A .gov website belongs to an official government organization in the United States. A lock ( ) or https:// means you've safely connected to the .gov website. Share sensitive information only on official, secure websites. CDC provides recommendations for the sterilization process in the Guideline for Disinfection and Sterilization in Healthcare Facilities (2008) as well as on page 21–25 and 42–44 of the Guidelines for Infection Control in Dental Health-Care Settings — 2003 and in the Summary of Infection Prevention in Dental Settings: Basic Expectations for Safe Care. CDC recommends that dental health care personnel be familiar with the recommended practices for reprocessing patient-care items. Always follow manufacturer's validated Instructions for Use when reprocessing items. Patient-care items are categorized depending on the potential risk for transmission of infection. Critical items penetrate soft tissue or bone. These items have the highest risk of transmitting infections and should always be heat sterilized. Semicritical items touch mucous membranes, like the inside of the cheeks or the gums. These items have a lower risk of transmission than critical items. Most semicritical items can (and therefore should) be heat sterilized. If they cannot tolerate heat sterilization, they should be processed using a high-level disinfectant. Noncritical items only contact unbroken skin. These items have the lowest risk of transmission. In most cases, noncritical items can be cleaned and, if visibly soiled, low-level disinfected. Cleaning is the basic first step in all decontamination processes. Cleaning removes debris and organic contamination from instruments. Blood, saliva, and other contamination can cause the disinfection or sterilization process to fail if it is not removed. Debris can be removed from an instrument in several ways. Dental health care personnel may scrub the instrument manually with a surfactant or detergent and water. Dental health care personnel may also use automated equipment (e.g., ultrasonic cleaner, washer-disinfector) and chemical agents. Using automated equipment can be more efficient and safer than manually cleaning contaminated instruments. If manual cleaning is performed: After cleaning, instruments should be

rinsed with water to remove chemical or detergent residue. Take care to minimize splashing. After cleaning, instruments should be allowed to dry thoroughly before they are packaged, wrapped or otherwise contained. Wet instruments can compromise the packaging material's integrity and ability to maintain sterility. Once dry, instruments should be inspected and then wrapped, packaged, or placed into container systems before heat sterilization. Packaging materials allow for penetration of the sterilization agent and maintain sterility of the processed item after sterilization. Dental health care personnel should follow the manufacturer's instructions for packaging patient-care items. This includes following instructions for the item being sterilized, the packaging, and any sterilization equipment being used. Before placing packaged instruments in the sterilizer, at a minimum, include the following information on the label: This information helps dental health care personnel retrieve items in the event of an instrument processing or sterilization failure. The majority of patient-care items in dentistry are heat-tolerant and therefore should be heat sterilized. Follow the manufacturer's recommendations for sterilization times, temperatures, and other operating parameters for all equipment and supplies used during reprocessing. This includes correct use of containers, wraps, and chemical or biological indicators. If the manufacturer's instructions for use are not clear, contact the manufacturer for assistance. Ideally, sterile instruments and supplies should be stored in covered or closed cabinets. They should not be stored under sinks or in other places where they might become wet. Storage practices for wrapped sterilized instruments can be either date- or event-related. For date-related shelf-life practices, sterilized packages are expiration-dated and used on a "first in, first out" basis. Event-related shelf-life practices recognize that the product should remain sterile indefinitely, unless an event causes it to become contaminated (such as torn or wet packaging). Dental health care personnel should inspect packaging of sterilized instruments before opening and use to ensure the material has not been compromised (wet, torn, or punctured) during

storage. If a package has been compromised, the contents should be reprocessed—that is, cleaned, packaged, and heat-sterilized again—before patient use. The use of heat-sensitive semicritical items that must be processed with liquid chemical germicides is discouraged. Heat-tolerant or disposable alternatives are available for the majority of such items. If heat-sensitive instruments must be used, they can be sterilized or high-level disinfected by soaking them in a liquid chemical germicide cleared by FDA as sterilants. However, these powerful chemicals are highly toxic and manufacturer instructions—for example, regarding dilution, immersion time, temperature, and disposal—and safety precautions for using chemical sterilants or high-level disinfectants must be followed precisely. This video, from CDC's Foundations: Building the Safest Dental Visit training, describes the workflow pattern for a sterilization area that ensures devices and instruments clearly flow from high-contamination areas to clean and sterile areas. CDC protects patients and providers by developing recommendations that guide infection prevention and control practices wherever dental care is delivered. Languages Language Assistance Languages Language Assistance