



## Preventing Transmission of Tuberculosis Ventilation Requirements for Healthcare Facilities

### TB Isolation Room

**Ventilation rate:** At least 6 total air changes per hour (ACH), including at least 2 outside ACH.

**Within-room air distribution:** Sufficient to dilute or remove TB bacilli from locations where healthcare facility personnel or visitors may be exposed.

**Preventive measures:**

- ◆ Establish and maintain the direction of airflow so that air flows into the isolation room from the hallway (that is, maintain the room under negative pressure).
- ◆ Keep isolation room doors closed to maintain control of the airflow direction.
- ◆ Exhaust the air from the isolation room directly to the outside of the building and away from intake vents, people, and animals in accordance with Federal, state, and local regulations concerning environmental discharges.

### Transporting TB Patients

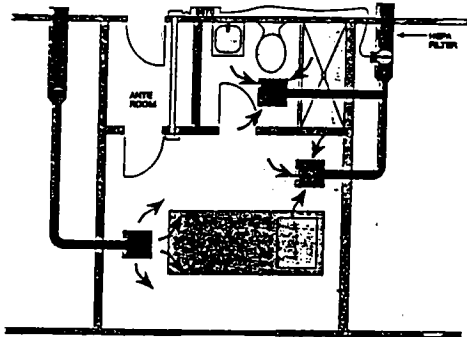
When transporting a patient who may have TB from the isolation room, have the patient wear a properly fitted surgical mask or valveless particulate respirator.

### Treatment Rooms and the Radiology Department

**Ventilation rate:** At least 6 total ACH.

**Preventive measures:**

- ◆ Keep an area ventilated especially for TB patients. If this is not possible, return the patient to the isolation room as soon as is practical.
- ◆ Keep treatment rooms where cough-inducing procedures are performed under negative pressure relative to adjacent rooms. Exhaust the room air directly outdoors away from all windows and air intakes.
- ◆ Allow time between patients for the ventilation system to remove any residual infectious organisms from the air.



- ◆ Healthcare Facilities
- ◆ Information/Guidance
- ◆ TB Prevention by Ventilation

### **Intensive Care Unit (ICU)**

*Ventilation rate:* At least 6 total ACH, including at least 2 outside ACH.

*Preventive measure:* If air is recirculated in the ICU, it should pass through high efficiency particulate air (HEPA) filters.

### **Emergency Room Waiting Area**

*Ventilation rate:* At least 6 total ACH.

*Preventive measures:*

◆ Maintain the waiting room under negative pressure. If it is impossible to direct air from potentially contaminated emergency rooms or waiting areas to the outside, HEPA filters may be useful for removing infectious organisms prior to recirculation.

### **Laboratories**

*Ventilation rate:* At least 6 total ACH or makeup equal to hood exhaust volume.

*Preventive measures:*

◆ Maintain the laboratories under negative pressure relative to any adjacent areas to prevent the exfiltration of any airborne contaminants.

◆ Exhaust the air from fume hoods or safety cabinets in infectious disease laboratories through HEPA filters prior to discharging it outdoors.

### **Autopsy Rooms**

*Ventilation rate:* At least 12 total ACH.

*Preventive measures:*

◆ Maintain a good distribution of airflow.

◆ Maintain the autopsy room under negative pressure relative to adjacent areas.

◆ Exhaust the room air directly to the outside of the building.

### **Clinics**

*Ventilation rate:* Increased ventilation may reduce the risk of TB transmission.

*Preventive measures:* HEPA filters may be appropriate.

**CONSULT WITH ENGINEERS WHO HAVE HOSPITAL VENTILATION EXPERIENCE  
PRIOR TO MAKING ANY MODIFICATIONS!**