

*The development, selection and training of the total staff at an Emergency Hospital should follow a planned sequence:*

Nomination of a basic team (Key personnel) by the Provincial Director of Emergency Health Services

- a) Medical Director
- b) Director of Nursing Services
- c) Director of Pharmaceutical Services
- d) Administrative Officer
- e) Transport Officer
- f) Surgeon
- g) Physician in charge of Anaesthesia
- h) Professional Personnel (dentists and veterinarians)
- i) Radiographer

The members of this team of leaders after basic orientation training in their province (Phase 1, see page 50) should attend a course, designed to teach candidates the principles and techniques of organizing, training and operating an E.H.S. medical unit.

The Medical Director should then prepare a unit training program encompassing:

#### Phase 1 – Individual Training

- a) Emergency Health Services Organization, Planning and Operations
- b) Effects of Nuclear Weapons
- c) Principles of Casualty Care in Major Disaster
- d) Standardization of Care
- e) Functions of an Advanced Treatment Centre
- f) Functions of an Emergency Hospital
- g) Functional Packaging of Emergency Medical Units
- h) First Aid and Home Nursing Courses for auxiliary staff not already so skilled.

#### Phase 2 – Functional Area Training

- a) Familiarization with the equipment and supplies of the functional area

- b) Practise in setting up and operating a functional area.

#### Phase 3 – Unit Training

- a) Practise in setting up the whole unit
- b) Practise in handling simulated casualties

#### Emergency Hospital Training Units

The supplies and equipment in Emergency Hospital Training units are packed in cleated plywood boxes secured by wood screws. The bulk storage items are also in cleated plywood boxes, colour-coded for their particular functional area. It should be noted that in the operational unit these latter supplies are in vendor's cartons and are *not colour-coded*.

#### Distribution of Supplies during unloading Procedures

All items in the Emergency Hospital Training Unit are colour-coded whether in boxes or bulk supplies. This colour-coding index is a rectangle placed on two sides of the box or bulk supply items.

*Each functional area has a different colour-code:*

Functional Area	Colour-Code
Admission & Discharge	Yellow
Resuscitation (Pre-op)	Green
Recovery (Post-op)	Green
	Black lettering over rectangle indicating area
Operating Rooms	Red
Pharmacy	Black
Central Supply	Blue
Laboratory	Red with a black bar
X-ray	Orange
Wards	Green
Blood Donor Packs	Black rectangle with super-imposed Circle.

During training periods when the hospital supplies and equipment are being unloaded, the Director of Pharmaceutical Services and his area staff should be present to familiarize themselves

Figure 5

## EMERGENCY HOSPITAL

Phase 2 – Functional Area Training Suggested Training Periods Required/by Area			
AREA	NUMBER OF BOXES & BULK SUPPLIES (REPRESENTATIVE SAMPLE OF AREA)	TIME REQUIRED A=Opening B=Familiarization C=Repacking	TOTAL TIME REQUIRED
*1.	Pharmacy	62	2 or 3 8-hr. periods
*2.	Central Supply Room	42	2-8hr. periods
*3.	Operating Room	7	A=1 hr. B=3 hrs. C=3-4 hrs.
4.	Resuscitation (Pre-operative)	14	A=1 hr. B=½ hr. C=1 hr.
5.	Recovery (Post-operative)	14	A=1½ hrs. B=½ hr. C=1½ hrs.
*6.	X-ray	8	A=40 mins. B=2 hrs. C=2 hrs.
7.	Ward (General Ward) Set up 4 wards.	14	A=1 hr. B=1 hr. C=1½ hrs.
8.	Admission and Discharge	6	A=30 mins. B=30 mins. C=30 mins.
9.	Laboratory	4	A=15 mins. B=1 hr. C=30 mins.
10.	Service Utilities	7	A=1 hr. B=2 hrs. C=2 hrs.
Total		178	

\*Additional helpers are required to set up heavy equipment.

Note: The operating room should be exercised on the same day as the 2nd training period for the C.S.R. to test flow of Equipment to the operating room from the C.S.R.

with the total contents of the hospital and colour-coding system, and the distribution of the boxes and bulk items to the functional areas.

### Bulk Supplies

In the logistics section of the "Emergency Hospital Information Manual" reference is made to the distribution of bulk supplies to functional areas. Most of the bulk supplies go in totality to one particular functional area. Five bulk supply items however, have to be divided among one or two functional areas and the amounts are indicated against the item. It must be noted that in the operational unit, the bulk supply items are *not* colour coded. Every effort should be made during training periods to ensure that the Director of Pharmaceutical Services and his staff and the basic cadre of workers become very familiar with the procedures necessary to ensure rapid unloading of the equipment and supplies and dispersal to various functional areas.

### Functional Area Training

For functional area training the use of a building or part of a building with several large areas or rooms in which boxes of supplies may be placed for opening and setting up the equipment is required - 8000 square feet of space or more is suggested. Screws should be removed from boxes prior to commencement of a training period to obviate time loss when a large number of boxes must be opened.

Only a representative sample of the boxes and bulk supply items need be demonstrated and handled in order to familiarize the professional and technical personnel with the equipment and supplies of a particular functional area. In figure 5 some suggested time periods are indicated against the functional areas. It shows also the number of boxes and bulk supply items (as a representative sample) which must be opened, the contents unpacked, handled and set up to give staff an opportunity to thoroughly familiarize themselves with the equipment and supplies. Such

time periods will allow staff to set mechanical equipment e.g. the X-ray machine, portable autoclaves etc., in working order. It is most important that the staff during their training periods carry out the latter manoeuvres under the close supervision of the members of the basic team. Functional Area training may be varied according to particular circumstances in a province. The equipment may be set out for demonstration purposes in a large building in a central location. Specific functional areas may then be exercised for groupings of personnel who will be supervising staff e.g. in the Pharmacy Area, followed perhaps by the Central Supply Area, Operating Rooms, etc. Such a method would allow of training staff in the handling of a particular area and give them a demonstration of the other functional areas to complete their background knowledge of the whole hospital.

*The following sequence of exercising staff in familiarization procedures may be found useful:*

1. Pharmacy
2. Central Supply
3. Operating Rooms
4. Service Utilities
5. Resuscitation (Pre-op)
6. Recovery (Post-op)
7. Wards
8. X-ray
9. Admission and Sorting
10. Laboratory

This sequence is graded roughly from the area which requires the longest time for the handling and familiarization process to the least. It must be emphasized that for professional and technical personnel, functional area training should be directed to familiarization with the supplies and equipment, primarily of the area in which they will be working and secondly to the general organization of the whole hospital.

Figure 6

## TRAINING CURRICULUM

### Phase 1 – Individual Training

Serial	Subject	Instructor	References	Method	Time
1.	Effects of Nuclear Weapons	Physician	"Casualties from Nuclear Weapons"	Lecture and discussion	1 hour
2.	EHS Organization Planning and Operations	Administrative Officer	EHS Precis Serials 1.00 3.00 5.00	"	1 hour
3.	Principles of Casualty Care in Major Disaster	Physician	"Casualty Care in Major Disaster"	"	1 hour
4.	Standardization of care	"	"Emergency War Surgery	"	1 hour
5.	Functions of an A.T.C	"	"A.T.C Operating Manual"	"	1 hour
6.	Functions of an Emergency Hospital	"	Emergency Hospital Operating Manual	"	1 hour
7.	Functional Packaging	Director of Pharmaceutical Services	Technical Bulletin #7 "Handling of an Emergency Hospital Training Unit" "Emergency Hospital Technical Guide for Health Supplies Officers"	"	1½ hours
8.	First Aid and Home Nursing	By arrangements with the St. John Ambulance Association or Canadian Red Cross			

## TRAINING CURRICULUM

### Phase 2 – Functional Area Training

Serial	Subject	Instructor	References	Method	Time
1.	Examination of Equipment	Director of Pharmaceutical Services	Technical Bulletin No. 7 "Handling of an Emergency Hospital Training Unit" Emergency Hospital Technical Guide for Health Supplies Officers"	Practical handling of equipment by personnel assigned to a functional area	Depends on complexity of the Functional Area (see Figure 00)
2.	Setting up a Functional Area	Officer in Charge of Functional Area	Emergency Hospital Operating Manual	Practical	
3.	Repacking	"	Technical Bulletin No. 3 "Handling of an Emergency Hospital Training Unit" "Emergency Hospital Technical Guide for Health Supplies Officers"	Practical	

### Phase 3 – Unit Training

Serial	Subject	Instructor	References	Method	Time
1.	Setting up an Emergency Hospital	All Directing Staff	"Emergency Health Operating Manual"	Practical, all personnel should examine each functional area	1 – 2 day sessions
2.	Exercise in Handling Simulated Casualties	"	"Emergency Hospital Operating Manual" Casualty Simulation	Practical, some personnel may act as casualties	

*The hospital records, printed in English and French are as follows:*

Records	Numbers Available in Hospital
1. Admission and Discharge Book	3
2. Nominal Roll of Patients	600
3. Case Medical Record with jacket	1,000
4. General purpose register	12
5. Fluid intake and output record	100
6. Clinical laboratory requisition and report forms	1,000
7. X-ray requisition form	1,000
8. Ward diet list	300
9. Kitchen summary sheet	60
10. Requisition form (general)	1,500
11. Alphabetical Listing and Distribution Chart of Supplies	25

Most of the hospital records are packed in Pharmacy Box No. 16 and the balance is to be found in Pharmacy Box No. 24.

In the shock phase, there will be little time for extensive recording of medical information. Patients may have initial documentation carried out by First-Aid personnel. An Emergency Medical Tag, with identifying information, notes on the type of injury and first aid treatment received, may be found on the patient. Further medical information may have been noted on this tag at the Advanced Treatment Centre. At the Emergency Hospital the patient will pass through the hands of a number of medical personnel; it is vitally important to patient care that the information on the patient's documents be brief, clear and precise. The records are designed for simplicity in recording information. See Appendix D for illustrations of the records.

#### Admission and Discharge Book

The Admission and Discharge Book has space

for 750 entries (15 entries to a page.). Two carbon copies can be made with each page. Each entry lists the patient's Admission Number, Name, Address (if available), diagnosis, treatment and hour of admission. One copy should be made available to EWS (yellow copy) and the other to Municipal Emergency Government H.Q. (pink copy).

Some Emergency Medical Tag numbers are pre-stamped serially on the tags. This number should be entered in the Admission and Discharge Book by a records clerk in the sorting area of the Emergency Hospital. In the case of unconscious patients, (with no identification) this number may be used for identification purposes within the hospital and later documentation of the event of the patient's death. This tag should not be detached from the patient in the sorting area.

#### Nominal Roll of Patients

The nominal roll of patients should be completed daily by the nurse in charge of each ward. It may be employed in other ways.

#### Case Medical Record with Jacket

The records clerk should enter identifying information, from the Emergency Medical Tag, on the Emergency Hospital Medical Record. If time does not permit, the Admission Number is entered. The clerk in the sorting area should record notes on the diagnosis and disposal as dictated by the surgeon in charge of sorting. All patient records should be kept in the Medical Record Jacket. This should be securely attached to the patient-not to the litter.

#### General Purpose Register

The general purpose register may be used for any specific purposes considered necessary in the various functional areas and in the hospital wards.

#### Fluid intake and output Record

The fluid intake and output record may be commenced in the resuscitation area. This again is placed in the Medical Record Jacket.

## Clinical Laboratory Requisition and Report Forms

The Clinical Laboratory Requisition form number 2 may also be commenced in the resuscitation area. On this form the patient's number refers to the Admission Number. The form contains requests for blood grouping and typing and for stool and bacteriological smear analysis. The Clinical Laboratory requisition form No. 1 is for urinalysis - only the simpler qualitative tests can be performed in the Emergency Hospital Laboratory. These forms are prepared in duplicate, both copies being sent to the Laboratory. The yellow and red copies will be returned as reports.

### X-ray Requisition Form

The X-ray Requisition Form may be initiated in the Resuscitation Area or in the wards by a physician. The x-ray technician will return this form, which contains a space for a radiologist's report, to the ward, after the patient has had his or her x-ray examination. In the early phases of post-disaster such examination will be limited to X-ray for fractures and the location of radio-opaque foreign bodies.

### Ward Diet List

The nurse in charge should complete the Ward Diet List which is sent to the appropriate person supervising the food service within the Emergency Hospital.

### Kitchen Summary Sheet

The kitchen summary sheet should be used to compile and tabulate totals of diets requested by the ward staff.

## Requisition Form (General)

The Requisition Form is a general form which may be used to request supplies such as sterile goods, ward equipment, expendable supplies, diet or any other class of supplies. A separate requisition is required for each class of supplies. These forms are prepared in duplicate, the original being retained as a ward copy.

### Alphabetical Listing and Distribution Chart of Supplies

Each functional area chief and his service staff should during training periods become familiar with the supplies and equipment of their particular functional area. A list of contents of the emergency hospital by functional area is to be found in Appendix A. During unloading procedures the Director of Pharmaceutical services should use a master-list giving the location within the hospital of the colour-coded boxes and the bulk supply items. Each Area Chief should be provided with a copy of this master-list - the Alphabetical Listing and Distribution Chart of Supplies. This will assist in checking and correcting rapidly any errors or deficiencies in supplies and equipment during the distribution of supplies after unloading. The Alphabetical Listing and Distribution Chart will provide also an index to Area Chiefs of the distribution of supplies and equipment in functional areas other than their own. If a particular item is required by a functional area and is not on the initial allocation to that area, demand should be made on the Requisition Form (general) to the Pharmacy for supply.