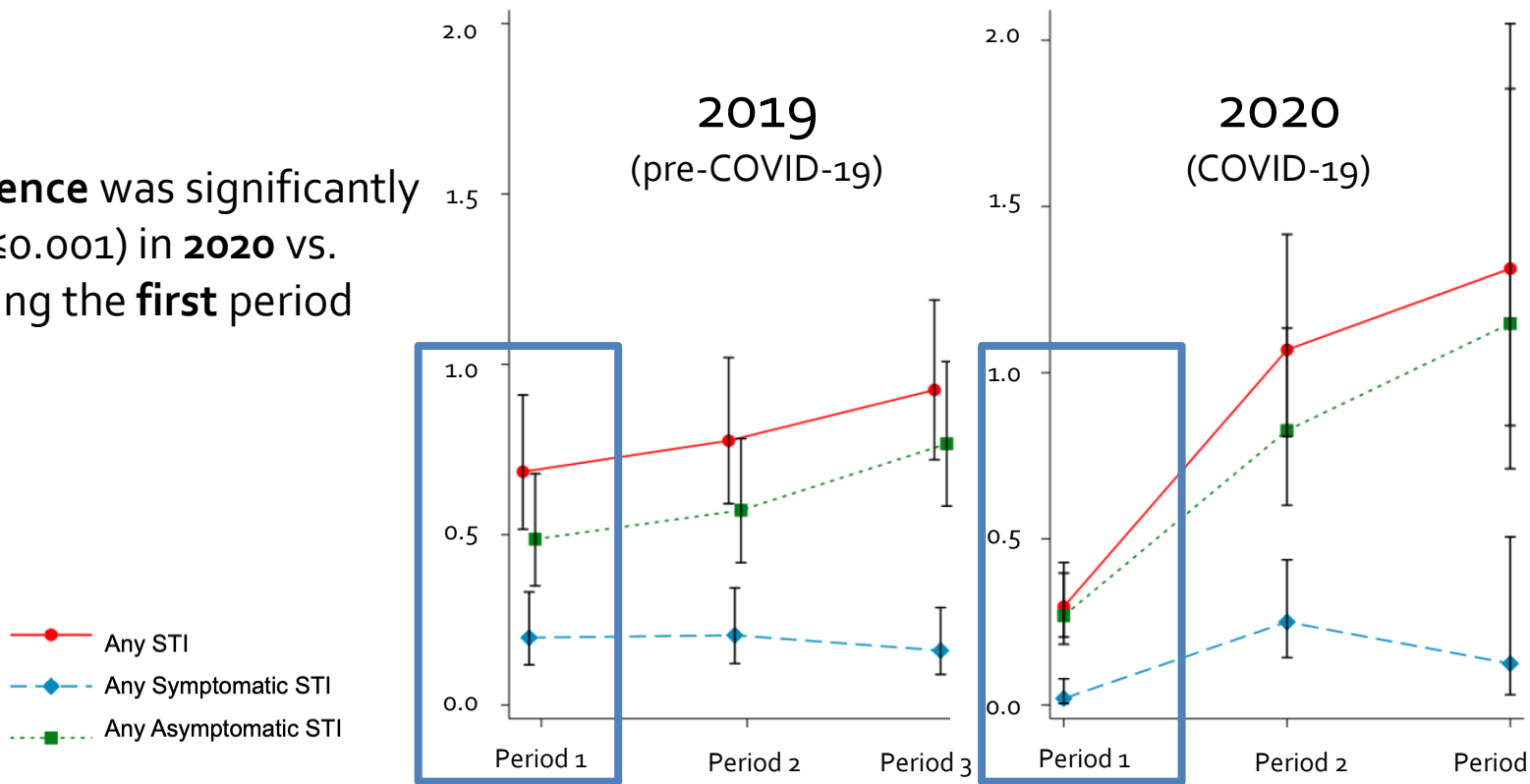
# *Key Findings: Returning for care during COVID-19*

❑ **27.2% (n=83) did not return for care in 2020**

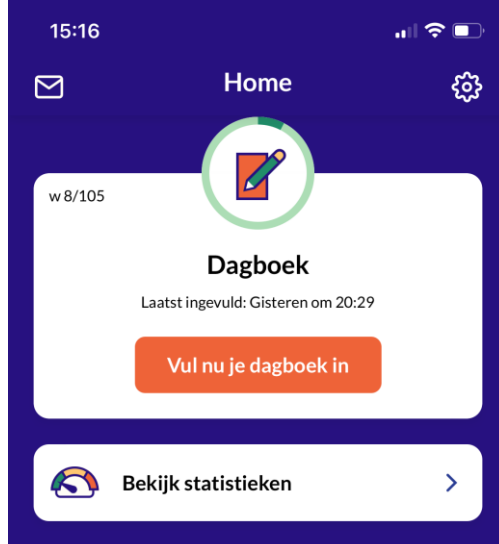
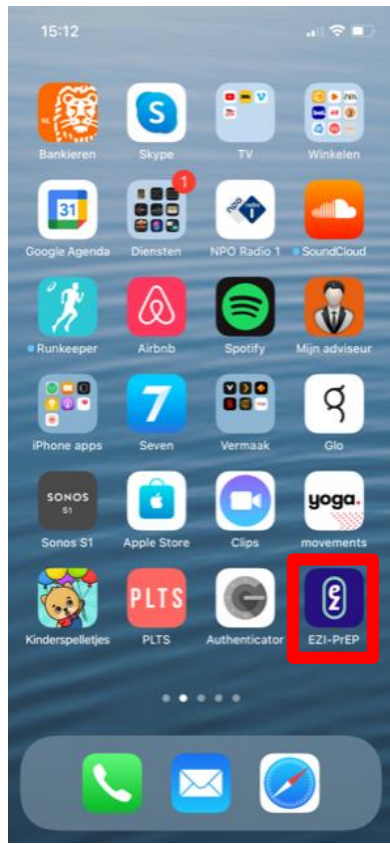
❑ **Daily PrEP users (vs. event-driven) had significantly higher odds ( $p \leq 0.001$ ) of returning for care across all three periods**

# Key Findings: STI incidence in 2020 versus 2019

□ STI incidence was significantly lower ( $p \leq 0.001$ ) in **2020** vs. **2019** during the **first period**

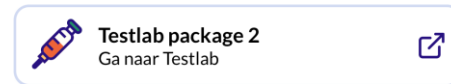


# EZI-PrEP app



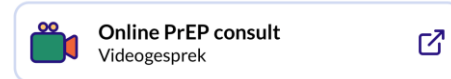
## Overzicht afspraken en studieactiviteiten

### Morgen



### 12 november

11:00





# Ezi-PrEP



- In-app enrolment
- Arrangement of testing & online test results
- Arrangement of consultations & webconsults
- Reminders
- Care overview

# Ezi-PrEP RCT



- Non-inferiority online versus standard of care
- Non-inferiority 3-months versus 6 months follow-up



Continuous **research** to inform  
**intervention** and **policy**

# HIV-Impact studies: HIMPACT

a series of 4 mix-methods studies

## Burden of living with HIV among men who have sex with men: a mixed-methods study

Ward P.H. van Bilsen\*, Hanne M.L. Zimmermann\*, Anders Boyd, Udi Davidovich, on behalf of the HIV Transmission Elimination Amsterdam Initiative

AIDS and Behavior  
<https://doi.org/10.1007/s10461-021-03281-1>

ORIGINAL PAPER

### The Burden of Living With HIV is Mostly Overestimated by HIV-Negative and Never-Tested Men Who Have Sex With Men

Hanne M. L. Zimmermann<sup>1</sup> · Ward P. H. van Bilsen<sup>1</sup> · Anders Boyd<sup>1,2</sup> · Amy Matser<sup>1</sup> · Frenk van Harreveld<sup>3,4</sup> · Udi Davidovich<sup>1,3</sup> on behalf of HIV Transmission Elimination Amsterdam Initiative (H-TEAM)

Accepted: 21 April 2021  
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Lancet HIV 2020

“Where are we heading in the HIV response”  
Monday (1<sup>st</sup> of Aug)  
Room 517b/channel 4  
10:30 AM

## Factors Associated with Never Testing for HIV: Directions for Targeted Testing Interventions Among Men Who Have Sex with Men

Ward P.H. van Bilsen, MD,<sup>1,\*†</sup> Hanne M.L. Zimmermann, MSc,<sup>1,\*</sup> Anders Boyd, PhD,<sup>1,2</sup>  
Frenk van Harreveld, PhD,<sup>3</sup> and Udi Davidovich, PhD,<sup>1,3</sup> on behalf of HIV  
Transmission Elimination Team Amsterdam

Zimmermann HML et al. *Journal of the International AIDS Society* 2021, **24**e25715  
<http://onlinelibrary.wiley.com/doi/10.1002/jia2.25715/full> | <https://doi.org/10.1002/jia2.25715>

**JIAS**  
JOURNAL OF THE  
INTERNATIONAL AIDS SOCIETY

### RESEARCH ARTICLE

## Prevention challenges with current perceptions of HIV burden among HIV-negative and never-tested men who have sex with men in the Netherlands: a mixed-methods study

Hanne ML Zimmermann<sup>1</sup> , Ward PH vanBilsen<sup>1,3</sup> , Anders Boyd<sup>1,2</sup>, Maria Prins<sup>1,3</sup>, Frenk vanHarreveld<sup>4,5</sup>, Udi Davidovich<sup>1,4</sup> and on behalf of HIV Transmission Elimination Team Amsterdam



# Continuous research...

AIDS and Behavior

<https://doi.org/10.1007/s10461-021-03239-3>

ORIGINAL PAPER



## Understanding Reasons for HIV Late Diagnosis: A Qualitative Study Among HIV-Positive Individuals in Amsterdam, The Netherlands

Maarten Bedert<sup>1</sup>  · Udi Davidovich<sup>2</sup> · Godelieve de Bree<sup>3</sup> · Ward van Bilsen<sup>4</sup> · Ard van Sighem<sup>5</sup> · Wim Zuilhof<sup>6</sup> · Kees Brinkman<sup>7</sup> · Marc van der Valk<sup>8</sup> · John de Wit<sup>9</sup>

Accepted: 18 March 2021  
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# Last Mile Intervention

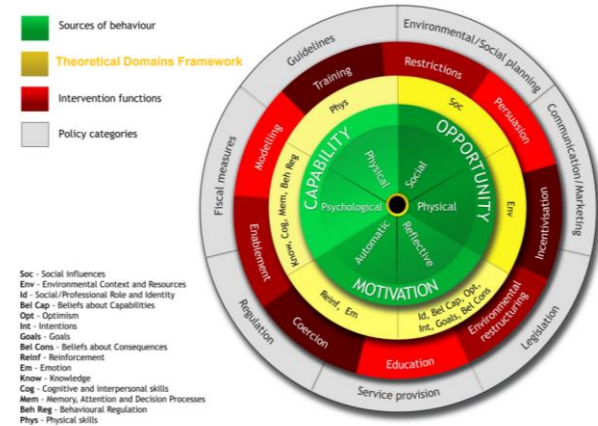
**Goal:** To reduce the late presentation of HIV in MSM by 'surgically' increasing HIV testing

**Geo-based tailored intervention to specific high-risk group profiles throughout the city**

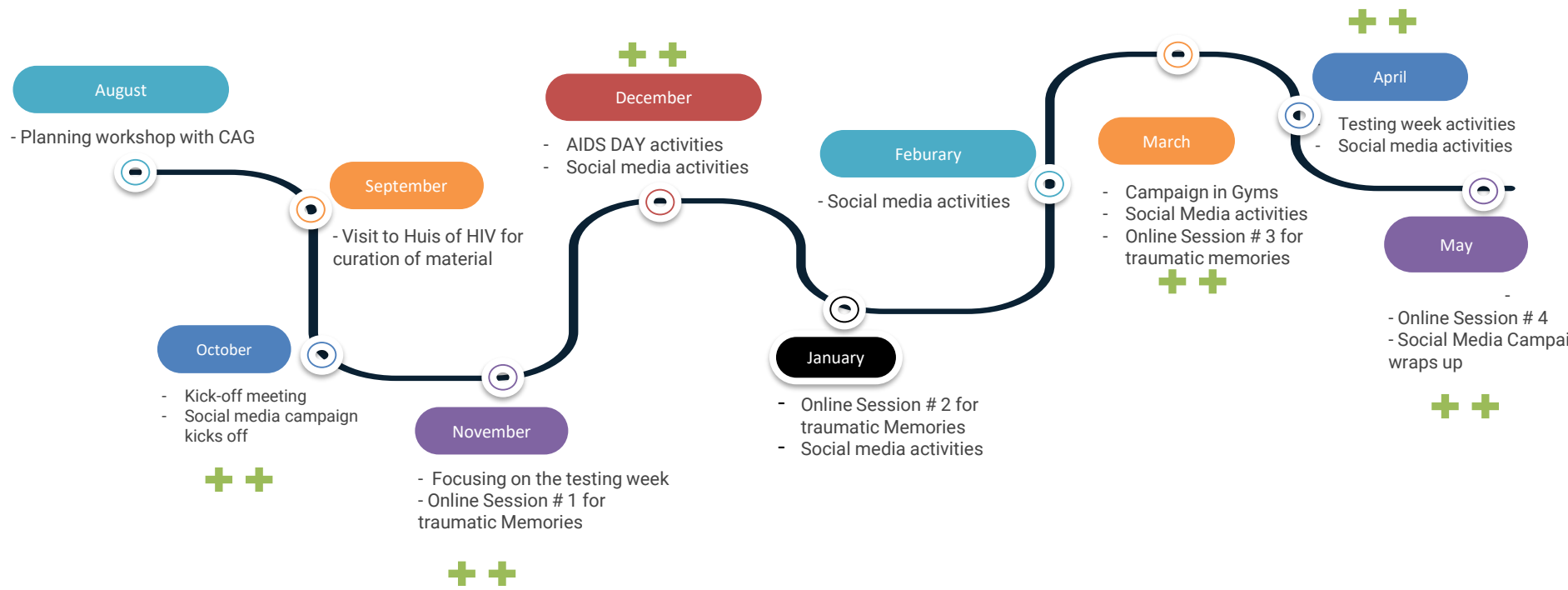
**Approach:** Multidisciplinary; Behavior Change Wheel (Michie et al., 2019)  
Community co-creation (Oertzen et al., 2018)

**Behavior change model:** COM-B

**Implementation and Evaluation:** Realist evaluation design 2022-23



# Timeline Infographics – 10 Months LM Campaign





# Getting zero new infections in Amsterdam

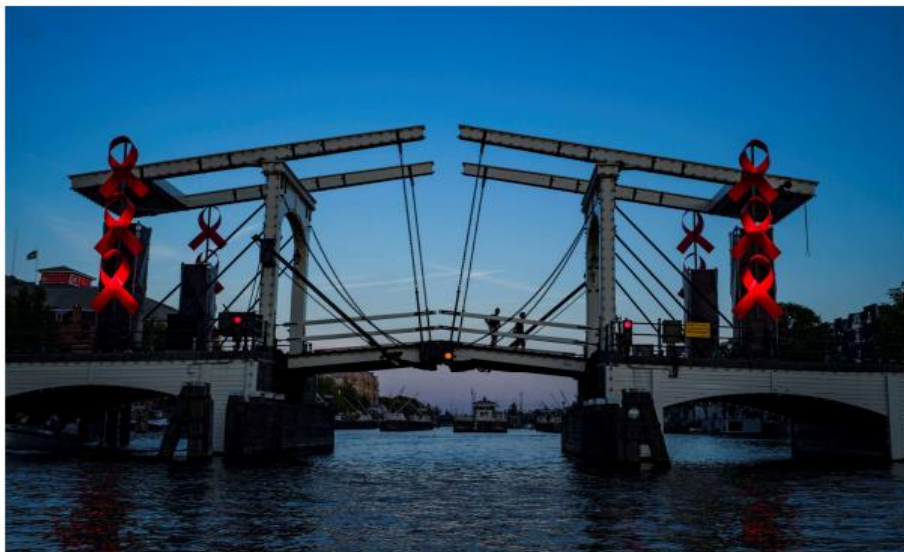
## **Policy paper**

# Policy paper

## Towards zero new HIV infections in Amsterdam

Published and approved by the City Council, 1 July 2020

Aiming for zero new HIV infections in  
Amsterdam by 2026



Link:

[https://www.fast-trackcities.org/sites/default/files/Aiming%20for%20zero%20new%20HIV%20infections%20in%20Amsterdam%20by%202026\\_final.pdf](https://www.fast-trackcities.org/sites/default/files/Aiming%20for%20zero%20new%20HIV%20infections%20in%20Amsterdam%20by%202026_final.pdf)



# 2020 Policy Paper of the City of Amsterdam

## Top Priorities



1. Increasing access to HIV testing services, including self-testing and community-based testing



2. Expanding PrEP access and uptake



3. Enhancing prompt treatment after HIV diagnosis



4. Eliminating HIV-related stigma



5. Sharing Amsterdam's experiences nation- and worldwide and learning from frontrunners cities and regions



# The Public Health Response in Getting zero new HIV infections in Amsterdam

## **Lessons learned and challenges**

# The Amsterdam approach to reaching zero infections from a '95-95-95' starting point:

- **Work evidence based:** find the needs of the hard to reach
- **Involve all care partners** in the chain
- Obtain **local political commitment** and set mutual goals with city officials
- **Tailor intervention** geographically and answer micro-needs and barriers

# Lessons learned

**Closely working together with all stakeholders works and is great but also has its challenges**

- Identify gaps in prevention and care at the city between stakeholders
- Start innovative projects/pilots that are feasible
- Integrate novel projects with existing interventions

**90-90-90 or 95-95-95 are not sufficient to stop ongoing transmission**

**The remaining 5-5-5 are challenging: regional-level micro-interventions are key!**

# Acknowledgements



**Participants of our studies  
Colleagues**

**Partners & sponsors H-TEAM**  
[www.hteam.nl](http://www.hteam.nl)





# H-TEAM acknowledgements



Professor Joep Lange



## Partners



## Funding support

