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Ensuring Continued Trust

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PRACTICE ADVISORY SERVICE FAQ



Information about Infection Prevention and Control for Dentists

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Information about Infection Prevention and Control for Dentists

Does the College have any document that addresses the issue of infection prevention and control in the dental office?

Yes, the College has Guidelines on Infection Prevention and Control in the Dental Office. [Click here](#) to access these Guidelines.

What type of education and training is required for oral health care workers (OHCW)?

In addition to previous formal instruction in a university or college dental program, it is important that all OHCWs receive office-specific training in infection prevention and control as part of their orientation, and whenever new tasks, procedures or equipment are introduced. This training should be supplemented whenever necessary and reviewed at least annually by means of staff meetings, attendance at continuing education courses and through self-learning programs.

All OHCWs should receive training that includes information about their exposure risks, infection prevention and control strategies specific to their occupational tasks, and the management of significant exposures to blood or blood contaminated saliva and/or blood splatter.

It is also recommended that the College's Guidelines, as well as key reference materials identified in it, form part of an in-office Infection Prevention and Control Manual.

Which illnesses should OHCWs be immunized against?

All OHCWs should be adequately immunized against hepatitis B, measles, mumps, rubella, varicella, influenza, diphtheria, pertussis, tetanus and polio. It is important that all OHCWs know their immunization status and ensure that it is up-to-date. OHCWs should consult with their family physicians about the need for immunization, as well as baseline and annual tuberculosis skin testing.

Is immunization against HBV required for all OHCWs?

Yes. Hepatitis B is the most important vaccine-preventable infectious disease for all workers engaged in health care. Immunization against HBV is strongly recommended for all OHCWs who may be exposed to blood, body fluids or injury involving sharps.

How do we know that the vaccination process was successful and that OHCWs are protected against HBV infection?

Serological testing for anti-HBs should be conducted 1 to 2 months after completion of the 3-dose vaccination series to establish antibody response.

What happens if an OHCW fails to develop an adequate antibody response?

The OHCW should complete a second vaccination series, followed by retesting for anti-HBs. OHCWs who fail to respond to the second vaccination series should be tested for HBsAg.

Nonresponders to vaccination who are HBsAg-negative should be counselled regarding precautions to prevent HBV infection and the need to obtain immunoglobulin prophylaxis for any known or probable parenteral exposure to HBsAg-positive blood.

Should a needle be capped or remain uncapped after use?

Safe recapping of a needle is preferred to prolonged exposure to an unprotected needle. Therefore, following use, needles should be recapped as soon as possible by using a one-handed scoop technique or a commercial recapping device.

How do we manage a significant exposure to blood (e.g. needle-stick injury)?

Blood-borne pathogens, such as HBV, HCV and HIV, can be transmitted to OHCWs through occupational exposures to blood, saliva and other body fluids. Significant exposures include percutaneous injuries with contaminated needles, burs or other sharp instruments, as well as accidents in which blood, saliva or other body fluids are splashed onto non-intact skin or the mucosa of the eyes, nose or mouth. However, percutaneous injuries pose the greatest risk of transmission of blood-borne pathogens to OHCWs.

In the event of a significant exposure, immediate first-aid measures should be instituted:

- For percutaneous injuries, allow the wound to bleed briefly and freely. Then, gently wash the wound with soap and water, and bandage as needed.
- For exposures involving the eyes, nose or mouth, flush the area with copious amounts of water.
- For exposures involving non-intact skin, wash the site with soap and water.

The dentist should then assess the source patient's status and risk for blood-borne illnesses by reviewing the patient's medical history and, if necessary, asking her/him additional questions.

What should we do if the patient's HBV, HCV or HIV status is unknown, or if the patient presents with known risk factors?

Reasonable efforts should be made to obtain the patient's informed consent to be tested for HBV, HCV and HIV. This can be accomplished by referring the patient to her/his family physician for consultation, assessment of risk factors and any blood tests that are considered necessary.

At the same time, the injured OHCW should be referred to her/his family physician, and infectious disease specialist or hospital emergency department for counselling, baseline blood test and, if deemed necessary, post-exposure prophylaxis and/or administration of immunoglobulins.

Is there a specific timeframe to administer post-exposure prophylaxis?

If necessary, post-exposure prophylaxis should be administered as soon as possible. For example, in the event of a high-risk exposure to HIV infection, anti-retroviral drugs should be administered within hours.

Do instruments need to be packaged for sterilization?

Critical and semi-critical instruments should be processed in a manner that will maintain sterility during storage. Suitable packaging materials include wrapped, perforated instrument cassettes; peel pouches of plastic or paper; and woven and nonwoven sterilization wraps.

Are there specific situations in which instruments can be sterilized unpackaged?

Unpackaged (flash) sterilization should be used only under the following conditions:

- Thorough cleaning and drying of instruments precedes the unpackaged cycle.
- Mechanical parameters are checked and a chemical indicator is used.
- Care is taken to avoid thermal injury to staff or patients.
- Items are transported aseptically to the point of use to maintain sterility.

When sterile items are left open to the air, they can quickly become contaminated. Therefore, critical instruments that are sterilized unpackaged should be used immediately and not stored. Sufficient inventories of critical instruments should be maintained to avoid flash sterilization.

Semi-critical instruments that are sterilized unpackaged on a tray or in a container system should be used immediately or within a short time. Storage, even temporary, of unpackaged semi-critical instruments is discouraged because it permits exposure to dust, airborne organisms and other unnecessary contamination before use on patients.

Unpackaged sterilization of implantable items is inadequate and must not be used.

How do we evaluate the sterilizing conditions and the effectiveness of sterilization procedures?

Through a combination of mechanical, chemical and biological indicators.

How often should biological indicators be used?

Biological indicators (or spore tests) are the most accepted means for monitoring of sterilization, because they directly assess the procedure's effectiveness in killing the most resistant micro-organisms. According to the College's IPAC Guidelines, a biological indicator should be included each day a sterilizer is used.

What are the other indicators that are required and how frequently should they be used?

Mechanical indicators are the gauges or displays on the sterilizer for cycle time, temperature and pressure. Some tabletop sterilizers have recording devices that print out these parameters, which is preferred. Mechanical indicators should be checked and recorded for each load.

Chemical indicators (i.e. internal and external) use sensitive chemicals to assess physical conditions during the sterilization process. For example, heat-sensitive tape, applied to the outside of a package, changes colour rapidly when a given temperature is reached. This signifies that the package has undergone a sterilization cycle, although it does not ensure that sterilization has been achieved.

Each package must have external chemical indicators. In addition, it is recommended that internal chemical indicators be used to detect penetration into the package.

The daily operation of every sterilizer must be reviewed and documented. A logbook should be kept for this purpose. Any malfunction must be noted and appropriate action taken.

Do dentists need to sterilize handpieces between patients?

The majority of semi-critical items used in dentistry, including handpieces, are heat-tolerant and should always be heat-sterilized between uses.

For hand hygiene, which is better: soap and water or alcohol-based hand rubs?

Hands should be washed with plain or antimicrobial soap and running water:

- When hands are visibly soiled (including with powder from gloves) or contaminated with body fluids;
- Following personal body functions.

If hands are NOT visibly soiled (i.e. the majority of instances), the use of a 70-90% alcohol-based hand rub is the preferred method of hand hygiene. This includes:

- Before and after direct contact with individual patients.
- After contact with environmental surfaces, instruments or other equipment in the dental operatory.
- After contact with dental laboratory materials or equipment.
- Before eating or drinking.

Use professional judgement for either procedure. If you think your hands have accidentally become contaminated with body fluids, wash with soap and water to remove organic matter. However, there is sufficient evidence that alcohol-based hand rubs are superior to washing with soap and water, except in cases where the hands are visibly soiled or contaminated with body fluids.