HCV incidence among 5941 HIV+ MSM using two methods to estimate follow-up: CASCADE in EuroCoord study (1990–2014)


MSM: men who have sex with men
National HIV/HCV treatment cascade in The Netherlands

79% cured (n=1097) or on treatment (n=88)

- Retained in care: 1505
- Started treatment: 1243
- Completed treatment: 1173
- SVR: 1097

Active HCV:
- Treatment failure: 262
- Ongoing DAA treatment: 88
- Never treated for HCV: 58


DAA: direct-acting antiviral agent; SVR: sustained virological response
HCV treatment uptake in HIV+ patients in the Netherlands

Number of patients initiating HCV treatment

Calendar year

2014 2015 2016

November 2015

Q1 Q2 Q3 Q4


Q: quarter
HCV treatment uptake in Amsterdam: 4637 HIV-infected patients in care

Description of care in 255 HIV/HCV co-infected patients. The majority of patients were treated with DAAs

- Patient refused treatment, n=7
- Severe comorbidity, n=4
- Health insurance issues, n=3

Treatment initiation pending, n=8

- Failed
- Pending
- SVR12
- All

SVR12 = 99% (186/188)

*One patient failed treatment and another patient terminated treatment due to possible drug-induced rash after 3 days of treatment

DAA: direct-acting antiviral agent; SVR: sustained virological response

HCV prevalence among HIV-negative and HIV-positive MSM by calendar year

Bi-annual cross-sectional surveys at the STI Clinic, Amsterdam, 1995–2012

- HCV Ab+ among HIV- MSM
- HCV Ab+ among HIV+ MSM
- HCV RNA+ among HIV+ MSM

Study includes acute infections.
Ab: antibody; STI: sexually transmitted infection
HIV-negative MSM in the Amsterdam PrEP project

- **4.8% (18/375)** HIV-negative were HCV-positive
- **83.3% (15/18)** had detectable HCV RNA

Risk factors for sexual transmission of HCV among HIV+ MSM

**Sexual behaviour**
- Receptive UAI
- Sharing sex toys
- Unprotected fisting

**Sex-related variables**
- Number of casual sex partners*
- Anal rinsing
- Rectal bleeding
- Meeting casual sex partner(s) at sex party

**Drug use before/during sex**
- Injected drugs
- NADs used, straws shared

**Clinical characteristics**
- CD4 cell count**
- Ulcerative STI

*Per doubling, modelled as 2Log(N + 1); **Per cubic root lower at the HCV-negative visit preceding study entry, cells/μL. **

Meeting casual sex partner(s) at sex party


NAD: nasally administered drug; UAI: unprotected anal intercourse
High rate of re-infection after successful treatment of primary HCV infection in HIV+ MSM: MOSAIC study

Re-infection incidence = 15.2 per 100 PY
Projected HCV incidence and prevalence among HIV-infected MSM in Switzerland

Pessimistic scenario: growing size of the high-risk group

Intermediate scenario: stable size of the high-risk group

Optimistic scenario: decreasing size of the high-risk group

- Interferon-based and current treatment uptake (22% per year)
- Second-generation DAAs and current treatment uptake (22% per year)
- Interferon-based and increased treatment uptake (100% per year)
- Second-generation DAAs and increased treatment uptake (100% per year)

The effect of reduction of high-risk behaviour and DAA therapy with current treatment uptake


Incidence per 100 person-years

Year

2000 2010 2020 2030

Observed Projected

0.1

1

15

Prevalence

Scenario of high-risk behaviour

- Pessimistic
- Intermediate
- Optimistic
- Best case

Year

2000 2010 2020 2030

Observed Projected
Time to HCV seroconversion following acute HCV in 63 HIV-positive MSM

Kaplan–Meier estimate of the probability of seroconversion following acute HCV infection

95% confidence interval

Main objective of MC Free

To reduce the incidence of HCV infections among MSM in Amsterdam
The consortium

Academic Medical Center
Dept. of Virology
Dept. of Infectious diseases

Amsterdam Institute for Global Health and Development (AIGHD)

Amsterdam Public Health Service (GGD Amsterdam)

Dutch HIV Monitoring Foundation (SHM)

MSM Observational Study of Acute Infection with Hepatitis C (MOSAIC)

STI AIDS Netherlands
Amsterdam MSM hepatitis C Free (MC Free)
MC Free aims

- Increase:
  - Knowledge and awareness
  - Regular testing and earlier diagnosis
  - Risk reduction behaviour
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- Provide fast linkage to care
MC Free aims

- Increase:
  - Knowledge and awareness
  - Regular testing and earlier diagnosis
  - Risk reduction behaviour

- Improve awareness, attitude, knowledge and skills among professionals

- Create enabling environment for risk reduction

- Provide fast linkage to care

- Prevent re-infections

- Penetrate social/sexual networks and enhance partner notification
MC Free aims

- Increase:
  - Knowledge and awareness
  - Regular testing and earlier diagnosis
  - Risk reduction behaviour
- Improve awareness, attitude, knowledge and skills among professionals
- Create enabling environment for risk reduction
- Provide fast linkage to care
- Prevent re-infections
- Penetrate social/sexual networks and enhance partner notification
- Understand and predict the epidemic and transmission dynamics
MC Free strategies

• Online tools and promotion
• Face-to-face strategies
• Modelling and molecular epidemiology (intended)
Online tools

• Website
• Test advice
• Testing service
• HepC information
• Risk reduction
• Toolbox
• Partner notification and treatment
• Testimonials
• C WhatYouCanDo!
Online tools
Online tools
Online tools
Should I get tested?

• Risk assessment questionnaire
  • 6 risk factors:
    • Condomless anal sex
    • Sharing sex toys
    • Unprotected fisting
    • Injecting drug use
    • Sharing of straws
    • Ulcerative STI
  • Validated among HIV-positive MSM
    (sensitivity: 78.0%; 95% CI 67.9–85.6; specificity 78.6%; 95% CI 70.8–84.8%)¹

Online tools
Personalised test advice

Resultaat

Risicofactoren
Risicofactoren voor het optreden van hepatitis C zijn onder meer:

- zonder condoom geneukt worden
- zonder handschoenen riken of zonder handschoenen gefist worden
- het delen van toys
- het hebben van syfilis, herpes of LGV
- het injecteren (slanven) van drugs (ongeacht of ieder zijn eigen naalden gebruikt)
- het delen van rietjes of andere attributen voor het snuiven van drugs

Advies
Online tools

- **HCV RNA home-based testing service**
  - DBS self-sampling test
  - DBS for HCV has been validated
  - Viral load detection limits: 2.2–3.4 log IU/ml
    - Suitable for diagnosing acute infections
  - Pre-launch evaluation of DBS self-sampling started Sept 2017
    - Assessment of RNA stability
    - Different elution buffers
    - Questionnaires
    - Standardised assessment of quality of spots


Self testing for HCV and HIV is not approved in Germany.

DBS: dried blood spot
Online tools

Information page on hepatitis C

• What is hepatitis C?
• Consequences and symptoms of hepatitis C
• Networks with hepatitis C
• Transmission routes
• Decreasing transmission
• Testing for hepatitis C

Cartoons to visualize transmission routes and prevention measures

Cartoons by Eric Krabbenbosch and Chris Vincent
Online tools

Personalised advice on risk reduction strategies

• Short questionnaire on preferences:
  • Fucking
  • Ass play with dildos/sex toys
  • Fisting
  • Sex parties
  • Chemsex
Online tools

Personalised advice for each topic – an example

Disinfecting hands and arms
Online tools
Order the NoMoreC Toolbox

In de Toolbox van NoMore C zitten voorbeelden van middelen die je kunt gebruiken om de kans op hepatitis C-overdracht te verkleinen. In overleg met mannen uit de community is deze doos samengesteld.

Vanaf februari 2018 kun je gratis een doos afhalen bij je een aantal fetisj shops en bij je hiv-consulent (een doos per persoon, we willen graag dat zoveel mogelijk mannen die risico lopen op hepatitis C kennis maken met de Toolbox).

Ook kun je straks via deze site een Toolbox bestellen.
Meer informatie volgt vanaf half december.

KLIK HIER OM BESTELLEN
Het is erg vervelend als je hoort dat je hepatitis C hebt. Er kunnen allerlei gevolgen door je heen gaan, zeker als je al eerder hepatitis C hebt gehad. Het belangrijkste is je te realiseren dat het ongeluk in een klein hoekje kan zitten en dat je niet de pachthoudt (weer) tegen het virus aan te lopen.

Gelukkig hoeft je niet lang te wachten met behandeling als je een recente infectie hebt. We vertellen je op de pagina over behandeling hoe dat zit. Ook vertellen we hoe anderen de behandeling hebben ervaren.

Je partners waarschuwen dat je hepatitis C hebt, is ook niet fijn. Maar het zal gewaardeerd worden. Het is uiteindelijk ook in je eigen belangen om zo veel mogelijk sekspartners te waarschuwen, zodat zij zich ook kunnen laten testen. Zo voorkom je pingopongen van het virus in je eigen seksuele netwerk. We geven je adviezen over hoe je partnerwaarschuwing aan kunt pakken. Ook geven we adviezen over seks als je hepatitis C hebt.

Ontbreek er naar jouw smaak iets op deze pagina's? Meld het ons. info@NoMoreC.nl
Online tools
FAQs

4 sections

• Ordering information about the C-test
• The C-test
• Home sampling of the C-test
• The Toolbox
Online tools
Testimonials

Jörgen talks about hepatitis C
https://youtu.be/MirD7OL2_uU
Face-to-face strategies
Professionals

Training for:
• HIV nurses/specialists
• STI nurses/doctors
• GPs

• Map out training needs of health professionals
• Input from health professionals used for development of training
Face-to-face strategies
Professionals

• E-learning
• Face-to-face training
• Counselling concept for HCV-infected MSM to reduce their chance of (re)infection
• Improve partner notification
Face-to-face strategies
MSM

Main principle: developed in close cooperation with community stakeholders

• NoMoreC Toolbox
• Themed events
• Peer-to-peer education
• Advice to sex venues

NoMoreC Toolbox
NoMoreC Toolbox
NoMoreC Toolbox
NoMoreC Toolbox
NoMoreC Toolbox
NoMoreC Toolbox
Face-to-face strategies
Community Advisory Board

1st meeting: 25 September 2017
- Fetish shops
- Gay clubs
- Saunas
- Gay chat and dating sites
- Poz and Proud
- PrEPnu
- Dutch Organization for LGBT Men and Women (COC)
Face-to-face strategies
Community Advisory Board

Support shown and suggestions given:

- Willingness to distribute Toolbox through fetish shops
- Make C-test available in fetish shops and on promotion activities in the community
- NoMoreC label for gloves and condoms
- Inform venues on disinfection and on location
Face-to-face strategies
MSM

- NoMoreC Toolbox (450 boxes)
- Raise awareness through fetish shops and professionals
Toolbox demonstration
Desinfectiequiz:

1. Welk middel kun je het best gebruiken om de speelplek te desinfecteren?

   a. Allesreiniger
   b. Huishoudalcohol (70% of hoger)
   c. Waterstofperoxide
   d. Dettol
Desinfectiequiz:

2. Welk middel kun je het best gebruiken om dildo’s te desinfecteren?

a. Afwasmiddel
b. Chlooroplossing
c. Waterstofperoxide
Face-to-Face strategies
MSM

Instructievideo
desinfectie speelplek

https://youtu.be/Bc_O095h-ho
Promotion
C What You Can Do!

Intensive periods:
Feb 2018 and Spring 2018 (Fetish Pride) and Autumn 2018 (Leather Pride)

• Target group:
  • Gay men
  • Active in specific sexual networks
  • Increased risk

• Primary goals/content
  • Increase awareness
  • Offer a range of safe options
  • Refer to NoMoreC website

• Social network component
  • To be developed in close cooperation with the community
Promotion
C What You Can Do!

Co-creation process with the community

Promotion strategy
• Online
• Offline
  • Social network component for C-test and Toolbox

First meeting: 7 November 2017
Evaluation measures

- Log data (web pages visited)
- Risk assessment questionnaire data
- Risk reduction questionnaire data
- Test results of home-based testing service
- Evaluation questionnaires, sent 4 weeks after purchase
  - Testing service users
    - Reasons for ordering
    - User experience
    - Satisfaction with test service
    - Follow-up in case of positive test
    - Satisfaction with website
  - NoMoreC Toolbox users
Timeline

2017

- METC approval
- Website live
- Start DBS validation study
- Co-creation meeting: promotion

2018

- Pilot partner notification
- 1st intensive promotion period
- 2nd intensive promotion period
- 1st themed event
- E-learning
- Face-to-face training for professionals
- Enabling environments via commercial stakeholders
Many thanks to the funders/supporters of the MC Free Project

- Gilead Sciences
- Johnson & Johnson
- AbbVie
- Merck Sharp & Dohme
- Roche Diagnostics
- Abbott Diagnostics
- The MSM community
- Community advisory board
- Scientific advisory board
Bedankt voor uw aandacht

C What You Can Do!