17.6: Accreditation and links between laboratories

In some cases, a field laboratory may be set up specifically for the conduct of a particular study and may have no regular links with other laboratories. Increasingly, however, there will be links with other laboratories, either as collaborative partners in projects or to provide specialized expertise and analysis. There should be a clear specification in the study protocol of which procedures and checks will be performed at each laboratory, how arrangements will be made for the transport of specimens and supplies between them, and how and which records will be exchanged. Links with an external reference laboratory may be desirable for independent checks, as part of QA procedures (see Section 5.3).

If samples are to be sent to other laboratories for further storage, processing, or analysis (for example, blood, sera, slides), it will be important to give attention to the following points.

1. It is risky to send entire samples to another laboratory or to send all of the samples from one survey or study at the same time. Duplicates should be kept, even when storage facilities are limited, to guard against loss during shipment.

2. Samples should not be sent to another laboratory without a clear agreement as to what analyses will be done and how these will be reported back. It is essential that an SOP defines who does what, with what, and when. These arrangements are defined in Material Transfer Agreements (MTAs). An MTA is a contract that governs the transfer of research materials, such as blood or serum samples, between two organizations. The number of samples to be analysed and type of tests should be agreed beforehand, ideally as part of a predefined analysis plan. It is common practice to send samples to another laboratory in such a way that they are analysed ‘blind’ (for example, no details are sent of which trial arm the samples are from or of the age and sex of the individual subjects). Agreement with respect to publication procedures should also be made, before specimens are sent.

3. The MTA agreed between the field and other laboratories should be part of the study protocol, in which the division of responsibilities should be specified. All parties must also adhere to the provisions of the MTA, in order to participate in the study (for example, local research clearance and ethical clearance).