

Philadelphia Department of Public Health (2009) Information Sheet – Amalgam dental fillings containing mercury

The Philadelphia Department of Public Health has developed this information sheet pursuant to Section 1, Title 9, Chapter 9-3100 of the Philadelphia Code. Its purpose is to give you information about amalgam fillings that contain mercury and other dental filling options.

Your dentist's office should provide you with a copy of this sheet and answer any questions that you may have.

1. What is dental amalgam?

- Dental amalgam is the silver-colored material used to fill (restore) teeth that have cavities. It is one of several approved choices for filling cavities.
- Amalgam is made up of 50 percent mercury, a type of metal. Amalgam also contains other metals including silver, tin, copper, and zinc.

2. Is dental amalgam that contains mercury safe?

- There is ongoing research and discussion about the health effects of mercury in amalgam fillings.
- Small amounts of mercury are released as a vapor (gas) when amalgam fillings are placed or removed and through chewing. This mercury can be absorbed by the body and may build up over time.
- High levels of mercury can cause toxic effects on the brain, nervous system, and kidneys.
- Generally, people with amalgam fillings have higher levels of mercury in their blood and urine than people without amalgam fillings. The mercury levels in people with amalgam fillings are not high enough to be considered toxic.
- So far, well-done studies have shown that amalgam fillings do not impact behavior, information processing, and kidney function among children.
- It is more difficult to study the long-term effects of dental amalgam (effects that may appear later in life). Research in this area is still being performed.
- The Food and Drug Administration (FDA), which regulates the safety of medications and medical devices, has stated that "dental amalgams contain mercury, which may have neurotoxic effects on the nervous systems of developing children and fetuses." The FDA is currently reviewing data and will make a decision about how strongly to regulate the use of amalgam.

3. Are there alternatives to amalgam?

- Yes. Amalgam is one of several approved choices for filling cavities.
- The most common dental filling used today is resin composite, which does not contain mercury. Resin is usually tooth-colored.
- Other filling materials are a form of glass cement, porcelain, gold, and other metals.

4. Aside from safety issues, what are the pros and cons of amalgam and alternatives?

- Amalgam fillings generally last longer than resin composite fillings, so they don't need to be replaced as often.
- Resin composite fillings are tooth-colored and, therefore, are preferred by some people for cosmetic reasons.
- There may be a cost difference between resin composite and dental amalgam.
- To protect the environment, amalgam must be disposed of as a hazardous waste.

5. What should you do?

- Talk to your dentist, ask questions, and make an informed choice about dental fillings if you have a cavity.
- Prevent cavities through regular brushing, flossing, and dental exams.
- For more information on amalgam fillings that contain mercury:
Mercury in Dental Amalgam (U.S. Environmental Protection Agency)
About Dental Amalgam Fillings (U.S. Food and Drug Administration)

or call toll-free:

The U.S. Food and Drug Administration at
1-800-638-2041 (option #2) between 8:00 a.m. and 4:30 p.m

A copy of this information sheet has been provided to the patient (or patient's representative) and his/her questions, if any, have been answered.

Patient signature _____ **Date** _____

Dentist signature _____ **Date** _____