

the following:

- a. Risks of cardiac catheterization
  - b. Association between vomiting and bleeding after cardiac catheterization
  - c. Concerns related to acute blood loss
3. What priorities for nursing care should be established for Tommy?
  4. Does the evidence support your nursing interventions?

## **Congenital Heart Disease**

The incidence of CHD in children is approximately 8 to 12 per 1000 live births ([Park, 2014](#)). CHD is the major cause of death (other than prematurity) in the first year of life. Although there are more than 35 well-recognized cardiac defects, the most common heart anomaly is ventricular septal defect (VSD).

The exact cause of most congenital cardiac defects is unknown. Most are thought to be a result of multiple factors, including a complex interaction of genetic and environmental influences. Some risk factors are known to be associated with increased incidence of congenital heart defects. Maternal risk factors include chronic illnesses (such as diabetes or poorly controlled phenylketonuria), alcohol consumption, and exposure to environmental toxins and infections. Family history of a cardiac defect in a parent or sibling increases the likelihood of a cardiac anomaly. In general, when one child is affected, the risk of recurrence in siblings is about 3%, and for those who have a child with hypoplastic left heart syndrome (HLHS) the risk of CHD in subsequent children is reported to be at 10% ([Park, 2014](#)).

Congenital heart anomalies are often associated with chromosomal abnormalities, specific syndromes, or congenital defects in other body systems. Down syndrome (trisomy 21) and trisomies 13 and 18 are highly correlated with congenital heart