



Public Health
England

Protecting and improving the nation's health

Hepatitis C among people who inject psychoactive drugs in the UK: insights from national survey data and the way forward

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Outline

- Hepatitis C in people who inject drugs
- Insights from the unlinked anonymous monitoring (UAM) survey
 - Anti-HCV testing results
 - Self-reported HCV VCT
 - Access to care
- Way forward
 - Global health sector strategy
 - New Direct-Acting Antivirals
 - Treatment as prevention
 - Enhancing the UAM survey

Hepatitis C

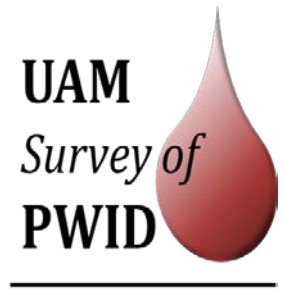
- Bloodborne virus: 6 genotypes
- Often asymptomatic until severe liver damage
 - End-stage liver disease (ESLD)
 - Hepatocellular carcinoma (HCC)
- Curable
- No vaccine

- UK: estimated 214,000 chronic cases
- At risk: people who inject drugs (PWID)

**PHE, Hepatitis C in the UK, 2016 report*

Insights from the unlinked anonymous monitoring (UAM) survey

The Unlinked Anonymous Survey of People Who Inject drugs

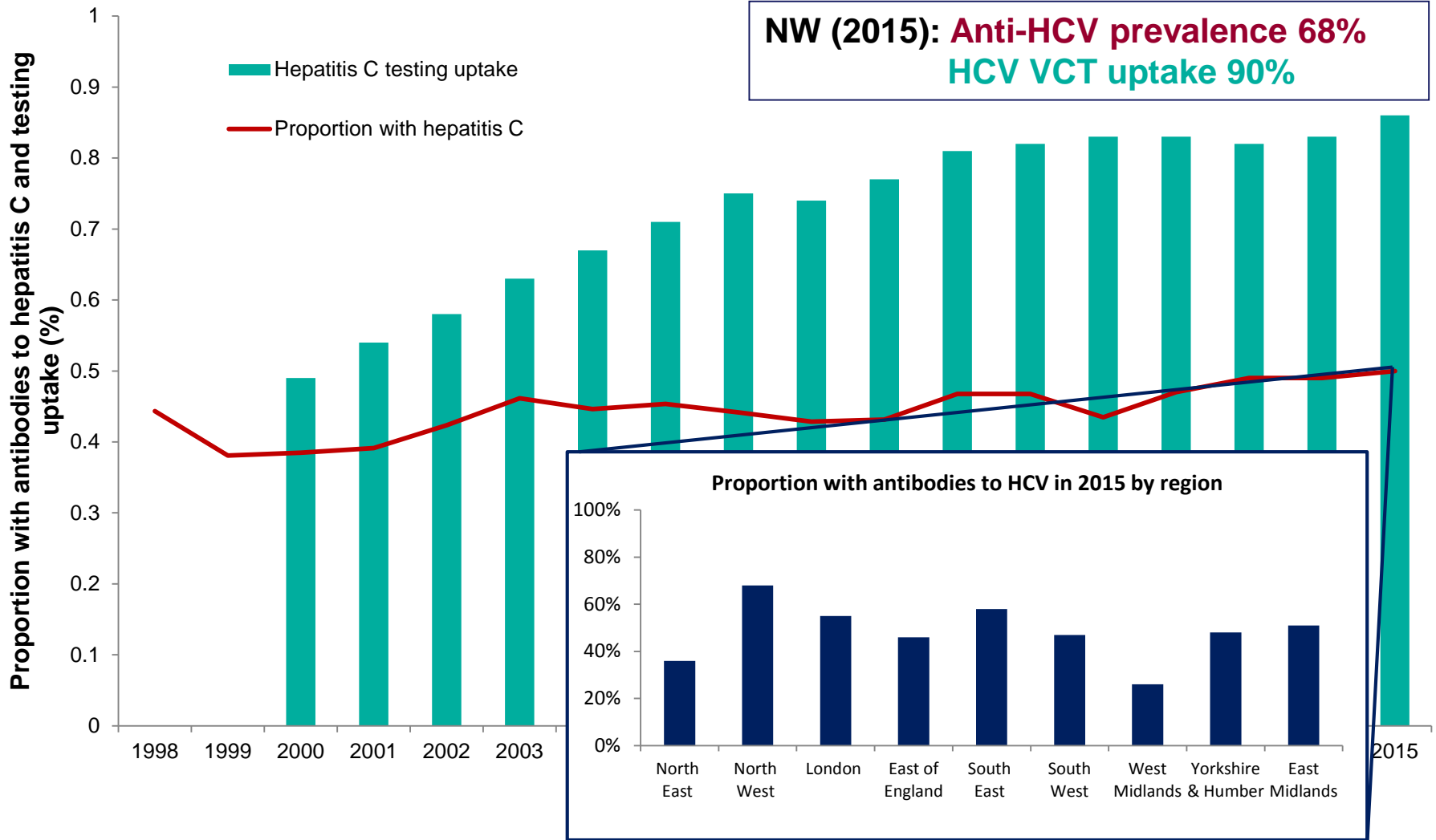


- Recruits people who inject psychoactive drugs across England, Wales & Northern Ireland
- Sentinel surveillance by voluntary recruitment at collaborating drug agencies.
- First established in late 1980s as part of HIV monitoring
- Participants
 - Complete a short behavioural questionnaire
 - Provide a Dried Blood Spot sample: HIV, HBV, HCV
- An unlinked and anonymous methodology

UAM Survey Aims:

1. Measure the prevalence of blood borne viral infections among PWID (HIV, HBV, HCV).
2. Monitor changes in both risk and protective behaviours related to drug taking.

Trends in Hepatitis C prevalence and voluntary and confidential HCV testing uptake* among PWID in EW&NI:1998/2000 - 2015



HCV testing / access to care

Unpublished results removed for public access: please contact ellen.heinsbroek@phe.gov.uk for information

Way forward: national picture

Direct-acting antiviral (DAA) therapy

- Sofosbuvir / Ledipasvir
- Oral
- Shorter treatment duration
- Improved side effects
- High sustained viral response (~cure) rates
 - >90% genotype 1
- Cost: 12/24 week course of Sofosbuvir: £35,000/£70,000

*NICE technology appraisal guidance 330:
Sofosbuvir for treating chronic hepatitis C. 2015.*

Global Health Sector Strategy

- WHO Global Health Sector Strategy (GHSS) on viral hepatitis for the period 2016-2021
- First-ever global targets for viral hepatitis control
- “Eliminate viral hepatitis as a major public health threat by 2030”

Impact

- Reducing HCV-related morbidity and mortality
 - 10% reduction in HCV mortality by 2020, 65% by 2030
- Reducing the number of new (incident) chronic infections
 - 30% reduction in HCV incidence by 2020, 80% by 2030

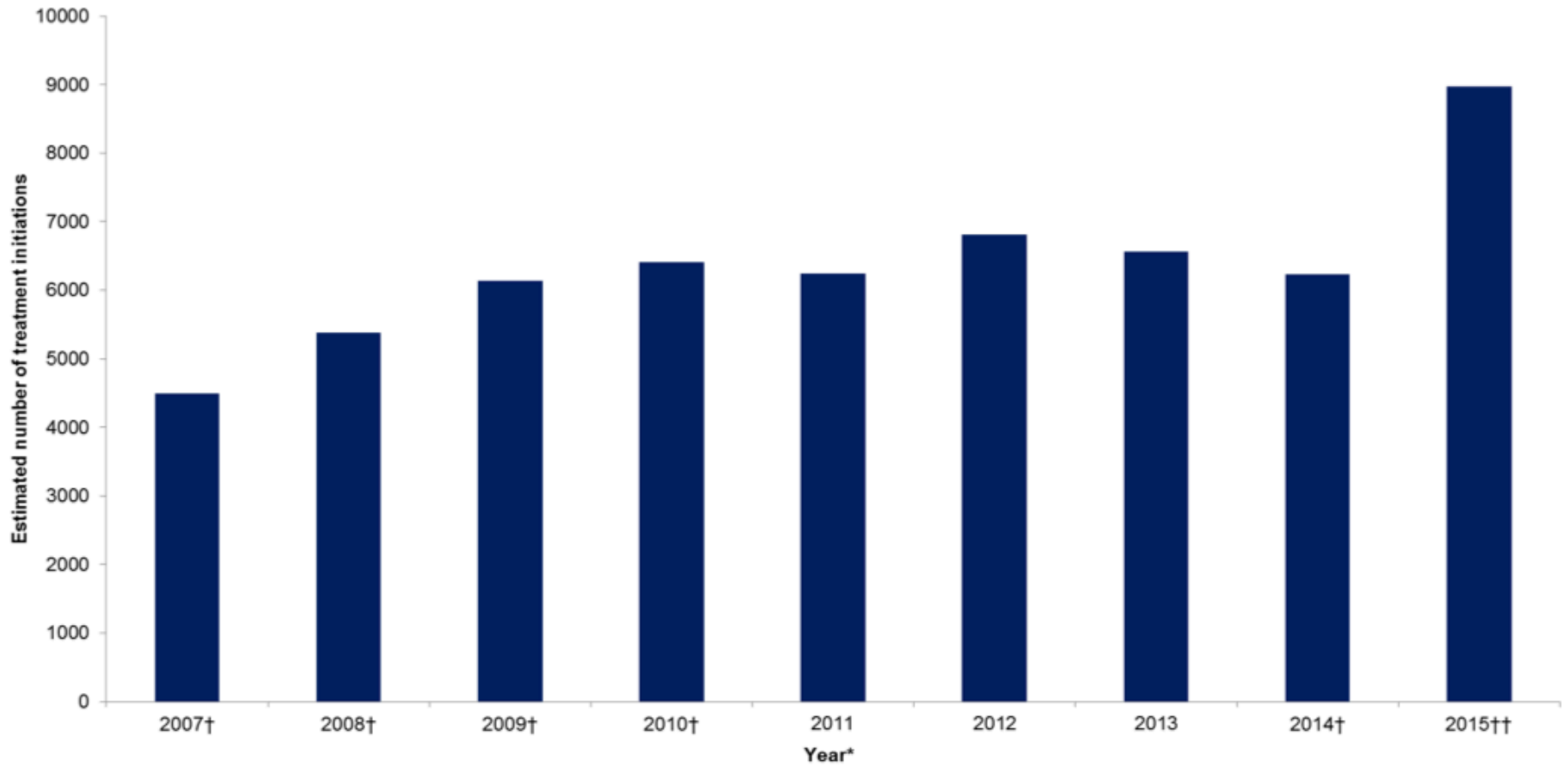
Global Health Sector Strategy

Key interventions PWID

- Harm reduction
 - 200 needles and syringes per PWID per year in 2020, and 300 in 2030
- Increased proportion diagnosed
 - 30% in 2020, 90% in 2030
- Increasing proportion and number treated
 - 80% of eligible persons in 2030

Increased number treated

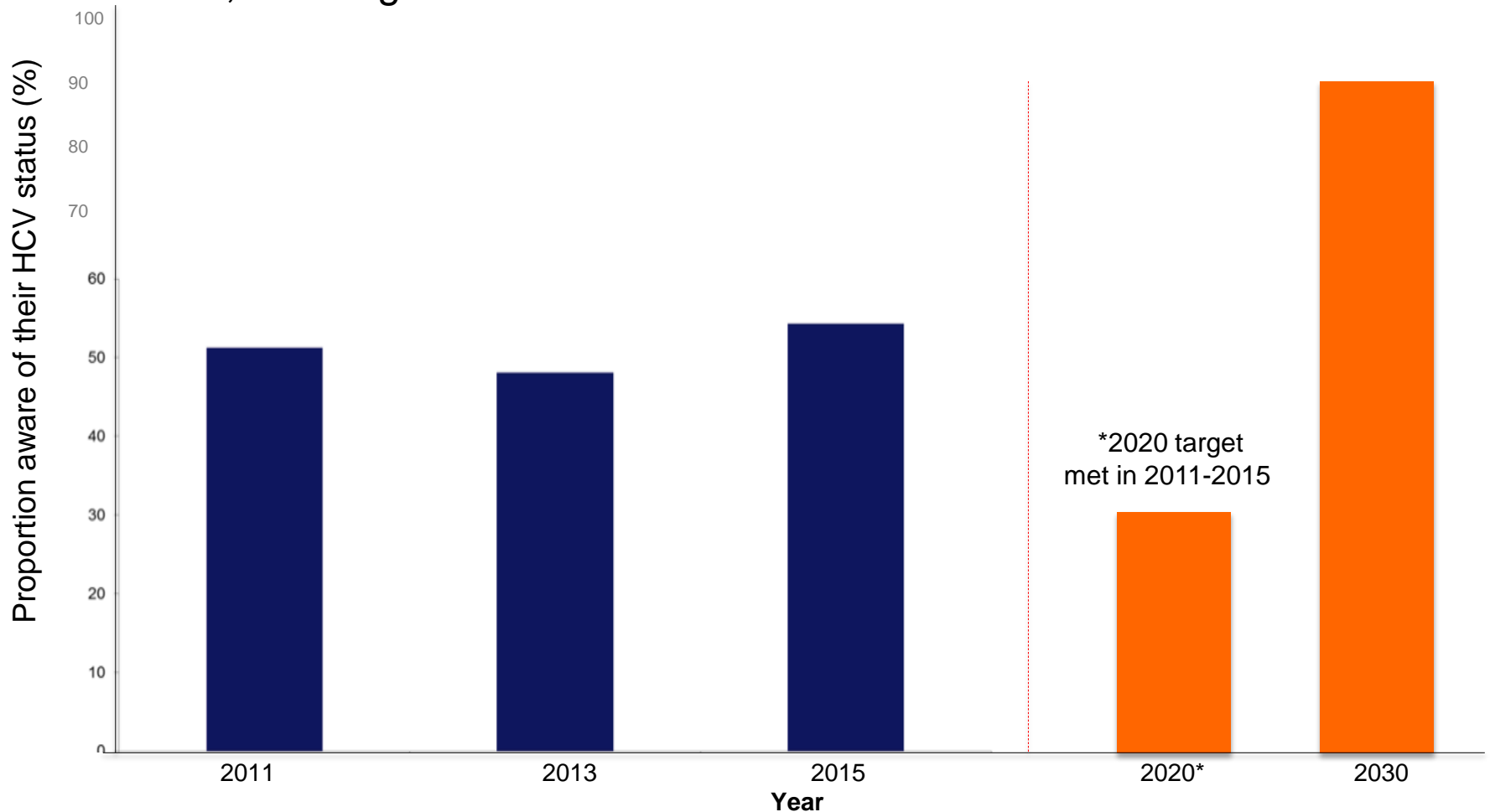
Provisional UK-wide estimates of numbers initiating HCV treatment



PHE, Hepatitis C in the UK, 2016 report

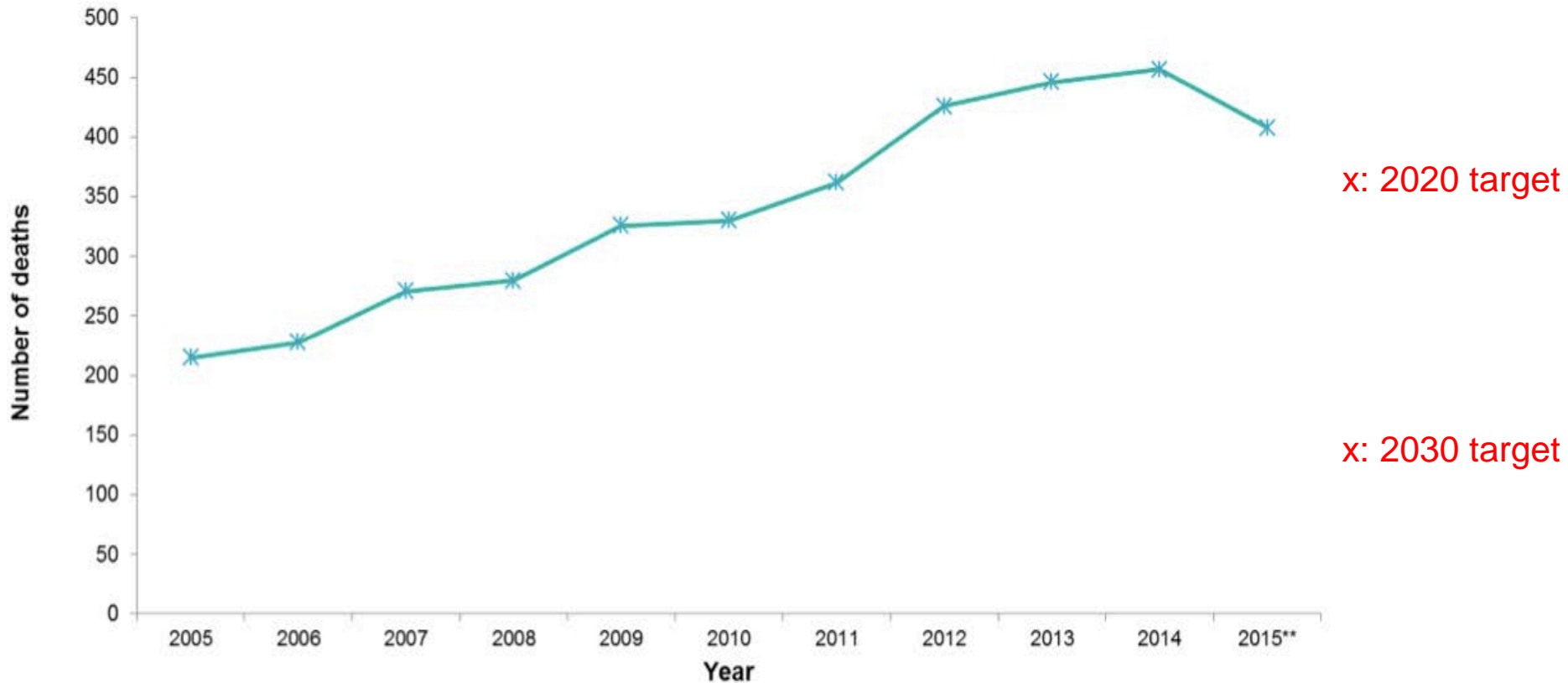
Increased proportion diagnosed

Estimated UK-wide proportion of PWID aware of their HCV infection, 2011-2015, and targets for 2020-2030



Reducing HCV mortality

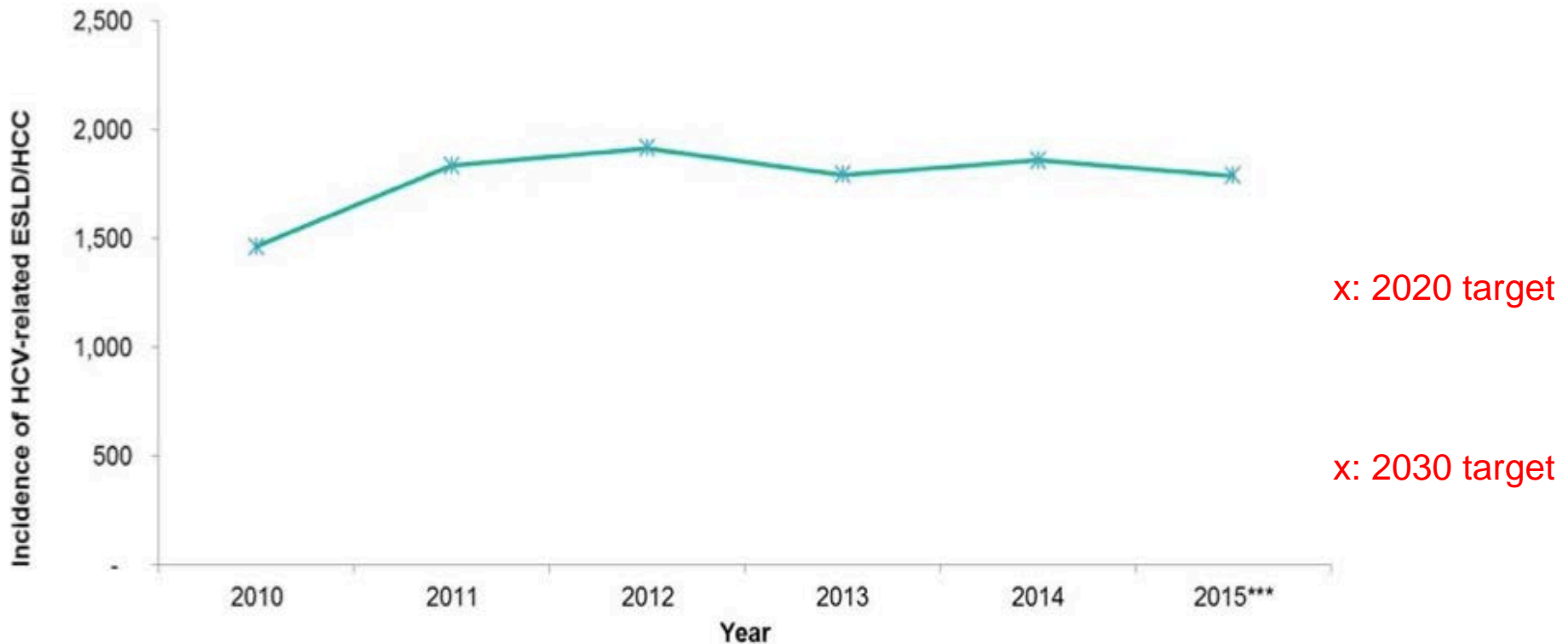
Deaths from ESLD or HCC in those with hepatitis C mentioned on the death certificate in the UK, 2005-2015



Adapted from: PHE, Hepatitis C in the UK, 2016 report

Reducing the number of new chronic infections

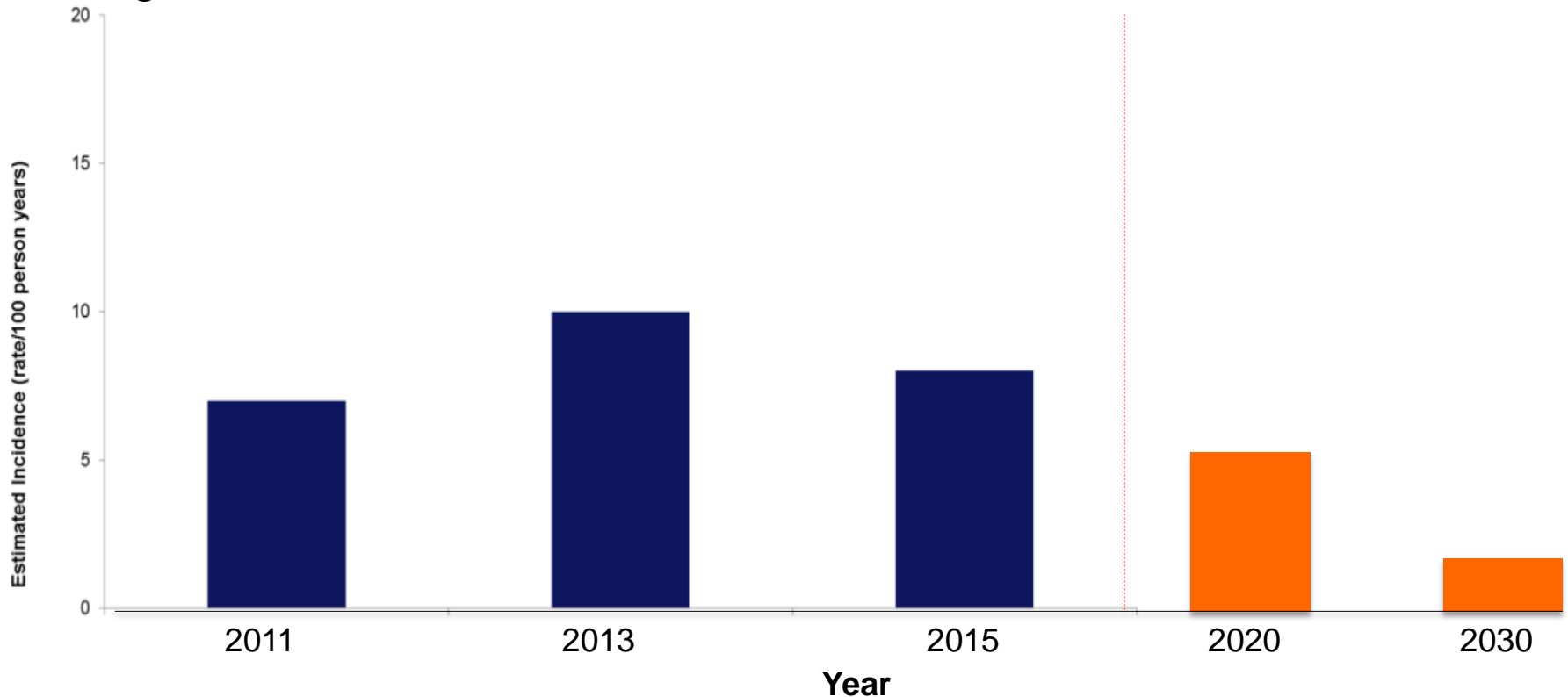
Preliminary estimates of incidence of HCV-related ESLD/HCC: 2010-2015, and 2020 and 2030 targets



Adapted from: PHE, Hepatitis C in the UK, 2016 report

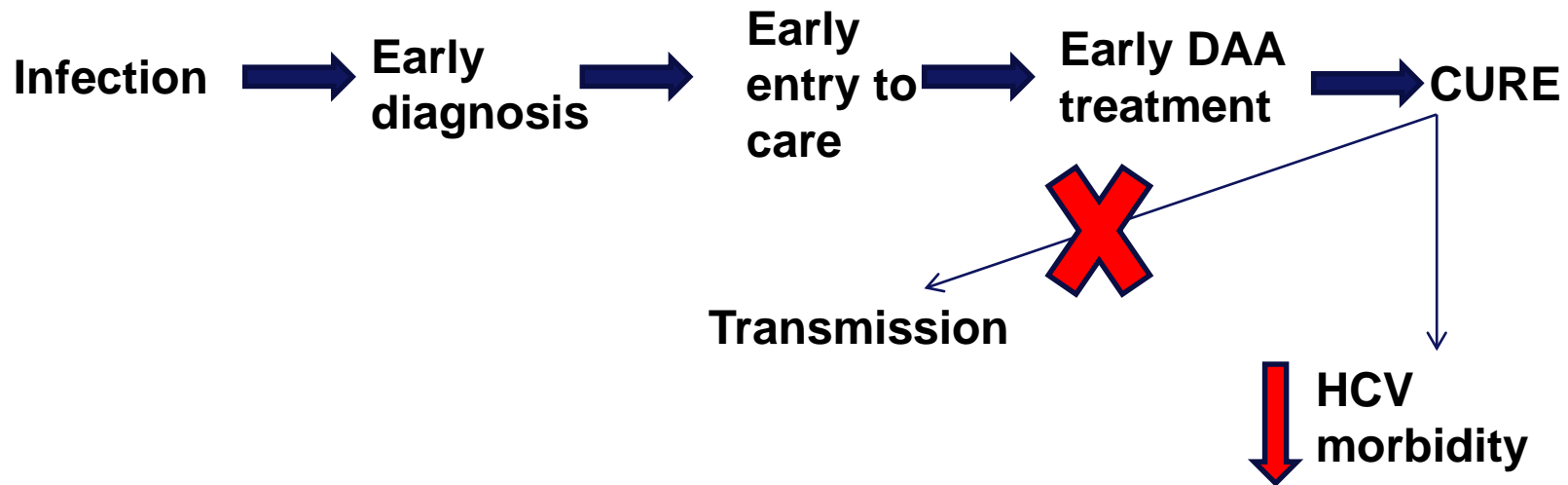
Reducing the number of new infections

Estimated UK-wide incidence of HCV among PWID 2011-2015, and goals for 2020-2030



Adapted from: PHE, Hepatitis C in the UK, 2016 report

Directly acting antivirals and Treatment as Prevention



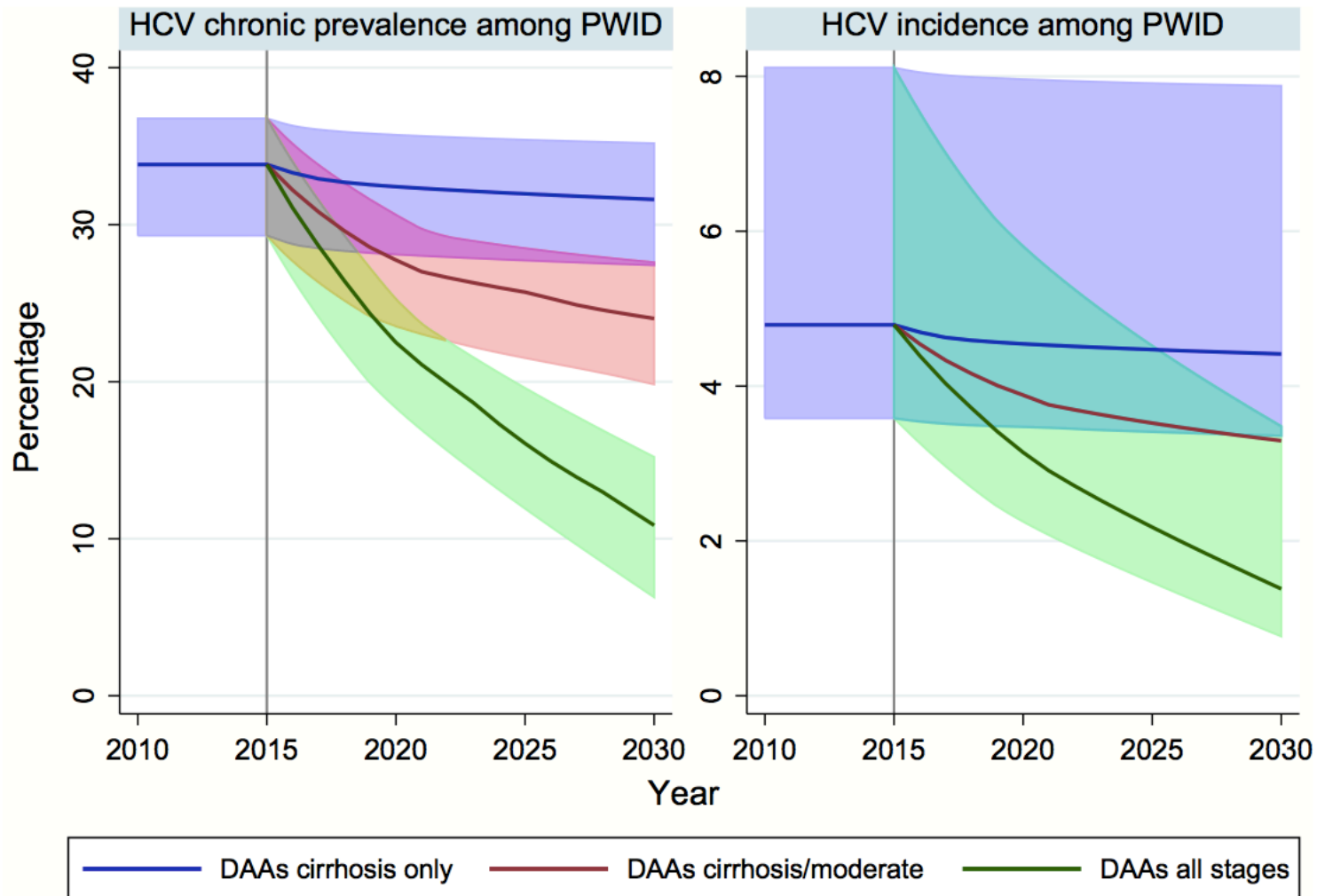
Treatment as prevention

Modelling study: impact treatment severe / moderate / mild disease

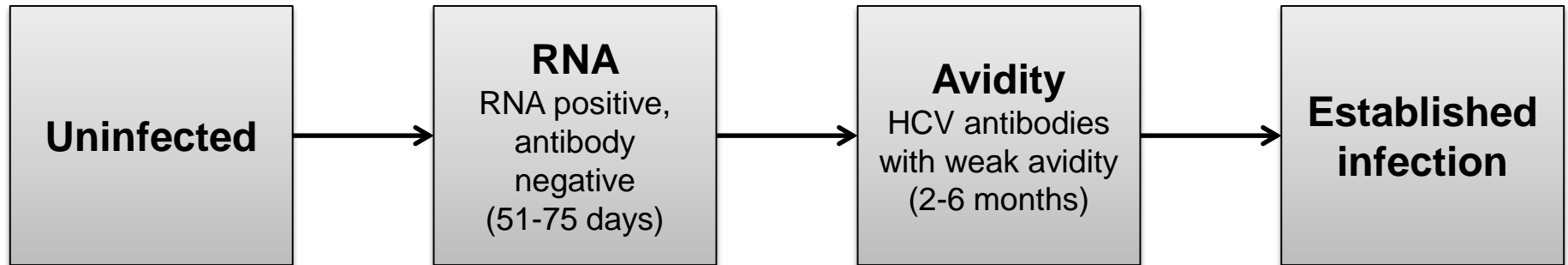
- Severe (3500/yr):
 - ESLD/HCC incidence from 1240 cases in 2015 to 630 (95%CI 530-770) in 2020
 - Negligible preventative impact
- Mild (2500/yr):
 - Negligible impact on ESLD/HCC incidence within 15 years
 - Annual prevalence/incidence from 34%/5% in 2015 to 11%/1.4% in 2030

Harris et al, J Viral Hep, 2016 23, 631–643

Modelling studies



Measuring hepatitis C incidence



All UAM samples from 2017 onwards will be routinely tested for HCV RNA.

Discussion

- Fluctuations in incidence
 - Incidence unstable in cross-sectional surveys
 - Transient state of incident infections/outbreaks
- Trends in incidence need longer-term monitoring and mathematical modelling
- Importance of avidity/RNA for monitoring incidence, chronic prevalence, reinfection

Conclusion

- +/- 50% PWID infected with HCV
- Little change in key indicators 2011-2015

New opportunities

- Direct-acting antivirals
- Global Health Sector Strategy (GHSS)

- Change required to reach GHSS targets 2020 & 2030
- Treatment as prevention expected to reduce incidence

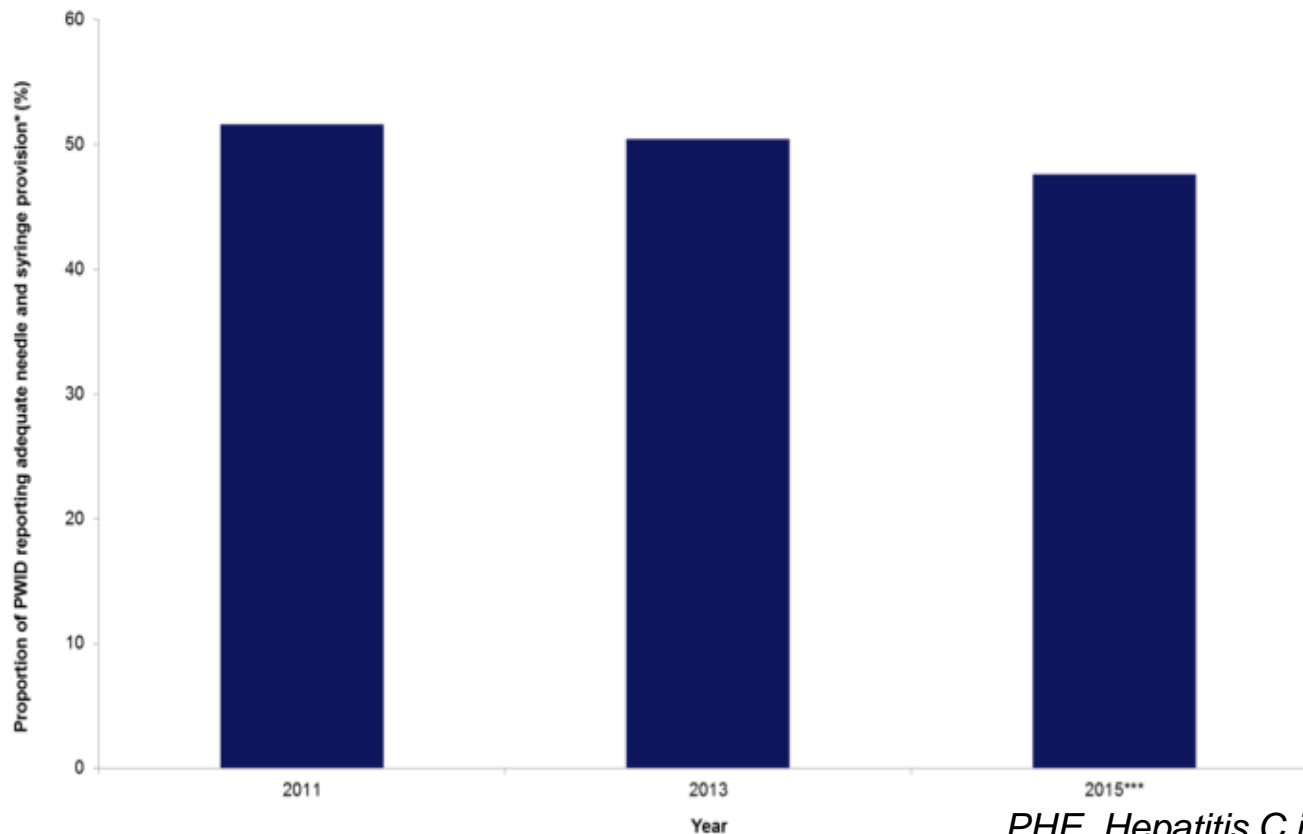
Thank you for your attention

We are grateful to the survey participants and collaborating sites across the UK for their support of the UAM Survey of PWID

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Adequate harm reduction

Estimated UK-wide proportion of PWID reporting adequate needle and syringe provision, 2011-2015



PHE, Hepatitis C in the UK, 2016 report

Trends in equipment sharing among current* PWID in EW&NI: 1991 - 2015

