

George's parents will understand the signs and symptoms of HF and will understand the actions being taken by the health care team.

Assist in Measures to Improve Cardiac Function

The nurse's responsibility in administering digoxin includes calculating and administering the correct dosage, observing for signs of toxicity, and instituting parental teaching regarding drug administration at home. The child's apical pulse is always checked before administering digoxin. As a general rule, the drug is not given if the pulse is below 90 to 110 beats/min in infants and young children or below 70 beats/min in older children (the cutoff point for adults is 60 beats/min). However, because the pulse rate varies in children in different age groups, the written drug order should specify at what heart rate the drug is withheld. The nurse should also use judgment in evaluating the pulse rate. If it is significantly lower than the previous recording, the dose should be withheld until the practitioner is notified.

The apical rate is taken because a pulse deficit (radial pulse rate lower than apical) may be present with decreased cardiac output. It is auscultated for 1 full minute to evaluate alterations in rhythm. If the child is monitored by means of an ECG, a rhythm strip is obtained and attached to the chart for rate and rhythm analysis, such as abnormal lengthening of the PR interval (>50% increase over predigitalization interval) and dysrhythmias.

Digoxin is a potentially dangerous drug because of its narrow margin of safety of therapeutic, toxic, and lethal doses. Many toxic responses are extensions of its therapeutic effects. Therefore, the nurse must maintain a high index of suspicion for signs of toxicity when administering digoxin ([Box 23-6](#)).

Box 23-6

Common Signs of Digoxin Toxicity in Children

Gastrointestinal

Nausea