
SECTION 2 (F)

FACT SHEET

**TECHNOLOGICAL AND
MAN-MADE DISASTERS**

FACT SHEET

WAR-MADE AND TECHNOLOGICAL DISASTERS

INTRODUCTION

Worldwide people are becoming victims of industrial accidents when hazardous materials are released into the environment. Such incidents have the potential to cause ecological damage and are therefore likely to impact several countries. It is crucial then that Governments have the capability to prevent and respond to such events and minimise their harmful effects. In order to access the potential of a chemical accident, one needs to determine the *source and the type of accident*.

Such accidents can occur by:

- Production of materials.
- Transport of materials.
- Technological system failures.
- Contamination of food or the environment by the use of chemicals, or improper waste management.
- Explosion in a plant or storage facility handling toxic substances.
- Arson or sabotage.
- Other precipitating factors like lightning, floods and earthquake.

LIKELY IMPACT

Physical Damage

- * Damage or destruction to structures and infra-structure.
- * Transportation accidents may damage vehicles and other objects on impact.
- * Industrial fires may reach high temperatures

and affect large areas.

Environmental

- * The most dangerous elements are gases, vapors, volatile liquids and suspended articles in the air.
- * Contamination of water supply, land and animal life.
- * Ecological systems may be disrupted.

Casualties

- * Many people may be killed or injured and require medical treatment.

Health Effects

- * Direct inhalation of toxic substances is most common in the early phases. Afterwards, skin contaminations become more significant.
- * Dose of contaminant is critical - certain non-carcinogenic substances have threshold levels above which they are harmful to man.
- * Better protection offered in closed places.

FACTORS CONTRIBUTING TO VULNERABILITY

- * Persons, structures, livestock etc. closest to the scene are most vulnerable, however, large scale releases of airborne pollutants may spread for hundreds of kilometers.
- * Lack of safety features.
- * Lack of evacuation plans.
- * Unawareness of potential danger.

Fact Sheet - Man-made and Technological Disasters (Cont'd)

EMERGENCY ACTION

Atmospheric Contamination

Close all windows and doors and block off any other openings to the outdoors.

Extinguish any naked flames.

Reduce oxygen consumption by bringing physical activity to a minimum.

Cover mouth and nose with dampened cloth.

Seek First Aid.

Contamination of the Skin

Wash the affected parts to remove toxins.

Use soap and water and wash body carefully.

Remove all clothing while washing.

Do not use chemical antidotes, as the heat generated from the neutralising reaction

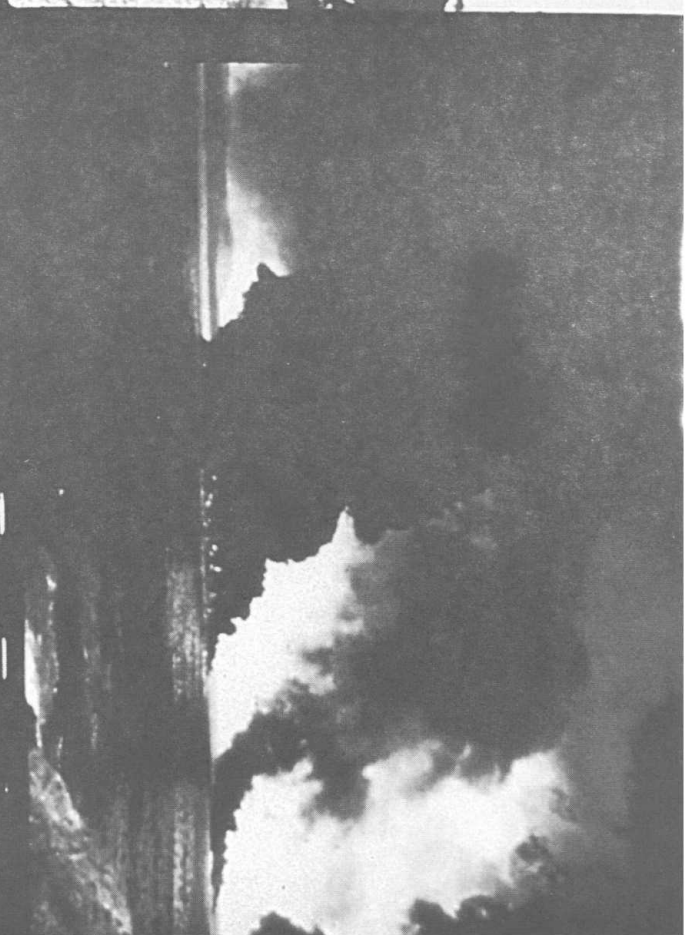
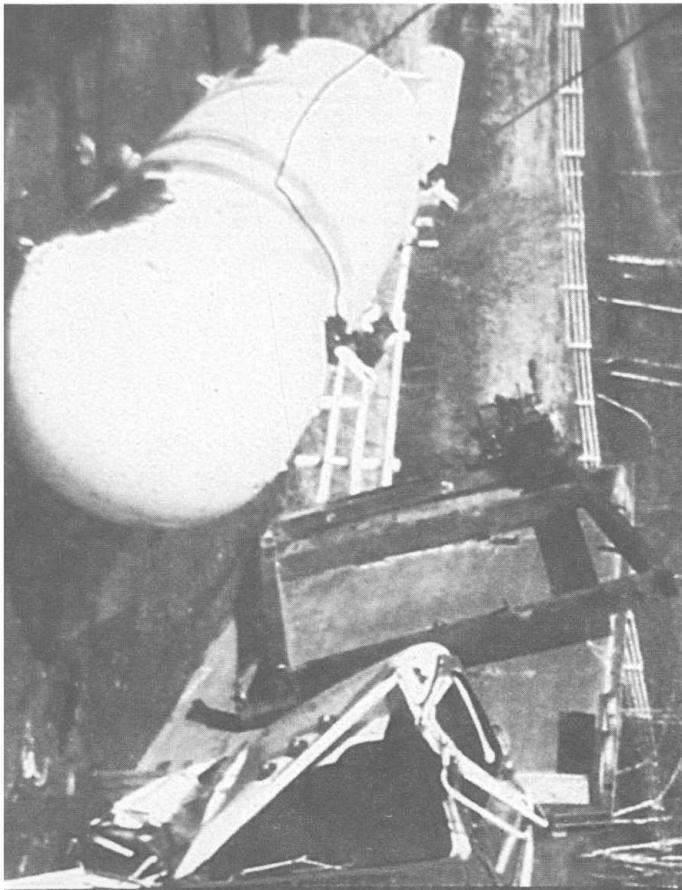
may make the lesions worse.

MITIGATION MEASURES

- * Hazard mapping.
- * Hazard material identification.
- * Inspection of chemical plants and storage facilities.
- * Monitoring toxic waste disposal procedures.
- * Improve fire-fighting and emergency response capacities.
- * Prepare and practice evacuation plans.
- * Test warning systems.

Typical Post Disaster Needs

- * Evacuation.
- * Search and Rescue.
- * Alternative sources of water.
- * Clean-up.
- * Monitoring environmental effects.



Photograph showing the different types of technological and man-made disasters

SECTION 2 (G)

FACT SHEET

EPIDEMICS

FACT SHEET EPIDEMICS

DEFINITION

An epidemic is the occurrence of a number of cases of a disease known or suspected to be of parasitic or infectious origin that is unusually large or unexpected for the place and time. Examples of diseases that cause epidemics are Dengue, Malaria, Cholera and typhoid.

A disaster may promote the conditions under which an outbreak occurs and spreads.

Classification of an epidemic emergency may depend on two local factors.

- * The existing stage of endemicity.
- * The presence or absence of a means of transmission.

In investigating and defining an epidemic data should indicate who, where and how many are affected.

General Characteristics

- * Risk of introduction or spread of the disease.
- * Possible large number of cases of the disease.
- * Severe cases leading to disability or death.
- * Risk of social or economic disruption.
- * Lack of adequate professional personnel and needed supplies.
- * Danger of international transmission.

LIKELY CAUSES

- * Unsanitary conditions, over-crowding and poverty.
- * Contamination of water and food supply.
- * Non-immune persons migrate to endemic disease area.
- * Ecological changes that favour breeding of vector.
- * Poor nutrition.

LIKELY IMPACT

- * Illness and death.
- * Economic losses resulting in social and political disruption.
- * Physical and mental incapacities due to increased trauma.

Method of Control

Elimination of Source

- * Treatment of cases and, at times, carriers.
- * Isolation of cases, depending on the nature of the epidemic.
- * Surveillance of suspects.
- * Notification of cases to authorities.
- * Control of animal reservoirs of disease.

Strategies for interrupting transmission

- * Environmental health measures including water supplies, excreta disposal, food hygiene, elimination of vector breeding centre.
- * Personal hygiene.
- * Vector control.
- * Disinfection and sterilization of surroundings.
- * Reduction of population movements and migration.

Protecting susceptible individuals

- * Immunization.
- * Chemoprophylaxis (prevention of disease by drugs).
- * Personal protection.
- Better nutrition.

In an emergency situation where time is critical, the emphasis is usually on interrupting transmission, since information relating to the history of the epidemic, the identification of carriers and the sick and the implementation of control measures usually take considerable time.

SECTION 3

CONTACT DIRECTORY

CONTACT DIRECTORY

ROLES AND RESPONSIBILITIES

This section provides information on the contact personnel in the National Disaster Management Office, the Ministry/Department of Health and the Government Information Services of CDERA's participating States.

It also provides information on their respective roles and responsibilities as they relate to disaster management.

National Disaster Coordinators (NDC)

The NDC is the administrative head of the National Disaster Office with responsibility for conceptualizing and implementing the National Disaster Preparedness Programme. He/she is special advisor to the government in times of disaster.

Health Disaster Coordinator

The Health Disaster Coordinator is responsible for organising and maintaining the Health Sector in a state of readiness to respond to a major disaster event. He or she is usually a member of the National Emergency Council and chairs a standing committee in Health and related matters. He/she is the special advisor to the Permanent Secretary and the Chief Medical Officer in the disaster response phase.

Chief Information Officer (CIO)

The CIO is responsible for keeping the public informed during the three phases of a disaster. In the event of a disaster, the CIO is responsible for overseeing the smooth operations of the press room, providing the media with accurate and appropriate information and rumor control.

The CIO is usually the chairperson of the Public Education and Information committee.

CONTACT DIRECTORY

(Conf'd)

National Disaster Coordinators, Health Disaster Coordinator and Government Information Service Contacts in CDERA Participating States

National Disaster Coordinators

Health Disaster Coordinators

Government Information

ANTIGUA AND BARBUDA

Director
National Office of Disaster Services
P.O.Box 1399, St. John's
Tel No: (809) 462 4742-3
Fax No: (809) 462 5003

Chief Medical Officer
Ministry of Health & Home Affairs
All Saints Road, St John's
Tel No: (809) 462 2675
Fax No: (809) 462 4097

Ministry of Information
Crosss Street, St John's

BAHAMAS

Coordinator for Disaster Activities
Cabinet Office
P.O.Box N-7147
Nassau
Tel No: (809) 322-2805
Fax No: (809) 328-8294

Health Disaster Coordinator
Ministry of Health
P.O.Box N-3729
Nassau, New Providence
Tel No: (809) 328-2260
Fax No: (809) 322-7788

Information Officer
Office of the Prime Minister
National Insurance Building
Freeport
Tel No: (809) 352-8525
Fax No: (809) 352-8520

BARBADOS

Supervisor of Emergency Services
Central Emergency Relief Organisation
Cnr James & Lucas St., St Michael
Tel No: (809) 427-8513
Fax No: (809) 429-4055

Health Disaster Coordinator
Ministry of Health
Jemmotts Lane, Saint Michael
Tel No: (809) 426-5080
Fax No: (809) 426-5570

Chief Information Officer
Gov't Information Service
Bay Street, Saint Michael
Tel No: (809) 427-6220
Fax No: (809) 436-1317

BELIZE

Secretary to the Cabinet
Nat'l Office of Emergency Management
Ministry of Finance, Belmopan
Tel No: (501) 8 2 2345
Fax No: (501) 8 23323

Permanent Secretary
Ministry of Health
Belmopan
Tel No: (501) 8 277-348
Fax No: (501) 8 23308

Chief Information Officer
Belize Information Service
East Block, Belmopan
Tel No: (501) 8 22159
Fax No: 501) 8 23242

BRITISH VIRGIN ISLANDS

National Disaster Coordinator
Government of British Virgin Islands
Office of Disaster Preparedness
Road Town, Tortola
Tel No: (809) 494-4499
Fax No: (809) 494-2024

Hospital Administrator
Government British Virgin Islands
P.O.Box 439
RoadTown, Tortola
Tel No: (809) 494-3497/2040
Fax No: (809) 494-4435

Chief Information Officer
Dept of Info, & Public Relations
Central Administration Building
Wickhams Cay 1, Tortola
Tel No: (809) 494-3701
Fax No: (809) 494-6877

Contact Directory (Conf'd)

National Disaster Coordinators

Health Disaster Coordinators

Govenment Information

COMMONWEALTH OF DOMINICA

National Disaster Coordinator
Government Headquarters, Roseau

Tel No: (809) 448-2883
Fax No: (809) 448-5200

Health Disaster Coordinator
Ministry of Health
P.O.Box 25, Roseau
Tel No: (809) 448-2401
Fax No: (809) 448-6086

Press Adviser
Office of the Prime Minister
Gov't Headquarters, Roseau
Tel No: (809) 448-2401
Fax No: (809) 448-5200

GRENADA

National Disaster Coordinator
Fort Frederick
St George's
Tel No: (809) 440-0838
Fax No: (809) 440-6674

Administrative Officer
Ministry of Health
Carenage, St George's
Tel No: (809) 440-2649
Fax No: (809) 440-4127

Chief Information Officer
Gov't Information Service
Scott's Street, St George's
Tel No: (809) 440-2494
Fax No: (809) 440-6650

GUYANA

Head, Presidential Secretariat
Office of the President
Vissengen Road
New Garden Street
Tel No: (592) 2 57051
Fax No: (592) 2 63395

Chief Medical Officer
Ministry of Health
P.O.Box 141
Brickdam
Tel No: (595) 2 56271
Fax No: (595) 2 52169 (thru PAHO)

Director
Gov't Information Service
New Garden Street
Georgetown
Tel No: (595) 592 2 63389
Fax No: (592) 2 63395

JAMAICA

Director General
Office of Disaster Preparedness and
Emergency Management (ODPEM)
P.O.Box 122
12 Camp Road
Kingston 4
Tel No: (809) 928-5114-4
Fax No: (809) 928-5503

Medical Officer
St Catherine Health Dept
P.O.Box 44, Spanish Town

Tel No: (809) 926-1820
Fax No: (809) 926-5674

Senior Director - Info. & Training
ODPEM (address at right)
and
Executive Director
Jamaica Information Service
58a Half Way Tree Road
Tel No: (809) 926-3591
Fax No: (809) 926-6715

MONTSERRAT

National Disaster Coordinator
Chief Minister's Office
P.O.Box 292, Plymouth
Tel No: (809) 491-2461

Health Disaster Coordinator
Ministry of Health
Glendon Hospital, P.O.Box 24
Tel No: (809) 491-3505

Senior Information Officer
Gov't Information Unit
Plymouth
Tel No: (809) 491-2885

Contact Directory (Cont'd)

National Disaster Coordinators

Health Disaster Coordinators

Government Information

ST CHRISTOPHER AND NEVIS

Coordinator
Nat'l Emergency Management Agency
Gov't Headquarters, P.O.Box 186
Tel No: (809) 465-2521
Fax No: (809) 465-5202

Chief Medical Officer
Ministry of Health
Gov't Headquarters, P.O.Box 186
Tel No: (809) 465-2521
Fax No: (809) 465-1316

Press & PR Secretary
Public Relations Office
Gov't Headquarters, P.O.Box 186
Tel No: (809) 465-2521
Fax No: (809) 465-5202

SAINT LUCIA

National Disaster Coordinator
Office of Disaster Preparedness
P.O.Box 1517, Vigie
Tel No: (809) 452-3802
Fax No: (809) 453-2152

Chief Medical Officer
Ministry of Health
Chaussee Rd, Castries
Tel No: (809) 453-2195
Fax No: (809) 452-0153

Chief Information Officer
Gov't Information Service
Brazil Street, Castries
Tel No: (809) 452-3016
Fax No: (809) 457-2152

ST VINCENT AND THE GRENADINES

National Disaster Coordinator
Ministry of Housing & Comm. Services
P.O.Box 174
Kingstown
Tel No: (809) 457-2607/4507
Fax No: (809) 457-2152

Hospital Administrator
Kingstown General Hospital
Kingstown
Tel No: (809) 456-1185
Fax No: (809) 457-2684

Chief Information Officer
Gov't Information Service
Ministry of Info. & Justice
Kingstown
Tel No: (809) 456-1600
Fax No: (809) 457-2152

TRINIDAD AND TOBAGO

Chief Coordinator
Nat'l Emer. Management Agency
Radio 610 Building
Abercromby Street
Port of Spain
Tel No: (809) 623-2078
Fax No: (809) 625-8926

Health Disaster Coordinator
Ministry of Health
Roundabout Plaza
10th Avenue
Barataria
Tel No: (809) 674-6535
Fax No: (809) 638-8620

Director of Information
Ministry of Nat'l Security
Knox Street
Port of Spain
Tel No: (809) 622-3947
Fax No: (809) 627-8044

Contact Data - (Conf'd)

DIRECTORY OF REGIONAL DISASTER MANAGEMENT AGENCIES

CARIBBEAN DISASTER EMERGENCY RESPONSE AGENCY

The Garrison, St. Michael

BARBADOS

Tel. No: (809) 436-9651

Fax No: (809) 437-7649

SEISMIC RESEARCH UNIT

University of the West Indies, St. Augustine

TRINIDAD AND TOBAGO

Tel. No: (809) 662-4659

Fax No: (809) 663-9293

INTERNATIONAL MARITIME ORGANISATION (IMO)

P.O.Box 3037, Building 598, CEIBA

PUERTO RICO, 00735

Tel. No: (809) 865 4343

Fax No: (809) 865-1785

PAN-AMERICAN HEALTH ORGANISATION (PAHO)

Emergency Preparedness Program

Dayrells Road, St. Michael

BARBADOS

Tel. No: (809) 436-6448

Fax No: (809) 436-6447

EASTERN CARIBBEAN DONOR GROUP

c/o UNDP - Barbados

Jemmotts Lane, St. Michael

BARBADOS

Tel. No: (809) 429-2521

Fax No: (809) 429-2448

UNITED NATIONS DEVELOPMENT PROGRAMME (UNDP)

Jemmotts Lane, St. Michael

BARBADOS

Tel. No: (809) 429-2521

Fax No: (809) 429-2448

CARIBBEAN CONFERENCE OF CHURCHES

George Street and Collymore Rock

St. Michael

BARBADOS

Tel. No: (809) 427-2681

Fax No: (809) 429-2075

USAID/OFDA

Regional Office

Embassy of the United States of America

San Jose

COSTA RICA

Tel. No: (506) 2 31 68 05

Fax No: (506) 2 31 41 11

REGIONAL SECURITY SYSTEM

Paragon Base

Paragon

Christ Church

BARBADOS

Tel. No: (809) 420-7110

Fax No: (809) 420-7316

INTERNATIONAL FEDERATION OF RED CROSS AND RED CRESCENT SOCIETIES (IFRC)

Caribbean Delegation

P.O.Box 1284

Kingston 8

JAMAICA

Tel. No: (809) 926-8329

Fax No: (809) 968-3497

OECS DISASTER PREPAREDNESS PROJECT

OECS Secretariat

P.O.Box 179

The Morne

Castries

SAINT LUCIA

Tel. No: (809) 452-2537

Fax No: (809) 453-1628

ORGANISATION OF AMERICAN STATES/ CARIBBEAN DISASTER MITIGATION PROJECT

3 Barbados Avenue

Kingston 5

JAMAICA

Tel. No: (809) 960-0639

Fax No: (809) 929-6792