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**Standardization of management of occupational exposure to HIV/blood-borne infections and evaluation of post-exposure prophylaxis in Europe**

**Executive summary**

Nine European countries participated in the project coordinated by the National Institute for Infectious Diseases “Lazzaro Spallanzani” in Rome, Italy: Croatia, Denmark, France, Germany, Italy, Portugal, Spain, Switzerland, and the United Kingdom.

National guidelines and recommendations, local bulletins, written protocols, published data or presentations from national and international conferences, and any other document relevant to occupational exposures to HIV in HCWs, antiretroviral post-exposure prophylaxis (PEP), exposures to hepatitis B virus (HBV) and hepatitis C virus (HCV) in health care workers (HCWs) and vaccination against HBV, were collected, in order to define the state of the art.

A literature review was conducted using the key terms *HIV, AIDS, HBV, HCV, occupational infection, health care workers, occupational risk, occupational exposure, hepatitis B vaccination, and antiretroviral prophylaxis*, searching the MEDLINE and AIDSline databases of MEDLARS (National Library of Medicine, Bethesda, MD). The bibliographies of selected articles were also searched for pertinent studies.

Representatives of the participating member countries, who are expert in the field of blood-borne pathogens transmission prevention and PEP, were also asked to fill an ad-hoc structured questionnaire, in order to assess current guidelines, policies, and data on occupational exposures to HIV and the management of antiretroviral PEP in HCWs, occupational exposures to HBV and HCV, vaccination against HBV, management of post-exposure anti-HBV prophylaxis and follow-up in HCWs. The questionnaires were reviewed and entered into a database at the coordinating centre to compare the results within the participating countries.

Identified differences and analogies, existing experiences and scientific evidences regarding the main issues in this field were analyzed and discussed during two consensus meeting held in Rome, Italy, in January and June, 2002. Members of the working group were convened to discuss the first draft of the **European recommendations for the**

**management of health care workers occupationally exposed to HIV, HBV and HCV and on antiretroviral PEP against HIV.** Subsequently, a second draft was produced incorporating comments and judgments of the working group. They reviewed the second draft and submitted comments, which were incorporated into a third and final version of the two documents.

The final document on the state-of-the-art on current policies and activities on the management of occupational HIV exposures and PEP in EU countries, and the Recommendations for Post-Exposure Prophylaxis against HIV Infection in Health Care Workers in Europe,

- were presented during the XIV International AIDS Conference in Barcelona, Spain, July 7-12 2002.) ([http://www.aids2002.com/Program/ViewAbstract.asp?id=/T-CMS\\_Content/Abstract/200206290751295929.xml](http://www.aids2002.com/Program/ViewAbstract.asp?id=/T-CMS_Content/Abstract/200206290751295929.xml)) ([http://www.aids2002.com/Program/ViewAbstract.asp?id=/T-CMS\\_Content/Abstract/200206290751305978.xml](http://www.aids2002.com/Program/ViewAbstract.asp?id=/T-CMS_Content/Abstract/200206290751305978.xml)),
- were published in Eurosurveillance Weekly (<http://www.eurosurveillance.org/ew/2002/020822.asp>),
- are available on the website of the Istituto Nazionale Malattie Infettive L. Spallanzani in the English and Italian version ([www.inmi.it](http://www.inmi.it)), and on the website of the Robert Koch Institute in the original version and in the German translation ([www.rki.de/INFEKT/AIDS\\_STD/EXPO/HIV.HTM](http://www.rki.de/INFEKT/AIDS_STD/EXPO/HIV.HTM))

Moreover, an **European Registry of Occupational Post-Exposure Prophylaxis** was instituted in January 2002. The data collection forms and the protocol were discussed and approved during the first steering committee. The forms and an explanatory document were widely distributed by the national coordinators in each country and are available upon request at the coordinating centre along with a software for data entry ([irapep@inmi.it](mailto:irapep@inmi.it)).

Between 01/09/2001 and 30/11/2002, the EuROPEP collected information on 531 cases of occupational PEP in health care workers. More than 40% were nurses. HCWs were mostly exposed through needlestick (71%) and mucous membrane contamination (35%) Following occupational exposure, PEP was started after a mean of 6 hours. The source patient was unknown/untested in 25% of cases, and HIV+ in 50%. Among HIV-infected sources, one third were co-infected with HCV, HBV, or both. Resistance to antiretrovirals in the source influenced treatment in 11 PEP cases.

Of the 503 healthcare workers for whom initial prophylactic regimen was available, 352 (70%) were started on a 3-drug regimen (AZT+3TC+IDV 36%; AZT+3TC+NFV 41%). One-hundred fifty-one cases (30%) received two drugs only (AZT+3TC 98%), however, most of these cases were enrolled before the European recommendations were issued. Nevirapine was used in 7 cases.

Overall, mean treatment duration in exposed HCW was 19 days (median 28, range 1-57), including 101 HCW who interrupted PEP after the source tested HIV negative. In the remaining subjects, prophylaxis was completed in 71% of cases; 12% of HCW interrupted PEP because of adverse reactions, 7% because of personal choice, and 4% because of other reasons.

No case of seroconversion was observed in the EuROPEP Registry as of November 30, 2002.

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