

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
GUIDANCE FROM HOTLINE COMPENDIUM

WSG H17
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SUBJECT: Household Refrigerators and Lead Contamination

SOURCE: Peter Lassovszky

Some home refrigerators have drinking water taps installed on the door. These refrigerators are directly connected to the household plumbing in order to continually provide users with cold water and ice. The water is stored in a reservoir inside the unit.

Considering recent research on exposure to lead via water coolers and "standing water," this situation raises several issues. From what materials are refrigerator reservoir tanks made (i.e., lead, plastic, steel)? Since the water is used only for drinking, it is reasonable to believe that the service line gets flushed less often than a common kitchen tap and water sits in the line longer. Thus, users drink "standing water" more often. Does the use of these refrigerators increase a consumer's risk of exposure to lead in drinking water?

Response:

Manufacturers indicate that the refrigerator reservoir tanks are made of plastic. The components of the device which produce the ice cubes include materials consisting of plastic and stainless steel. The "service line" providing water to the refrigerator consists of a copper tube. The "service line" is connected to the refrigerator and the plumbing with compression fittings.

Based upon the above information, the EPA concludes that it is unlikely that any lead is contributed to the consumer's drinking water from the refrigerator's ice making mechanism or from the cold water reservoir. If the refrigerator is attached to home plumbing which contains lead, it is possible that long standing times of water in pipes before the water enters the refrigerator may result in elevated levels of lead in water or ice dispensed by the refrigerator. The likely sources of lead to the drinking water may be from the household plumbing, or possibly from the compression fittings, provided they are made of brass.