



HIV Incidence Surveillance

Health Care Worker Fact sheet

Version 2.1 01/11/08

Why is HIV incidence surveillance needed?

Newly diagnosed cases of HIV have been increasing year on year from the mid 1990's, with an estimated 7000 new diagnoses in 2007, almost double that seen in 2000. Because of the long delay between infection and the onset of symptoms, typically between eight and eleven years, those being diagnosed with HIV may have been infected years before. Current HIV testing and surveillance methods, can not distinguish whether this increase is due to an increase in HIV transmission (therefore an increase in incidence) or due to increased testing of previously undiagnosed infections.

By enriching the data on those newly diagnosed infections with information on whether or not their infection is likely to have been recently acquired will give us a much clearer picture of those that are at increased risk of HIV. We will also be able to more effectively monitor and evaluate HIV prevention initiatives; target resources to the populations in greatest need; monitor HIV testing strategies; and highlight those programs that are most effective in reducing transmission.

How does the test for recent HIV infection work?

Current tests for HIV infection are aimed at detecting antibodies targeting HIV in the blood of infected individuals. These antibodies usually begin to appear within a few weeks after infection, but may take longer in some individuals. Over time, an individual's immune response to HIV increases and the antibody response matures. Recent advances in laboratory methods have made it possible to exploit the characteristics of the maturing antibody response to distinguish between long standing and recently acquired HIV infections. These tests are collectively called RITA (Recent Infection testing Algorithm) and can determine if an individual was infected within a defined recent interval or 'window period' (typically around 6 months).

How does HIV incidence fit into the existing surveillance programs?

Incidence surveillance is an extension to the HIV and AIDS reporting system for all new HIV diagnoses. We do not need to collect additional information from the reporting laboratories or clinics, we need to ensure that the current HIV report forms are filled out as fully and accurately as possible.

RITA testing uses a small amount of all left over diagnostic sample from each confirmed positive sample. The test will be carried out by the Virus Reference Department at the Health Protection Agency, the results of which will be returned to the laboratory, and then passed on to you. It is important that the results of the RITA test are interpreted in conjunction with other clinical information such as CD4 count, viral load, and the presence of an AIDS at diagnosis (as this can lead to a false recent result)

Who will be included in the surveillance system?

RITA testing, through a phased roll-out programme, will be extended to include all newly diagnosed cases of HIV and form part of the routine tests currently used to characterise an individual's HIV infection including CD4 count, viral load and HIV resistance testing. It is

important that we include all newly diagnosed cases of HIV to enable us to make the most accurate estimates of HIV incidence.

What is expected?

Health Care Workers perform a pivotal role in all our national surveillance strategies. To estimate national HIV incidence, however, we need to ensure that the information collected on the new HIV diagnosis report forms are complete and accurate. We are particularly keen to ensure that a patients previous negative test is recorded in the section on ‘testing history’ and the use of anti-retroviral treatment for HIV within 6 months prior to their diagnosis, including PEP (post-exposure prophylaxis) and PrEP (pre-exposure prophylaxis) are recorded in the ‘comment’ section of the form.

Do I need to get consent from the patient?

The RITA testing will form part of the routine tests carried out for all newly diagnosed cases of HIV in much the same way HIV resistance testing is done. Each patient should be given a copy of the patient information sheet (see attached) explaining the test carried out for all newly diagnosed patients; this includes RITA testing. This will provide the patient with the opportunity to decline any one of the tests mentioned.

How will the UK HIV incidence data be used?

Our intention is to gain new insights into the HIV epidemic in the UK by identifying populations and/or subpopulations where a greater risk of transmission, and therefore a greater need for intervention exists. Estimates of HIV incidence can also supply additional information for advocating, designing and planning public health action as well as providing the most direct means for evaluating the impact of intervention initiatives. In addition, incidence data can be linked with HIV resistance database to give insights into transmitted drug resistance.

What other centres are involved?

HIV incidence surveillance is being rolled-out in phases, and will eventually cover all newly diagnosed HIV infections. All participating centres will be listed in the surveillance tables and HIV incidence newsletters that will be sent out to all centres.

How do I get more information?

If you require any additional information, or clarification of anything written here, please contact:

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