

10. Equipment and Supplies

There were too few ambulances to carry the sick to the hospital, so mules pulled the ambulance carts until the mules, exhausted, stopped working. There were too few sheets for the beds ... There were too few beds, so several thousand cots were crammed into every square inch of corridor, storage area, meeting room, office, and veranda.

The Great Influenza, J.M. Barry

During an influenza pandemic, health care settings will need large quantities of equipment and supplies to provide care and to protect health care workers. Demand will be high worldwide, and traditional supply chains may break down. The health system must take steps to have an adequate stock of equipment and supplies to meet increased patient care needs and to protect health care workers, access to back up supplies, and an efficient system for purchasing, storing and distributing those supplies.

In early 2006, the ministry began developing and implementing a comprehensive pandemic procurement strategy to purchase and warehouse critical health care supplies. This strategy includes building:

- a stockpile of personal protective equipment
- a system for purchasing, storing and distributing supplies
- a process to manage perishable supplies.

The ministry is currently focused on procuring infection control and mass vaccination supplies. These items are priorities because they provide critical protection for health care providers and their patients and will be in short supply in a pandemic.

10.1 Objectives

Objectives

1. To maintain in all settings/ facilities a four-week stockpile of equipment and supplies for use during a pandemic.
2. To develop a provincial stockpile to supplement setting/ facility stockpiles and provide a source for supplies and equipment when settings run low or if the usual supply chains fail.
3. To develop an effective system for procuring, storing and distributing equipment and supplies.

10.2 Equipment and Supply Targets

To be able to respond effectively to a pandemic and avoid supply chain problems, the Ministry of Health and Long-Term Care is asking all health care settings/providers to plan for and maintain a four-week stockpile of personal protective equipment and other critical supplies. This will give organizations and practices surge capacity and ensure business continuity for the first wave of the pandemic (estimated to be 6 to 8 weeks).

In addition, the ministry is developing a four-week provincial stockpile that organizations will be able to access when/if their individual/local stockpiles are

exhausted. The provincial stockpile can be used until regular supply chains can be re-established.

To access the ministry stockpile during a pandemic, health care provider organizations should contact the Ministry Emergency Operations Centre.

To help smaller clinical settings/practitioners who may not have the resources to develop adequate stockpiles, the ministry is providing over 15,000 Emergency Infection Control Kits that will be pre-placed in community health centres, community physician offices and with midwives to provide extra emergency response capacity in smaller clinical settings.

10.3 Planning for Generic Supplies

To help organizations estimate their equipment and supply requirements, the ministry has developed preliminary templates of generic equipment and supplies required to provide care for people with influenza in the community and in hospital – including personal protective equipment (PPE) and diagnostic equipment and supplies for direct patient care (see Chapter 10A). As OHPIP evolves and the roles of various health care sectors are more clearly defined, the templates will be continually reviewed and refined.

The preliminary templates include:

- generic equipment and supplies across health sectors that would either be unavailable or in limited supply during a pandemic
- PPE equipment required based on the PIDAC recommendations for infection control for influenza. Note: Other PPE will be required to allow some sectors to maintain current routine practices. For example, Emergency Medical Services

(EMS) currently employs an “all hazards” approach when responding to an emergency and will maintain that routine practice during a pandemic. High risk environments, such as testing laboratories, will also continue to need PPE appropriate for their activities.

Planning Formula

The formulae used in the templates to calculate quantities are based on the assumption that – during a pandemic -- both facility and provincial four-week stockpiles will require supplies of equipment and supplies over and above those normally required to deliver patient care and to protect staff and their patients/clients over a four-week period. The formula for estimating requirements is based on the 35% pandemic attack rate or a 35% surge capacity requirement, which is the assumption for pandemic planning in Ontario.

10.4 Planning for Specialized Equipment

In addition to the generic supplies and equipment currently listed on the template, some sectors will require specific or specialized equipment and supplies. For example, public health laboratories have identified requirements for: nucleic acids extractors, liquid handlers (PCR set-up robotic pipettors), real-time thermocyclers, and reagents and disposables (pipette tips, 96 well plates).

10.5 Next Steps

Each sector will work with their settings and associations to identify sector-specific equipment and supply needs. The MOHLTC will:

- continue to develop an effective distribution system for equipment and supplies
- identify the supplies and equipment required for Influenza Assessment, Treatment and Referral Centres.