



Testing* Porcelain Fixtures

Background

Porcelain-enameled bathroom fixtures such as bathtubs and sinks have been recently identified as a source of lead exposure to young children. Over 1400 bathtubs were tested using LeadCheck® Swabs, with approximately 62% of the tubs positive for leachable lead (77% of the cast iron bathtubs and 25% of the steel bath tubs were positive). Simply touching, or wiping the side of these leaded fixtures is enough to transfer a residue of lead from the surface to the hand. This is of particular concern for young children because of their high level of hand-to-mouth activity. In some cases, this source of lead could represent a significant lead exposure to very young children.

For over 100 years, lead has been added to porcelain enameling material. Both new and old fixtures may leach the lead; however, older bathtubs that have repeatedly been cleaned with abrasive cleansers leach the highest amounts of lead. Refinishing the tub surface encapsulates the lead and should eliminate this source of lead exposure. To determine whether your porcelain-enameled bathroom fixtures contain lead, use the following method.

Test Method

1. Activate a LeadCheck® Swab according to the directions in the instruction manual.
2. Rub the LeadCheck® Swab over a small area of the **dry** tub surface for 30 seconds, especially on the bottom of the tub where the enameled surface appears worn or "gritty". Also rub over any cracks or chips on the bottom or around the drain as these damaged areas may leach lead.
3. Examine the Swab tip and/or tub surface for the development of a pink to red color.

Interpretation of Results

Any pink to red color indicates that hazardous levels of lead are leaching from the surface.

NOTE: Barium is a constituent in some porcelain enamels and may cause the LeadCheck® Swab to turn a yellow to orange color. A yellow/orange color is a negative result for lead.

*LeadCheck® Swabs are a versatile and sensitive screening tool for the detection of lead on any surface. This note provides a suggested method to allow testing for a specific application. Additional information and help are available by calling 800-262-5323 or 508-651-7881.