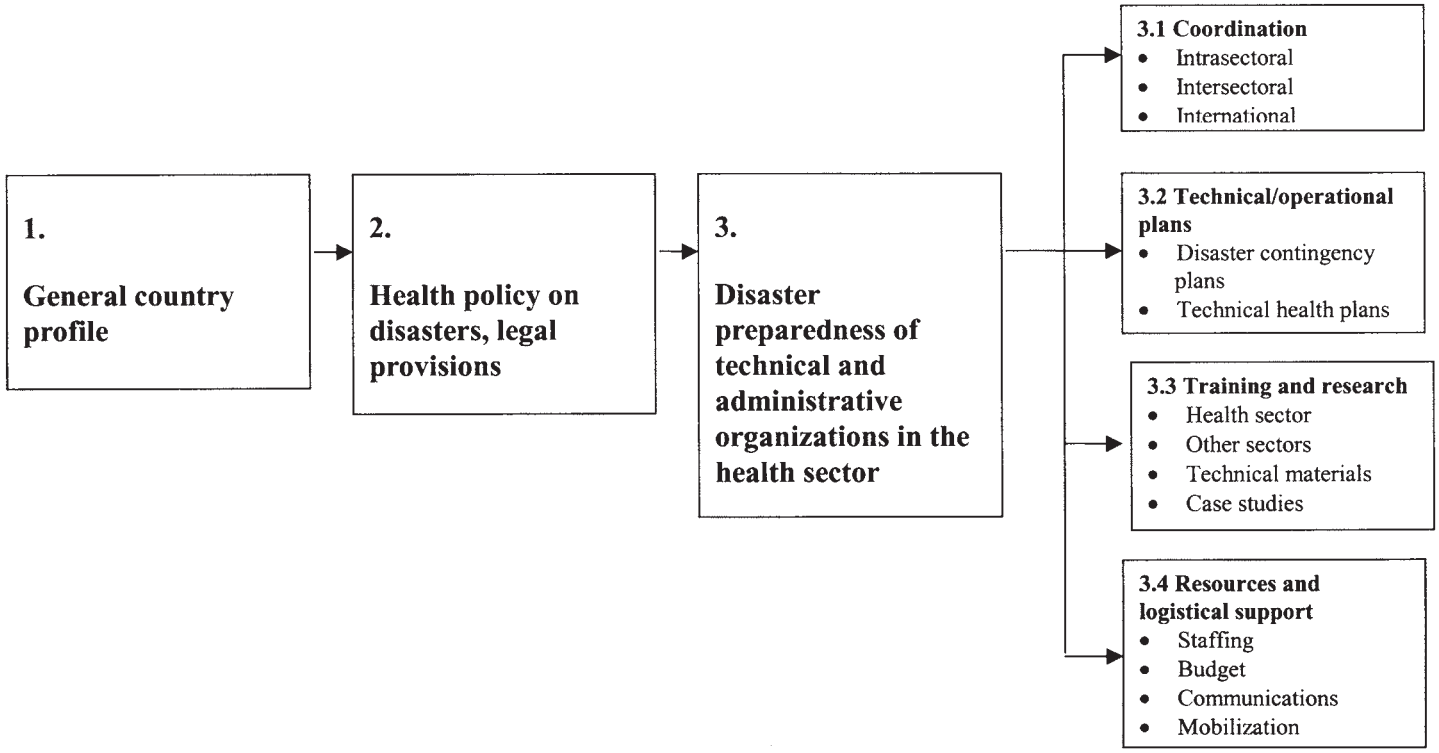
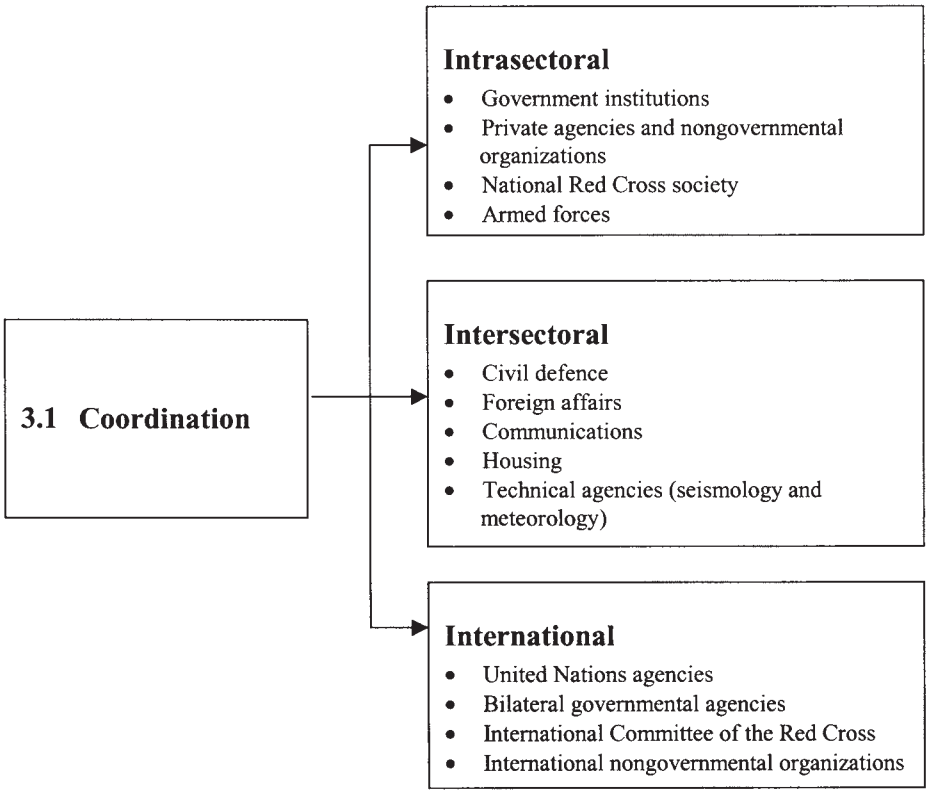
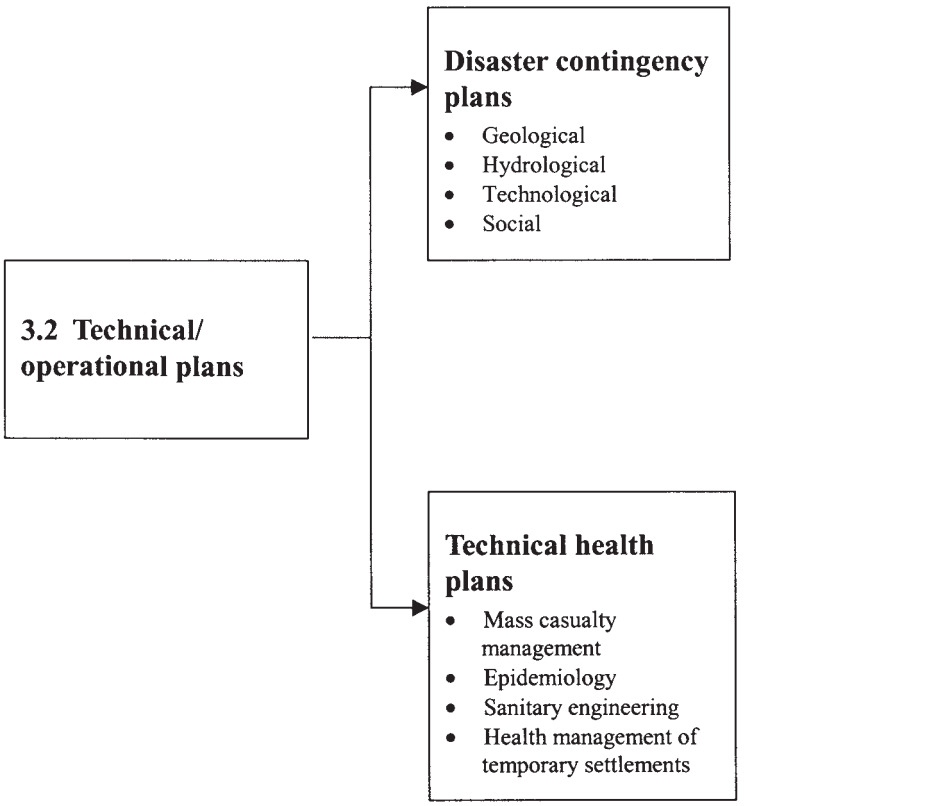
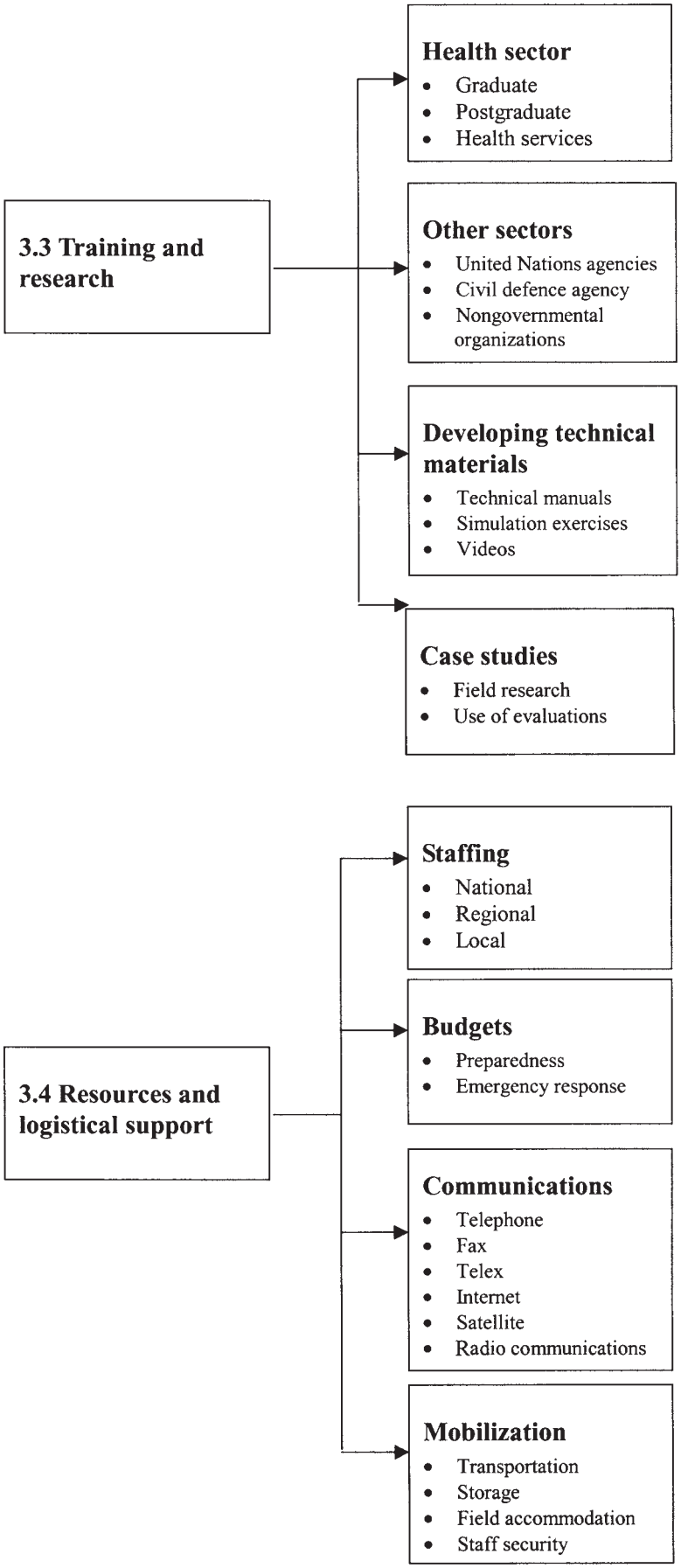
ANNEX 1

WHO model of country-level emergency planning




3.1 Coordination
Intrasectoral
Government institutions
Private agencies and nongovernmental organizations
National Red Cross society
Armed forces
Intersectoral
Civil defence
Foreign affairs
Communications
Housing
Technical agencies (seismology and meteorology)
International
United Nations agencies
Bilateral governmental agencies
International Committee of the Red Cross
International nongovernmental organizations


3.2 Technical/ operational plans
Disaster contingency plans
Geological
Hydrological
Technological
Social
Technical health plans
Mass casualty management
Epidemiology
Sanitary engineering
Health management of temporary settlements


3.3 Training and research
Health sector
Graduate
Postgraduate
Health services
Other sectors
United Nations agencies
Civil defence agency
Nongovernmental organizations
Developing technical materials
Technical manuals
Simulation exercises
Videos
Case studies
Field research
Use of evaluations
3.4 Resources and logistical support
Staffing
National
Regional
Local
Budgets
Preparedness
Emergency response
Communications
Telephone
Fax
Telex
Internet
Satellite
Radio communications
Mobilization
Transportation
Storage
Field accommodation
Staff security

ANNEX 2

Equipment and supplies for environmental health activities in disasters and emergencies

Essential items of equipment and supplies include the following (to be modified according to local conditions).

- Equipment for personnel:
  - — water-storage and water-treatment equipment;
  - — tents, tarpaulins;
  - — first-aid kits and personal health items;
  - — stoves and fuel;
  - — cooking and eating utensils;
  - — food;
  - — sleeping bags, blankets;
  - — portable radio receiver;
  - — waterproof bags;
  - — detailed local information and statistics;
  - — identity cards, travel warrants and any other official documents that may be required by authorities;
  - — rain protection;
  - — flashlights;
  - — telecommunications equipment;
  - — extra batteries for hand-portable communications and facilities for charging from vehicles;
  - — public address equipment.
- Equipment for emergency water supply, particularly for displaced populations:
  - — packaged water-storage/water-treatment kit;
  - — pumps and piping;
  - — fuel storage for pumps;
  - — treatment chemicals;
  - — water-quality testing kits;
  - — tapstands and self-closing taps;
  - — basic pipe-fitting tools;
  - — water collection and storage containers.
- Equipment for emergency sanitation:
  - — picks, shovels, rakes, hoes;
  - — plastic sheeting, poles and nails;
  - — tractors with trailers and spreaders;
  - — tractors with loaders and excavator attachments;
  - — cement mixers;
  - — moulds and vibrators for making squatting plates;
  - — cement, calcium chloride, steel reinforcing bars, sand, aggregate.
- Materials, tools and supplies needed for repairing and operating damaged urban water and sanitation networks:
  - — accurate maps of networks, location of facilities;

— equipment for locating pipes;
— equipment for detecting leaks;
— equipment for quick coupling and patching of pipes;
— assorted sizes and types of water pipe;
— pipe-laying tools;
— pipe-fitting tools;
— jointing materials;
— excavation equipment;
— valves;
— hose pipes;
— welding equipment;
— protective clothing;
— boots;
— heavy-duty gloves;
— well-head fittings and pumps;
— fuel tanks;
— generators;
— tanks for water distribution;
— pipes with valves and fittings;
— sludge pumps;
— sewage pipes with jointing material;
— chemicals for water treatment.

- Equipment for vector control:
  — this should follow local practice. See Chapter 10 for details.
- Items used in monitoring and surveillance:
  — maps;
  — baseline statistical data;
  — calculators;
  — dictation equipment;
  — photographic equipment;
  — blood-collection equipment;
  — equipment for carrying specimens and water samples;
  — chlorine test equipment;
  — water-quality test equipment;
  — tape measures;
  — compass and hand-held GPS equipment;
  — hand level;
  — insect-collection equipment;
  — pens, notebooks, data collection forms, clipboards;
  — water-pressure gauge;
  — graph paper;
  — mapping pins;
  — portable computer with modem and communications, and mapping software.
- Laboratory equipment and materials:
  These should be in accordance with national guidelines. Emergency stocks of reagents for cholera diagnosis should be held where cholera outbreaks are expected. For further details, see Johns (1987).
- Administrative and office items:
  — paper;
  — pens, pencils;
  — computers, printers, typewriters;
  — filing equipment;

— photocopiers;
— batteries;
— lighting and generators.

More specialized equipment may occasionally be needed, especially in larger, damaged urban areas, and may include:

— large mobile chlorinators;
— mobile water-treatment equipment;
— large water and sewage pumps;
— large power generators;
— bulldozers and graders;
— well-digging/repair equipment;
— drilling rigs;
— welding equipment for emergency repairs to tools, equipment and vehicles.

ANNEX 3

Accidental pesticide poisoning

Diagnosis

Pesticide poisoning may mimic several other conditions, and it is essential to make the appropriate diagnosis. At first sight, it may mimic symptoms of syndromes, such as those associated with gastroenterological and other infectious diseases, that are common in tropical countries.

Diagnosis is based on history of exposure, clinical features and analytical support. IMPORTANT POINTS TO BE ESTABLISHED ARE AS FOLLOWS:

- *Has the patient been exposed to a pesticide?*
  If so, when did it occur and under what circumstances (accidental, occupational or intentional)?
- *If so, what was the pesticide, and to which chemical group does it belong?*
  If the container or name of the pesticide has arrived with the patient, this information may be available through a poisons centre or other organization.[1] The label may also include a brief indication of the treatment (but beware of container reuse).
- *By what route has the patient absorbed the pesticide: dermal, ocular, inhalatory, ingestion or combined?*
- *For how long was the patient exposed, and when did exposure cease?*
  Time elapsed since exposure? Duration of exposure? Has exposure in fact ceased? Is the patient still wearing contaminated clothing? Was the patient decontaminated?
- *What was the time between exposure and the onset of symptoms?*
- *What signs and symptoms are observed?*

Treatment

Treatment of any pesticide poisoning depends on the history of exposure, the level of exposure, the clinical status of the patient and the chemical concerned.

Treatment must never be delayed, pending the result of laboratory tests.

In areas where pesticides are used heavily, stocks of suitable antidotes should be readily available.

Supportive therapy is basically the same as for any form of poisoning; vasoactive drugs should be used with caution.

Consider the possibility of transportation (and the conditions of transportation) to an appropriate health facility. The following is a suggested sequence of treatment in a well-established medical centre:

- CHECK VITAL SIGNS AND APPLY RESUSCITATIVE MEASURES IF REQUIRED.

[1] For addresses, see: World Health Organization (1997c); also on http://www.intox.org.

- IF ANTIDOTE(S) ARE REQUIRED GIVE THEM AS SOON AS POSSIBLE, AND STOP FURTHER ABSORPTION OF THE POISON (e.g. REMOVE WET CLOTHING, DECONTAMINATE SKIN, USE ADSORBENTS SUCH AS ACTIVATED CHARCOAL, OR EMPTY THE STOMACH).
- CONSIDER ENHANCEMENT OF ELIMINATION.
- MONITOR PROGRESS OF PATIENT FREQUENTLY OVER FIRST FEW HOURS, AND REGULARLY FOR DAYS, AS REQUIRED.
- WHEN UNSURE, ALWAYS CHECK WITH THE NEAREST POISONS CENTRE.