

FIG 21-9 Child using metered-dose inhaler (MDI) with spacer and face mask.

A spacer or AeroChamber device should be used with MDI inhalers. These devices allow the parent or child to deliver the medication from the MDI and slowly inhale it. Spacers also help prevent yeast infections in the mouth when corticosteroids are inhaled via an MDI.

The child and parents also need to be cautioned about the adverse effects of prescribed drugs and the dangers of overuse of  $\beta_2$ -agonists. They should know that it is important to use these drugs when needed but not indiscriminately or as a substitute for avoiding the symptom-provoking allergen.

## Nursing Alert

Long-acting  $\beta_2$ -agonist (LABA) inhalers (salmeterol) should be used only as directed (usually every 12 hours) and not more frequently. They are not intended to relieve acute asthmatic symptoms.

The family may be asked to obtain a PEFM and learn to use this device to monitor the child's asthma if the child is 5 years old and older. A written asthma action plan that includes the three peak