

Evidence-based public health guidance for integrated HBV, HCV and HIV testing in Europe

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INTRODUCTION

In 2010, ECDC published an evidence-based guidance on HIV testing in the EU/EEA. The guidance highlighted how to develop a national HIV testing strategy.¹ A 2015 evaluation of the guidance recommended an update to include the latest evidence, self-sampling and testing and examples of best practice.²

In parallel, ECDC conducted a survey to identify gaps in hepatitis B (HBV) and hepatitis C (HCV) testing policies and practices in the EU/EEA. Survey results identified the need for an EU-level testing guidance for HBV and HCV.³

These findings led ECDC to launch two projects to update the 2010 HIV testing guidance and to develop an evidence-based guidance to support national testing policies for HBV and HCV. Although initially planned as two independent processes, the development of the evidence-based guidance for hepatitis B and C and HIV testing were integrated to produce a single guidance document.

Guidance objectives:

1. To provide an evidence-based framework to help EU/EEA countries develop, implement, monitor and evaluate their own national HBV, HCV and HIV testing guidelines and programmes
2. To support efforts to increase the coverage and uptake of HBV, HCV and HIV testing, while encouraging the integration of testing interventions for all three viruses
3. To help reduce the number of individuals unaware of their infection by promoting early diagnosis and prompt linkage to care

METHODS

Systematic reviews of the evidence on strategies to improve HBV, HCV and HIV testing in the EU/EEA (2010-2017) were performed. Grey literature published since 2008 for HBV/HCV and 2010 for HIV was also reviewed. The evidence was reviewed following international standards, and methodically assessed for quality and risk of bias through standardised appraisal checklists and tools. Findings from the hepatitis and HIV systematic reviews were integrated for the purpose of evidence synthesis using a pragmatic approach.

The evidence base from the systematic reviews was compiled by developing separate decision-making tables (DMT); one each for partner notification and the settings: primary healthcare, hospitals, other healthcare, community, self-testing and self-sampling.

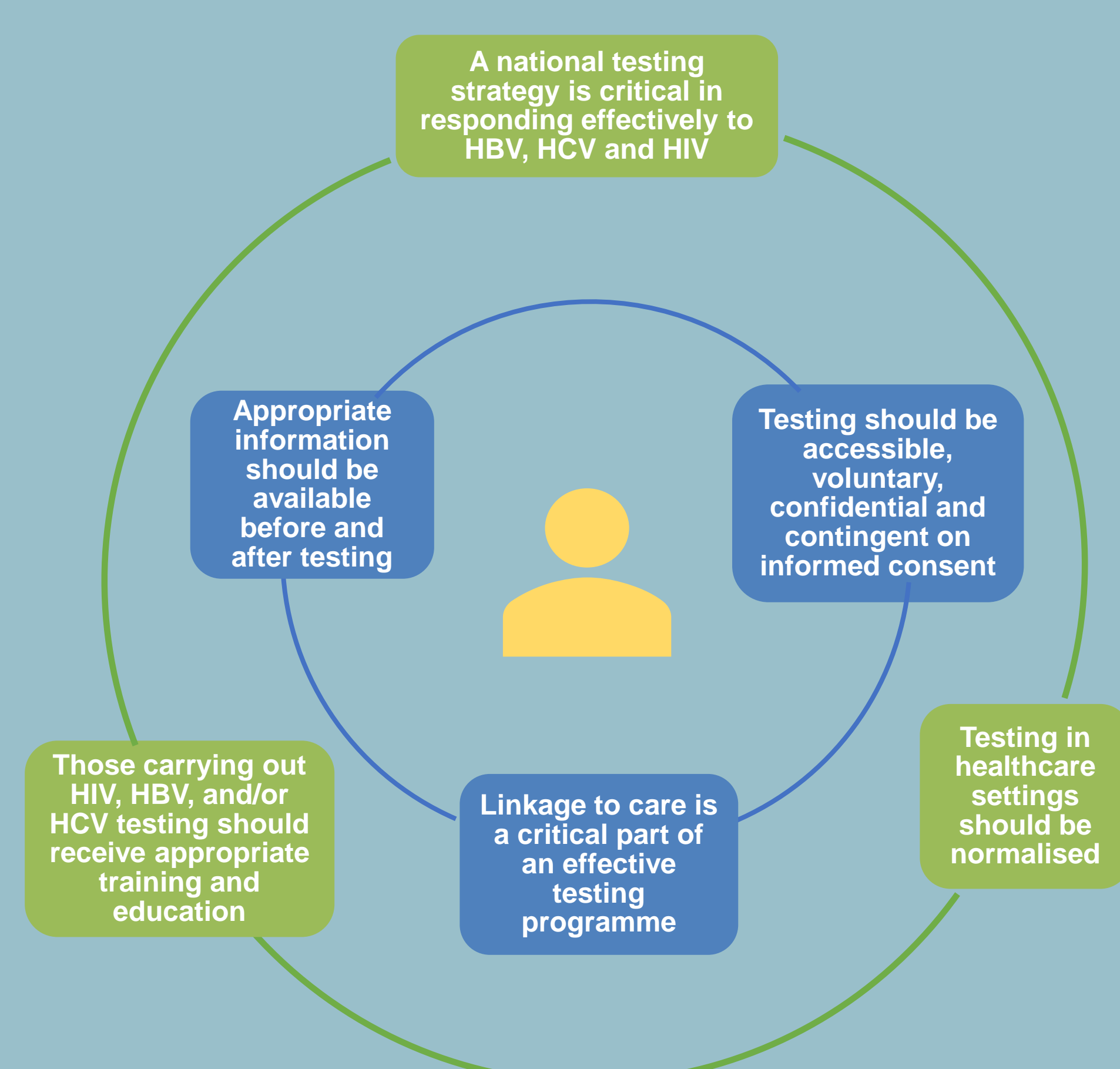
A multisectoral panel of European HIV and hepatitis experts, the Expert Panel (EP), was invited to contribute to the guidance development. Specifically the EP provided input on the evidence and agreed upon the draft recommendations using a consensus-building approach at a face-to-face meeting in Stockholm. The EP was additionally consulted throughout the guidance development to ensure accurate representation of expert opinion.

Good-practice examples of testing services were identified through the systematic reviews, two open calls and selected for inclusion by the EP and project consortium.

RESULTS

The evidence included 108 papers on HBV/HCV testing, 368 on HIV testing and 92 case studies, of which 15 were selected for inclusion in the guidance. The evidence was predominantly from the UK and Western Europe. Data were variable in presentation and quality and could not be pooled. To improve the utility and relevance of the guidelines, a setting-based approach was adopted with a focus on risk groups. A total of 43 recommendations were made; covering testing modalities in primary healthcare, hospitals, other healthcare and community settings. New to the guidance are optimal testing frequency for at-risk groups, the latest evidence for self-testing/self-sampling and partner notification in addition to case studies exemplifying the recommendations.

FIGURE 1. Six overarching principles for HBV, HCV and HIV testing programmes:



CONCLUSIONS

Traditional systematic review methodologies pose a challenge for developing public health guidance, particularly when integrating different diseases. Where evidence is lacking in specific topic areas and regions, systematic review enhanced by expert panel consensus and case studies can produce novel guidance where evidence is lacking in specific topic areas and regions. An integrated HBV/HCV/HIV approach can help countries address all three infections more effectively and efficiently. The evidence-based guidance should encourage improved coverage and uptake in the EU/EEA, however more evidence is needed on effective implementation and integration of testing for the three diseases, from service delivery models, particularly from Eastern Europe and Central Asia, self-testing/self-sampling and partner notification. Ongoing evaluation of their implementation across Europe is essential.

GUIDANCE HIGHLIGHTS

Who to test?

The guidance identifies population groups suitable for targeted HIV, HBV and HCV testing due to higher risk of infection and include, amongst others, men who have sex with men, trans* people, people who inject drugs and migrants.

Where to test?

The guidance outlines where, how and when to test for HBV, HCV and HIV by providing evidence-based options of testing strategies in a variety of settings including:

- Primary health care settings
- Hospital settings
- Other health care settings (e.g. STI clinics, pharmacies, prisons and some drug and harm reduction services)
- Community settings (including drug and harm reduction services); and
- Self-sampling and self-testing

How often to test?

The guidance presents the rationale and suggested testing frequencies for at-risk population groups based on expert opinion, existing guidance and recent evidence. The guidance is intended to support the identification of target groups for national and subnational testing programmes and serve as an overarching guide to testing frequency across all settings.

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