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## Infection Control

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### Frequently Asked Questions - Extracted Teeth

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#### How do I dispose of extracted teeth in the dental office?

Extracted teeth that are being discarded are subject to the containerization and labeling provisions of the Occupational Safety and Health Administration (OSHA) Bloodborne Pathogen Standard. OSHA considers extracted teeth to be potentially infectious material that should be disposed into medical waste containers. Extracted teeth containing amalgam should not be placed in a medical waste container that uses an incinerator for final disposal. State and local regulations should be consulted regarding disposal of amalgam. Many metal recycling companies will accept extracted teeth with amalgam. Contact a recycler and ask about their policies and any specific handling instructions they may have.

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#### Can I give patients their teeth after they have been extracted?

Extracted teeth may be returned to the patients upon request and are not subject to the provisions of the OSHA Bloodborne Pathogens Standard.

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#### What are the recommendations for using extracted teeth in educational settings?

Extracted teeth are occasionally collected and used for preclinical educational training. The teeth should be cleansed of visible blood and gross debris and maintained in a hydrated state. Because the teeth will be autoclaved before clinical teaching exercises, using an economical storage solution (e.g., water or saline) may be practical. A liquid chemical germicide (e.g., sodium hypochlorite [household bleach] diluted 1:10 with tap water) could reduce bacterial accumulation during storage, although it does not completely disinfect/sterilize the tooth. Extracted teeth must be placed in a well-constructed container with a secure lid to prevent leaking during transport and labeled with the biohazard symbol.

Prior to being used in an educational setting, teeth should be heat sterilized to allow for safe handling. Pantera and Shuster demonstrated elimination of microbial growth using an autoclave cycle for 40 minutes. However, since preclinical educational exercises simulate clinical experiences, students enrolled in dental educational programs should still follow standard precautions. Autoclaving teeth for preclinical laboratory exercises does

not alter their physical properties sufficiently to compromise the learning experience. However, autoclave sterilization of extracted teeth does affect dentinal structure enough to compromise dental materials research.

The use of teeth that do not contain amalgam is preferred because they can be safely autoclaved. Extracted teeth containing amalgam restorations should not be heat sterilized because of the potential health hazard associated with possible mercury vaporization and exposure. If extracted teeth containing amalgam restorations are to be used, their immersion in 10% formalin solution for 2 weeks has been found to be an effective method of disinfecting both the internal and external structures of the teeth.

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## Selected References and Additional Resources

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