HIV:
low prevalence is no excuse for not testing

HIV IN UK PRIMARY CARE
There are currently an estimated 86,500 individuals living with HIV infection in the UK, one-quarter of whom are unaware of their infection.1 Of the 6630 adults newly diagnosed in 2009, 52% had a CD4 count less than 350 x 10^6/L at the time of diagnosis, the recommended threshold at which antiretroviral therapy should be commenced.1 Thirty per cent were diagnosed with a CD4 count less than 200 x 10^6/L, which is indicative of severe immune deficiency and associated with a significantly higher risk of death in the first 3 months.3

Earlier diagnosis allows more timely initiation of therapy and is associated with a higher estimated life expectancy than for individuals started on treatment in late disease. Approximately one-quarter of all deaths in HIV-positive people are attributable to late diagnosis.2 Furthermore, earlier diagnosis has potential benefits to the wider public health. Knowledge of HIV infection is associated with behaviour change to reduce the risk of onward transmission.2 In addition, effective antiretroviral therapy substantially reduces the infectiousness of the HIV-positive individual, significantly reducing the likelihood of onward transmission to a potentially negligible level.4 The Health Protection Agency recently estimated that the prevention of one new HIV infection saves the public purse between £280,000 and £360,000 in direct lifetime healthcare costs.3

The public health challenge is to reduce the number of undiagnosed individuals, and to diagnose people living with HIV infection earlier. There is widespread agreement on the need for greater and wider testing for HIV infection outside the traditional setting in sexual health clinics, including testing in primary care and community settings. Since 2001, increasing HIV testing in primary care has been part of the National Strategy for Sexual Health and HIV in England.4

<table>
<thead>
<tr>
<th>Areas were diagnosed HIV prevalence ≥2 in 100000</th>
<th>All general practices, regardless of local HIV prevalence</th>
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<tbody>
<tr>
<td>(A) HIV test offered to all adult patients newly registered to general practice</td>
<td>(B) HIV testing routinely offered to:</td>
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<tr>
<td>1. Injecting drug users</td>
<td>1. Bacterial pneumonia</td>
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<tr>
<td>2. People from countries of high HIV prevalence (&gt;1%)</td>
<td>2. Peripheral neuropathy</td>
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<tr>
<td>3. Men who have sex with men</td>
<td>3. Severe/recalcitrant seborrhoeic dermatitis or psoriasis</td>
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<tr>
<td>4. Sexual partners of HIV positive individuals</td>
<td>4. Multidermatomal/recurrent herpes zoster</td>
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APPRAOCHES TO TESTING
What testing strategies are appropriate for general practice, and are these likely to be different in areas of low or high prevalence of HIV infection in the local population? The 2008 UK National HIV Guidelines for HIV Testing advocate different testing strategies for areas of different HIV prevalence.5

In areas where prevalence of diagnosed HIV infection exceeds 2 in 1000, universal screening for all newly registered adult patients is recommended (Table 1, part A). Non-UK data suggest screening at this threshold is cost-effective, and UK cost-analysis is currently being undertaken.6

For the majority of the UK population, in whom prevalence is less than 2 in 1000, a targeted approach is advocated. Testing is recommended for individuals from populations with known high HIV prevalence or that have a higher risk of exposure (Table 1, part B), and for individuals who present with conditions where HIV infection may form part of the differential diagnosis (Table 1, part C). These indicator diseases are surprisingly common in general practice.

‘NORMALISING’ THE HIV TEST
Current rates of HIV testing in primary care are low. There are large variations between practices, with some promoting HIV testing and others not testing at all.10 Recent data suggest patients find the routine offer of an HIV test in primary care...
acceptable, with most proceeding to test.8
Reasons for patients not testing include a
recent negative test or a belief they were
not at risk. Extensive pretest counselling
is not considered necessary for most
people. The essential elements of pretest
discussion are to explain the benefits of
testing for the individual and how the
result will be given, which is no different
from most other medical tests.4 Written
consent is usually unnecessary which is
consistent with General Medical Council
guidance on consent.11
HIV infection is still an uncommon
diagnosis for most GPs and this may
counter to low testing rates. However,
an important role for GPs is in diagnosis,
including consideration of uncommon
conditions: combined prevalence of ‘rare’
diseases in general practice is
approximately 6–8%.12
As patients with HIV get older, GPs are
likely to assume a greater role in their
routine care, managing unrelated
pathology as well as the complications of
HIV.13,14 Increasing testing now may help to
develop the skills and confidence to
achieve this.
Early diagnosis of HIV is no different
from that of other chronic diseases in that
it substantially improves treatment
outcome. We therefore argue that missing
HIV infection in primary care should be
considered no differently to failure in
diagnosis of any other chronic medical
condition or even that of cancer. A large
proportion of individuals who are HIV-
positive remain undiagnosed. HIV testing
is simple to perform, does not require
lengthy pretest discussion, and is
acceptable to the majority of patients.
We would urge GPs to increase HIV
testing, and argue that this is important in
both low and high HIV prevalent areas in
the UK.

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DOI: 10.3399/bjgp11X567009

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