

# **INFECTIOUS WASTE**

## **INTRODUCTION**

This document provides general information about the guidelines, laws, and rules and regulations that govern infectious waste that is generated in dental facilities in Indiana.

This information is provided for educational purposes only. The Oral Health Program (OHP) at the Indiana State Department of Health (ISDH) cannot provide legal opinions on the interpretation of guidelines, laws, and rules and regulations. Dental professionals are responsible for understanding and applying these as they pertain to the practice of dentistry in Indiana.

## **BACKGROUND**

The primary governing rules and regulations for infectious waste generated in dental facilities in Indiana are contained in 410 IAC 1-3, Infectious Waste (Rule 3). This administrative code gains its authority from the laws contained in Indiana Code (IC) Title 16, Article 41, and Chapter 16.

IC 16-41-16 states that Indiana shall adopt rules for the treatment of infectious waste after considering other guidelines, including those from OSHA, IOSHA and the CDC.

The CDC provides useful guidelines pertaining to infectious waste in dental health care settings that are often needed for greater understanding of the dental profession's responsibilities.

The following summarizes many important requirements pertaining to infectious waste generated in dental facilities in Indiana.

## **WRITTEN POLICIES AND PROCEDURES**

All persons and facilities subject to Infectious Waste, Rule 3 shall

- have written policies and procedures that contain,
  - the requirements contained in this rule, and
  - sanctions, including discipline and dismissal for failure to follow this rule;
- provide necessary personal protective equipment to those who will handle infectious waste;
- provide necessary training;
- maintain a record of training; and
- make written policies and procedures and records of training available to the ISDH upon request.

## **CATEGORIES OF WASTE**

How to handle waste that is generated in dental facilities depends on the category of waste. The IAC defines **Infectious Waste** and OSHA defines **Regulated Waste**, with each definition providing categories of waste.

The definition of infectious waste provided by 410 IAC 1-3-10 include

- contaminated sharps or contaminated objects that could potentially become contaminated sharps;
- infectious biological cultures, infected associated biological, and infectious agent stock;
- pathological waste (defined in 410 IAC 1-3-12);
- blood and body fluids in liquid and semi-liquid form;
- body parts (such as extracted teeth) and more (see 410 IAC1-3-10); and
- other waste that has been intermingled with infectious waste.

This definition of infectious waste can produce three general categories of waste generated by dental facilities:

- infectious waste consisting of contaminated sharps,
- infectious waste other than contaminated sharps, and
- non-infectious waste.

The definition of regulated waste provided by OSHA include

- contaminated sharps; and pathological and microbiological wastes containing blood or OPIM;
- liquid or semi-liquid blood or other potentially infectious material (OPIM);
- contained items that would release blood or OPIM in liquid or semi-liquid state if compressed; and
- items that are caked with dried blood or OPIM that can release these materials during handling.

This definition of regulated waste can produce three general categories of waste generated by dental facilities:

- regulated waste consisting of contaminated sharps,
- regulated waste other than contaminated sharps, and
- non-regulated waste.

#### Comments

- 410 IAC 1-3-4, as well as OSHA, provides a definition of contaminated sharps.
- The CDC recognizes that any surface, instrument, supply, equipment, etc. that has been contaminated with any blood or OPIM is potentially infectious, but the risk of transmitting an infection from a contaminated item varies according to various factors. OSHA's definition of regulated waste acknowledges this fact.
- The CDC has established a special circumstance that applies to extracted teeth, which are clearly a body part and infectious waste. The CDC states that "extracted teeth can be returned to patients on request, at which time provisions of the standard (OSHA bloodborne pathogens standard) no longer apply."

#### OPINIONS

- In the opinion of the OHP, the OSHA definition of regulated waste needs to be considered when considering infectious waste, as defined by 410 IAC 1-3-10, and what constitutes infectious waste and non-infectious waste in dental facilities in Indiana.
- In the opinion of the OHP, before returning an extracted tooth to a patient upon his/her request, the tooth should be treated to the OSHA standard for sending a tooth to a dental laboratory for shade or size comparison. That is, before an extracted tooth is returned to a patient it should be cleaned and surface disinfected with an EPA-registered hospital disinfectant, and rinsed and placed in an impervious container, such as a sealed plastic bag or other similar container. Once an extracted tooth is returned to a patient upon his/her request, it becomes the responsibility of that patient.

#### CONTAINMENT

According to 410 IAC 1-3-24 (a), all persons and facilities subject to this rule (Infectious Waste, Rule 3) shall ensure that infectious waste is always contained in a manner that will reasonably protect waste handlers and the public.

- Infectious waste consisting of contaminated sharps or contaminated objects that could potentially become contaminated sharps, and more (see 410 IAC 1-3-24(b)) shall be placed in containers that are
  - leak proof, rigid, and puncture-resistant;
  - tightly sealed to prevent expulsion;
  - labeled with the biohazard symbol; and
  - effectively treated (with heat treatment) prior to being stored in an unsecured area (or if untreated stored in a secured area).
- Infectious waste other than contaminated sharps (see 410 IAC 1-3-24(c)) shall be placed in containers that are
  - impervious to moisture;
  - enough strength and thickness to prevent expulsion;
  - secured to prevent leakage or expulsion;
  - labeled with biohazard symbol; and
  - effectively treated (with heat treatment) prior to being stored in an unsecured area (or if untreated stored in a secured area).
- Non-infectious waste (or OSHA's non-regulated waste) may be placed in the regular trash.

## **STORAGE**

Infectious waste that is not treated in the dental facility prior to transport, treatment, and disposal (i.e. **treated off-site**) must be

- stored in a secured area that
  - is locked or otherwise secured,
  - affords protection from adverse environmental conditions, and
  - has a prominently displayed biohazard label (on the entrance to the secured area);
- stored in a manner that preserves the integrity of the container;
- stored in a manner that is not conducive to rapid microbial growth and putrefaction; and
- any reusable containers for infectious waste are disinfected each time they are emptied, unless protected by disposable liners, etc., that are removed with the infectious waste.

Infectious waste that is treated in the dental facility prior to transport and disposal (i.e. **treated on-site**) may be stored, transported, and disposed in the usual manner for waste that is non-infectious. Thus, infectious waste that is treated on-site may be stored in an unsecured area. (Note: This is probably not done much in dental facilities in Indiana.)

## **EFFECTIVE TREATMENT**

Facilities subject to this rule shall either

- transport infectious waste off-site for effective treatment, or
- effectively treat infectious waste on-site.

See 410 IAC 1-3-26 for definition of effective treatment.

## **OPINION**

- The OHP considers heat treatment with an autoclave or dry heat oven, according to the manufacturer's instructions, an effective treatment for infectious waste in a dental facility.

## **TRANSPORT**

### Label

Prior to transporting infectious waste to be treated off-site or infectious waste treated on-site, a dental facility must label ALL infectious waste containers with the following information

- name, address, date, and phone number of generating facility (dental facility); and
- name, address, date and phone number of treatment facility (commercial vendor or dental facility).

NOTE: These containers and the information on these labels will be gone once transported from the dental facility. Thus, this information also needs to be retained in the dental facility in one of the following manners.

### Forms from the vendor and/or a dental facility log

Prior to transporting infectious waste to be treated off-site or infectious waste treated on-site, a dental facility must retain forms from a commercial vendor and/or a dental facility log with the following information for ALL infectious waste containers

- name, address, date, and phone number of generating facility (dental facility);
- name, address, date, and phone number of treatment facility (dental facility or commercial vendor);
- brief description of the waste and the method of treatment; and
- the signature(s) of a responsible person (preferably signatures from both the responsible member of the dental facility staff and the responsible person transporting, providing any required treatment, and disposing of the waste).

NOTE: Once infectious waste containers have been removed from a dental facility for transport, any required treatment, and disposal, then these containers with treated or untreated infectious waste fall outside the realm of the responsibility of the ISDH Oral Health Program.

## **INSPECTION**

The ISDH has the right to inspect facilities for possible violations pertaining to infectious waste.

As part of investigations into alleged violations of universal precautions in dental facilities, the OHP reviews the written policies and procedures for containing, labeling, logging, treating, and disposing of infectious waste, and reviews the necessary documentation associated with this management of infectious waste.

## **COMPLIANCE**

The OHP will refer violations considered emergencies to the ISDH Office of Legal Affairs (OLA) for immediate action.

The OHP will attempt to resolve documented non-emergency violations. The OHP may refer violations which have not been satisfactorily resolved to the ISDH Office of Legal Affairs (OLA) for review and any further action it may deem appropriate.

The ISDH has the authority to fine dental facilities that are in violation of the rules and regulations pertaining to universal precautions and infectious waste. The ISDH may also require further action by the dental facility to provide evidence of compliance with all applicable laws and rules and regulations.

Ultimately, if a dental facility is unable or unwilling to resolve a violation to the satisfaction of the ISDH, then the ISDH may refer the matter to the Office of the Indiana Attorney General for enforcement, which may involve review and action by the Indiana State Board of Dentistry.