

The College of Emergency Medicine

Best Practice Position Statement

HIV Testing in the Emergency Department



**Revised edition
October 2012**

Summary of recommendations

1. HIV testing should be performed in the ED setting when it influences immediate clinical management and improves patient care. Any doctor working in an emergency department should be able to organise and consent a patient for an HIV test. *Strong recommendation.*
2. Emergency Departments are not a suitable environment for ad hoc screening programs, particularly where local prevalence rates are uncertain or below 2/1000. *Strong recommendation*
3. The HIV seroprevalence rate in the catchment population should be known before any HIV testing program is introduced. *Strong recommendation*
4. Emergency Department HIV testing may be offered routinely where the local diagnosed HIV prevalence exceeds 2/1000. *Weak recommendation*
5. There is no current evidence to support the establishment of Emergency Department HIV testing where local diagnosed HIV prevalence is less than 2/1000. *Weak recommendation*
6. Safeguards are required before introducing routine Emergency Department HIV testing. These safeguards include: a systems-wide approach, adequate resources to meet the substantial set-up and staffing costs, and the development of robust protocols for the transfer of patient care with reactive or positive results to appropriate care and support services. *Strong recommendation*

Scope

This guideline has been developed to assist Emergency Physicians and healthcare managers in the establishment of human immunodeficiency virus (HIV) testing in Emergency Departments. The guideline offers recommendations regarding the principles and safeguards required for the implementation of HIV testing in the Emergency Department setting.

Reason for development

Early diagnosis and treatment for HIV prolongs life, reduces transmission, improves quality of life and has been demonstrated to be a cost-effective public health intervention.¹⁻⁹

Routine offer of an HIV test is currently recommended to all medical admissions, all patients accessing secondary care or having a planned venepuncture for any reason in populations where the diagnosed HIV seroprevalence exceeds 2/1000.¹⁰⁻¹² Furthermore, the Chief Medical Officer (CMO) of England, Wales, Scotland and Northern Ireland has called on every doctor in the UK to improve the detection and diagnosis of HIV in non-HIV specialties in order to reduce the harm caused by late presentation.¹³

Prevalence of HIV in the Emergency Department setting:

Evidence from the United States (US) indicates that infection with HIV is rising in non-traditional risk groups (e.g., racial and ethnic minorities, socioeconomically disadvantaged, heterosexual men and women) and the prevalence of undiagnosed infection remains relatively high in the patient populations in urban EDs.¹⁴

The unselected seroprevalence of HIV infection in urban EDs in the US ranges from approximately 1% to 4%.^{2-5,14} Meanwhile, in the UK, estimates of undiagnosed HIV infections rely on data from unlinked anonymous (UA) surveys conducted in three selected audit populations: pregnant women, people who inject drugs and sexual health clinic attendees.¹⁵

No specific data regarding the prevalence of HIV infection in UK Emergency Departments currently exists, though the prevalence of HIV is usually higher in people who attend emergency departments than the local population. Meanwhile, there are an estimated 86,500 people living with HIV (both diagnosed and undiagnosed) in the UK and a quarter (26%) of HIV-infected people are thought to be unaware of their infection.¹⁶ In that context, the National Institute for Clinical Excellence (NICE) Public Health Committee in the UK recommends HIV testing for all patients accessing secondary care (including Emergency Departments) or having a planned venepuncture for any reason in areas where the diagnosed HIV prevalence exceeds 2/1000.^{11,12}

HIV Testing in Emergency Departments:

The evidence regarding how HIV testing in the Emergency Department affects length of stay and patient flow in the Emergency Department is contradictory. Evidence from the UK suggests that Emergency Department HIV testing may have no significant effect on the time spent with patients, ED patient flow or total time spent in the ED.^{17,18} In contrast, US evidence suggests ED length of stay is significantly longer (approximately 1.7 hours added to the length of stay) for patients undergoing counselling, testing and referral in the Emergency Department.¹⁴ Nevertheless, it is intuitively logical that HIV testing should be performed in the Emergency Department setting when it influences immediate clinical management and improves patient care. There are a number of clinical situations where knowing the HIV status of a patient in the Emergency Department may be relevant to their care during that attendance. These include: occupational exposure, post-exposure

prophylaxis following sexual exposure, and unwell patients in whom a diagnosis of HIV would influence immediate management. Testing should be offered when a patient presents with an indicator condition, such as rash with fever.

Where local HIV prevalence rates exceed 2/1000, consideration should be given to routine testing of all adult patients who undergo blood tests. The guideline development group recognised that this was a challenging area for Emergency Departments in the UK.

Establishing HIV testing services in non-specialist settings raises issues regarding acceptability by patients and staff. Current evidence suggests that there is a high level of patient and staff acceptability in the UK regarding the routine offer of HIV testing within non-specialist settings, including the Emergency Department.¹⁷⁻²⁰

Safeguards for HIV Testing in Emergency Departments:

In general, the Emergency Department is not a suitable environment for ad hoc disease screening programs, particularly where local disease prevalence rates are uncertain. Emergency Physicians should know the diagnosed HIV seroprevalence rate in their catchment population before introducing HIV testing programs. The diagnosed HIV seroprevalence is well known for all areas in the UK and can be easily accessed via the Health Protection Agency website.¹⁵

The following safeguards should be adopted if a routine HIV testing system in an emergency department is planned:

1. A systems-wide approach must be adopted. Emergency Department HIV testing should be integrated with the resources and governance of the entire health care system.²¹
2. Adequate funding must be available to meet the substantial set-up and staffing costs required for its sustainability.^{20,21}
3. Emergency Department HIV testing programs must be backed up by strong governance and effective pathways. These pathways for people with a positive test in the Emergency Department need to be robust because the negative and positive predictive values vary from test to test and depend on the local diagnosed HIV seroprevalence rate.^{20,21} Additionally, care pathways must also take into account the seroconversion window period.
4. Consent for HIV testing in Emergency Departments should be bound by General Medical Council (GMC) guidance that applies to all diagnostic testing and should involve explanation of the benefits of the test to the individual and details of how the results will be given to the patient.¹⁰
5. HIV testing in the unconscious patient or patient who lacks capacity should only be done if it is in the interest of the patient and their clinical care.
6. The specificity of point of care HIV testing can be quite low. If point of care testing is used for HIV testing in the Emergency Department, it is mandatory to include a clear understandable and translated phrase so that patients understand what a reactive test means and that it DOES not mean they are HIV positive.
7. The responsibility for following up a patient with a positive test and subsequent contact tracing should belong to the appropriate sexual health service, not the emergency department.

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First published in June 2011

Reviewed and revised October 2012

Acknowledgements

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Review

Usually within three years or sooner if important information becomes available.

Disclaimers

The College recognises that patients, their situations, Emergency Departments and staff all vary. This guideline cannot cover all possible scenarios. The ultimate responsibility for the interpretation and application of this guideline, the use of current information and a patient's overall care and wellbeing resides with the treating clinician.

Appendix 1

Methodology

Where possible, appropriate evidence has been sought and appraised using standard appraisal methods. High quality evidence is not always available to inform recommendations. Best Practice Guidelines rely heavily on the consensus of senior emergency physicians and invited experts.

Evidence Levels

1. Evidence from at least one systematic review of multiple well designed randomised control trials
2. Evidence from at least one published properly designed randomised control trials of appropriate size and setting
3. Evidence from well designed trials without randomisation, single group pre/post, cohort, time series or matched case control studies
4. Evidence from well designed non experimental studies from more than one centre or research group
5. Opinions, respected authority, clinical evidence, descriptive studies or consensus reports.

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