OPCW SURVEY ON THE CAPACITIES OF MEMBER STATES REGARDING THE HANDLING AND ANALYSIS OF BIOMEDICAL SAMPLES

Background

1. The Chemical Weapons Convention provides for the collection of samples of biomedical origin during investigations of alleged use of chemical weapons by the OPCW (Verification Annex, Part XI, paragraphs 16 and 17). Analysis of these samples may provide information that contributes to the inspection team’s conclusions regarding allegations of the use of chemical weapons. The list of approved equipment adopted by the Conference of the States Parties includes an alleged use sample collection kit, with a module for the collection of biomedical samples (annex, attachment 16, to C-I/DEC.71 and Corr.1, both dated 23 May 1997).

2. While the Preparatory Commission and the OPCW both devoted considerable resources to the development of procedures and a network of accredited laboratories for the collection, transport and analysis of environmental samples, similar arrangements are not yet in place for samples of biomedical origin.

3. As part of an exercise to assess current international abilities in this field, and in order to assist decisions on development work that may be required, the Secretariat would greatly appreciate receiving answers to the questionnaire annexed to this document. National Authorities are requested to forward copies of this questionnaire to laboratories that they consider may have relevant abilities in the field of analysing samples of biomedical origin for the presence of chemical weapons. Responses should be sent, if possible, before 12 April 2001 to:

Health and Safety Branch
OPCW Secretariat
Johan de Wittlaan 32
2517 JR The Hague
The Netherlands

Annex: Questionnaire on national capacities for the analysis of biomedical samples
Annex

NATIONAL CAPACITIES
FOR THE ANALYSIS OF BIOMEDICAL SAMPLES
Questionnaire

Laboratory name:

Address and telephone:

Contact person:

1) Is methodology for retrospective detection of toxic scheduled chemicals in biomedical samples available in your laboratory?

   Yes / No

   If yes, please continue:

2) Which scheduled chemicals (or their metabolites and breakdown products) can currently be detected in biomedical samples at your laboratory?

3) Which methods are used in your laboratory to analyse biomedical samples for the presence of scheduled chemicals (or their metabolites and breakdown products)? Please note in each case whether these methods have been validated or not, in which species, and whether the method is suitable for use with blood, urine, and tissue.

<table>
<thead>
<tr>
<th>Method</th>
<th>Validated</th>
<th>Species</th>
<th>Blood / Urine / Tissue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetylcholinesterase activity</td>
<td>Yes</td>
<td>Human</td>
<td>Blood</td>
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4) Does your laboratory have internationally recognised quality control accreditation for the analytical techniques involved in biomedical sample analysis?

Yes / No

Comments:

5) Is your laboratory currently active in research into techniques for analysis of biomedical samples containing scheduled chemical or their metabolites?

Yes / No

If yes, please provide a separate list of relevant published references, and if possible, copies of relevant publications.

6) Do you have experience regarding the storage and transportation of biomedical samples from persons possibly exposed to scheduled chemicals?

Yes / No

If yes, please provide details:

7) Does your laboratory have experience of handling and analysing biomedical samples originating from actual incidents of suspected chemical weapons use?

Yes / No

If yes, please provide details:
8) Is your laboratory willing to be designated by the Director-General of the OPCW for the analysis of biomedical samples in the context of OPCW activities, and are you willing to participate in inter-laboratory comparison exercises and proficiency testing?

Yes / No

Comments:

9) Is your laboratory willing to share knowledge and skills regarding the analysis of biomedical samples (via, for example, provision of training to Nationals of other Member States)?

Yes / No

Comments:

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