

2.3.3 Numbers and sizes of samples

It is important to consider the number of samples which are required to allow correct conclusions to be drawn from the results of the sample analysis. We normally have little or no knowledge of the background concentrations in environmental and biological samples. Controls are therefore of the utmost importance if we are to obtain conclusive results from the analyses of such samples.

The following instructions should be followed in collecting environmental and biological samples:

- At least two liquid samples from bombs or shells should be collected in separate containers.
- In order to achieve at least 90 % probability of verifying a chemical attack, 20 environmental or battlefield samples should be randomly collected per area of 100 000 m² where the use of chemical weapons is alleged to have taken place. Fewer samples are necessary if clear evidence of such an attack has been obtained using devices such as CAM or detection paper. Three controls should be collected well outside the contaminated area and treated in the same way as the samples. The controls should be of a matrix as similar as possible to that of the samples.
- If it is possible to collect biological samples from humans or animals, at least two samples should be taken from each individual. If only one individual is available, more (10) samples should be taken. Body liquids from individuals not exposed to chemical weapons should also be collected as controls.
- The sample size should be about 50 g in the case of environmental samples (snow, water, sand, soil, concrete, etc) and about 20 cm² in the case of polymers, clothing or leather. About 10-50 g of body liquids or organs from dead humans or animals is considered sufficient. If the