or a visiting nurse. Ideally, two caregivers participate in the procedure to assist with positioning the child.

Changing the tracheostomy tube is accomplished using strict aseptic technique. A gown and eye protection should be worn to change the tracheostomy. Sterile gloves may be worn for insertion of the sterile tracheostomy tube, but clean gloves may be used for tubes that are cleansed and reused. Tube changes should occur before meals or 2 hours after the last meal. Continuous feedings should be turned off at least an hour before a tube change. The new sterile tube is prepared by inserting the obturator and attaching new ties. The child may be suctioned if necessary before the procedure and then restrained and positioned with the neck slightly extended. One caregiver removes the old ties and removes the tube from the stoma. The new tube is inserted gently into the stoma (using a downward and forward motion that follows the curve of the trachea), the obturator is removed, and the ties are secured. The adequacy of ventilation must be assessed after a tube change because the tube can be inserted into the soft tissue surrounding the trachea; therefore, breath sounds and respiratory effort are carefully monitored.

Supplemental oxygen is always delivered with a humidification system to prevent drying of the respiratory mucosa. Humidification of room air for an established tracheostomy can be intermittent if secretions remain thin enough to be coughed or suctioned from the tracheostomy. Direct humidification via a tracheostomy mask can be provided during naps and at night so that the child is able to be up and around unencumbered during much of the day. Room humidifiers are also used successfully.

The inner cannula, if used, should be removed with each suctioning, cleaned with sterile saline and pipe cleaners to remove crusted material, dried thoroughly, and reinserted.

## Emergency Care: Tube Occlusion and Accidental Decannulation

Occlusion of the tracheostomy tube is life threatening, and infants and children are at greater risk than adults because of the smaller diameter of the tube. Maintaining patency of the tube is accomplished with suctioning and routine tube changes to prevent the formation of crusts that can occlude the tube.