

The importance of precise diagnosis of an agent causing outbreak or a prevalent communicable disease for patient management, and particularly antibiotic management, is the third reason to obtain laboratory confirmation. For example, of influenza, dengue and typhoid fever, the first two require supportive care. Typhoid fever ordinarily requires treatment with chloramphenicol or ampicillin, but not penicillin or sulphonamides. The typhoid organism has developed resistance to chloramphenicol or ampicillin in some areas, however.

The final reason why access to diagnostic laboratory facilities is important to disaster relief is that critical vaccines, antibiotics and antisera may not be immediately available or may only exist in extremely short supply. Definitive laboratory diagnosis can be of considerable help in deciding in which areas there is a real demand for such scarce resources and for planning the relief effort.

Health authorities establish priorities for processing diagnostic specimens during times of disaster. Systematic confirmation of all suspected cases of the diseases subject to international notification and/or those of selected emphasis in surveillance is of highest priority. Next to these are more common conditions (febrile diarrhea) of which there are outbreaks, which require confirmation through a sample of cases. Laboratory diagnosis of disease for the purpose of individual case management is of lower priority. Since public health and clinical directors compete for limited laboratory resources, and because emergency conditions may make it necessary for national relief authorities to utilize hospital and private laboratory facilities, it is important to pay heed to these priorities.

In Table 3 is a line-listing of the most important communicable diseases found in patients affected by disaster, and the indications for seeking laboratory diagnosis for preventive medical officers and clinicians. This is as a general guideline for emergency usage during times of disaster. As such, it presents minimal, instead of optimal, standards.

The response to be taken to suspect yellow fever exemplifies the appropriate response to one type of internationally notifiable disease. Laboratory diagnosis should be sought on all suspect cases. Viral isolation is only feasible during the first three days of illness. Acute and convalescent sera should be collected from all patients. Postmortem hepatic tissue should be obtained for histologic examination from all fatal cases. Viscerotomy, rather than autopsy, is practiced in many areas of Latin America. In contrast to suspect yellow fever is influenza, for which clinical reporting of outbreaks to the epidemiology unit is re-

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Table 3. Criteria for Collection of Specimens of Selected Communicable Diseases for Laboratory Diagnosis after Disaster (27, 49)

Disease	Class**	Specimens for Isolation
Amebiasis	3C	Stool Blood
Chickenpox- Herpes Zoster	3C	Vesicular fluid Lesion scrapings Crusts
Cholera	1	Rectal swabs Stool Vomitus
Diarrhea Nonspecific	4	Fecal material
Diphtheria	2A	Nose/throat swabs
Ebola-Marburg Viral Disease	2A	Blood
Food Poisoning —Staphylococcal Food poisoning —Bacillus cereus	4 4	Samples of ingested material Fecal material
Gastroenteritis —Epidemic Viral Gastroenteritis —Rotavirus Gastroenteritis	4 4	Fecal material Stool Rectal swab
Hemorrhagic Fevers of Argentinian and Bolivian Types		Blood Spleen Throat washings
Hepatitis, Viral —Viral Hepatitis A —Viral Hepatitis B —Viral Hepatitis Non-A, Non-B	2A	Blood Blood Blood
Influenza	1 (under surveillance by WHO) 4 (other jurisdictions)	Pharyngeal/nasal swabs
Leprosy	2B	Tissue fluid from lesion Biopsy of nerve
