A less used oral chelating agent, d-penicillamine, is sometimes used to treat lead poisoning, but the medication is not approved by the US Food and Drug Administration for use in the United States (Dapul and Laraque, 2014).

Prognosis

Although most of the pathophysiologic effects of lead are reversible, the most serious consequences of both high and low lead exposure are the effects on the central nervous system. In children with lead encephalopathy, permanent brain damage can result in cognitive impairment, behavior changes, possible paralysis, and seizures. However, low-dose exposure may also cause permanent neurologic deficits. Increased distractibility, short attention span, impulsivity, reading disabilities, and school failure have been associated with lead exposure (Centers for Disease Control and Prevention Advisory Committee on Childhood Lead Poisoning Prevention, 2012).

Nursing Care Management

The primary nursing goal in lead poisoning is to prevent the child's initial or further exposure to lead. For children with low-level exposure, this requires identifying the sources of lead in the environment. Careful history taking is the most useful and most valuable tool and should concentrate on the personal risk questions. Suggestions for reducing lead in the child's environment are listed in the Community Focus box.

Community Focus

Reducing Blood Lead Levels

- Make certain children do not have access to peeling paint or chewable surfaces painted with lead-based paint, especially windowsills and wells.
- If a house was built before 1978 and has hard-surface floors, wet mop them at least once per week. Wipe other hard surfaces (e.g., windowsills, baseboards). If there are loose paint chips in an area,