

beds. Four feet spacing between the beds and the wall is suggested. It is imperative that nursing staff can observe patients easily.

## Equipment

A five outlet oxygen apparatus is provided and Wangensteen manually-operated suction apparatus is also available. These allow a number of patients to receive oxygen and suction therapy. Such patients should be grouped in those beds near the apparatus. Intravenous therapy stands may be attached to the beds. If necessary a severely shocked patient who has been operated on while still on a litter in the O.R. (see plate 4), may be returned to and left on the litter in the Recovery Ward. Trestles may be used for such cases or the litter placed on boxes.

After recovery from shock, patients should be moved expeditiously to the wards. Wangensteen suction apparatus will be available in the wards and the spare oxygen cylinder may be used here (see plate 7) if not required for the operating room.

#### Wards

There are eight general wards, each equipped for the nursing of twenty patients, and two special wards, the resuscitation or (pre-operative) ward and the recovery (post-operative) ward.

The wards should be set up under the supervision of the Director of Nursing Services in consultation with the Deputy Director. Special wards may be designated for pediatric patients and casualties with burns and fractures.

### Personnel

Twenty nurses of a total staff of thirty-four nurses in the Emergency Hospital will service the wards, assisted by fifty-one nursing assistants, orderlies and auxiliary workers. This is a ratio of almost one (1) nurse to three (3) ancillaries.

## Routine Ward Procedures

All ancillary nursing personnel should be familiar with and able to carry out the following minimal ward procedures, under nursing supervision:

- 1) Admitting casualties to a ward
- 2) Setting up documentation (e.g. nominal roll, patient medical log. etc.)

- Giving simple bedside care, e.g. patient cleansing, applying simple dressings, taking temperature, pulse and respiration, feeding patients
- 4) Observing, recording and reporting to the nurse in charge.

Basic and Advanced Nursing procedures and suggestions on Standing Treatment Orders will be found in a forth-coming EHS manual "Ward Management in the Emergency Hospital".

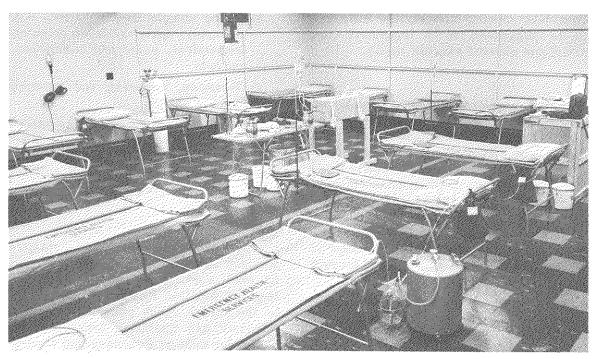
## Ward Equipment

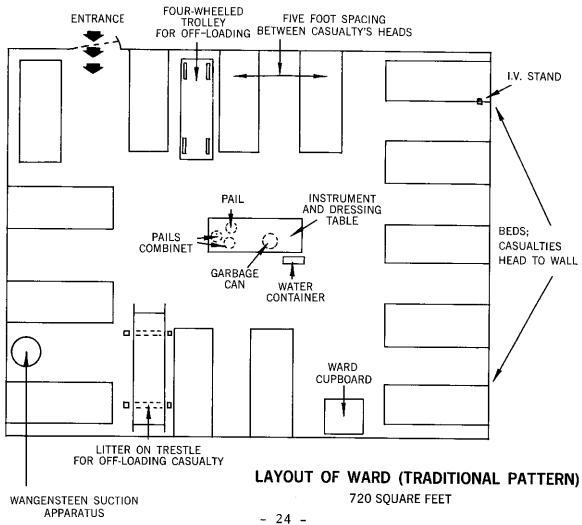
Sufficient supplies and equipment are provided in the ward boxes and bulk items to set up each ward. A few additional items may be required from the Pharmacy and Central Supply. In the initial shock phase, the Resuscitation/Recovery and Operating Areas will be placing heavy demands on Pharmacy and Central Supply. Additional requests for supplies from the general wards should be held to an absolute minimum at this time; in fact requests from wards should be nil, until such time as patients' needs demand further supplies.

The two hundred beds in the hospital are lightweight, folding beds. The decks (30 x 76 inches in area) are of nylon-cotton fabric coated with a plastic material. When unfolded and set up each bed occupies an area of 30 x 84 inches and is at a convenient height for nursing -27 inches.

Two wool and synthetic fibre blankets, a patients' effects bag and a pillow covered with a plastic pillow slip are provided for each bed. There is a reserve of two hundred additional blankets in the hospital. Sheets are provided but these are for use as operating room drapes, and for the covering of large burns.

As baby cots or children's beds are not available with the hospital, these together with additional sheets should be obtained from local resources. Initially, babies may be placed in suitably padded boxes, plastic wash tubs or wire shopping baskets such as may be found in a supermarket. Restrainers for young children are essential. These must be improvised as required. The blanket pins provided to prevent blankets slipping from bed-patients, may be used to pin blankets to serve this purpose.





There is an ample supply of chemical heating pads. These pads can be quickly activated by adding a tablespoon of water through the marked aperture.

## Arrangement of Ward Beds

The ward beds may be arranged in different patterns as desired. A traditional pattern is shown in plate 7 page 24. The 14 beds shown may be fitted comfortably into the area of a standard Canadian school class-room - 24 x 30 feet. This type of pattern gives ample space for off-loading patients from operating room trolleys. Use may be made of a set of trestles to assist in off-loading patients from stretchers to beds. A set may be rotated through the wards as each area is filled. The traditional pattern also provides ample working space centrally, and around each patient's bed. A large ward box is designed to become a convenient ward cupboard with three shelves (see plate 7). Built in cupboards and other furnishings present in the rooms may be used also if suitable.

### Central Supply Area

#### Function

The function of the Central Supply Area is to concentrate in one location the facilities for the preparation and assembling of surgical instruments, equipment and dressings; to provide sterilization facilities for these and, finally to ensure a freely flowing distribution of these items to all functional areas of the hospital requiring sterile supplies.

### Location

The Central Supply Area should be located reasonably close to the Operating Room Area and in a situation from which the special and general wards may be serviced with relative ease.

It must be given a priority with the Pharmacy Area as one of the first areas to be set up in the Emergency Hospital.

The Central Supply Area will be under the overall supervision of the Director of Pharmaceutical Services, who is responsible for ensuring a free flow of supplies available in the pharmacy

which will require sterilization before use, to the Central Supply.

## Layout of Central Supply Area

The Central Supply is divided into 3 areas:

- 1. A cleaning area (dirty instruments)
- 2. A preparation area (instruments, gloves, gowns, dressings)
- 3. A sterilizing area.

These three areas may be in one large room, however a separate room for the autoclaves is preferable because of ventilation requirements (see below). A sink with running water is essential for the cleaning area. Soap and detergents for cleansing instruments are supplied with the hospital. Additional supplies from local sources must be obtained or use may be made of those janitorial supplies usually available in large buildings such as schools.

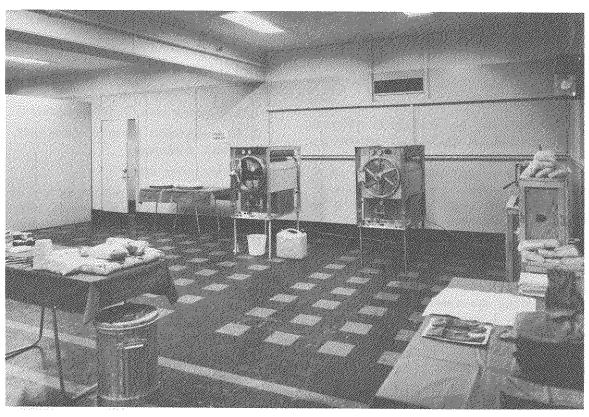
A suggested layout indicating the operational flow pattern is shown in figure 3.

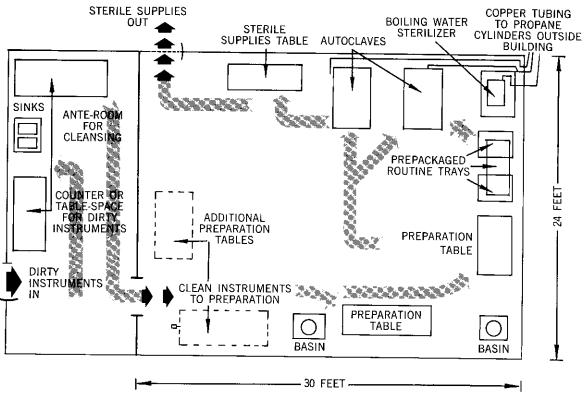
# Equipment

Two large portable autoclaves and a water boiling sterniser are supplied with the hospital. Initially, these units should be set up with propane-gas as a fuel source (5 propane gas cylinders are available, see plates 9 and 10). It should be noted that the smaller water-boiling sterilizer only functions with propane-gas as a fuel source. A basic repair and maintenance unit containing spare parts and tools is included. The two large autoclaves, however, are designed to function from a variety of heating sources — propane gas, steam, natural or mixed gases, electricity or wood.

#### Alternate Fuel Sources for the Autoclaves

- 1. Burner jets are supplied for propane, natural or mixed gases the correct jets for the particular gas supply must be selected and inserted before use.
- 2. An electrical conversion unit is supplied This is inserted at the base of the autoclave after removal of four nuts holding a baffle plate (see plate 10). A main supply of electricity is required if it is desired to heat the autoclave by





SUGGESTED LAYOUT OF CENTRAL SUPPLY AREA