100 Chair Event

Infection Control/Sterilization Protocol for Portable Dental Clinic

Infection Control Procedures on Clinic Floor

ADCF retains the right to change any of the following protocols as new information and better practices are discovered.

ADCF recommends that appropriate PPE equipment be used by all clinic personnel including face masks, proper eyewear, gowns, and gloves. ADCF also recommends that all healthcare and dental providers at the clinic should have the Hepatitis B vaccine.

After clinic equipment has been set up, chairs, dental delivery units, lights, curing lights, amalgamators, and ultrasonic scalers should all be wiped down with an appropriate disinfecting wipe. Appropriate disinfecting wipes shall be an EPA-registered low-level (HIV/HBV claim) to intermediate-level (Tuberculocidal claim). Wipes should be left on each item to indicate that it has been appropriately wiped down. Clorox or similar wipes are not to be used for this purpose.

All equipment should be wiped down again between each patient.

A vacuum line cleaner solution (approximately 3 oz. cup) should be run through the HVE/saliva ejector line between each patient. Line cleaning solution can be found in 5 gallon jugs in each department of the clinic. After solution is run through the line, the HVE/saliva ejector should be held up for a count of 10 seconds.

No loaded syringes should be carried across the clinic floor even with a needle cap. ADCF brings 430 syringes to each event and there is no risk of running out of syringes in anesthesia or within the treating departments. Syringes should be discharged of needle and anesthetic before being transported to sterilization. Syringes shall be loaded for each patient at the immediate time they will be used. Preloading of syringes is not permitted.

Dirty instruments should be brought to sterilization in a puncture proof container with a lid. Lids shall have the appropriate biohazard label on them. Providers are not to carry contaminated instruments in their hands across the clinic floor. Anyone carrying a container with instruments should wear gloves to do so.

Sterilization Department Set Up and Protocol

ADCF employs 16- uniquely identified MIDMARK M-ll Ultraclave gravity displacement steam sterilizers in support of each free dental clinic.

Sterilizers are to be placed as directed by ADCF personnel and according to MIDMARK location requirements. Environmental requirements as identified by MIDMARK are also considered (i.e. ambient temperature and area relative cleanliness). Once connected and running, the sterilizers will not be turned off for the duration of the clinic including in evening and non-clinic hours. Sterilizers must be grouped together and may not be placed in any location outside of the sterilization area. ADCF instruments may only be sterilized in ADCF MIDMARK M-11 sterilizers. ADCF does not permit any sterilization procedures to occur outside of the sterilization department at their events.

Electrical supply shall be reviewed with ADCF staff prior to powering up sterilizer units.

Sterilizers are then loaded with instruments and a test spore vial identified for the appropriate sterilizer. ADCF staff will test all sterilizers. Clinic volunteers will not be permitted to do so.

ADCF supplies everything needed to biologically test sterilizers.

Once the testing cycle is completed, the vials are placed in incubators along with a control vial. The control vial will turn yellow indicating the presence of bacteria. The other individually marked vials will turn purple indicating that no bacteria is present in the vial and proving the operability of the specific sterilizers being tested.

Friday morning before clinic begins, ADCF staff will check the vials to ensure that all sterilizers are working properly. Once a vial indicates the lack of bacteria by turning purple, sterilizer operability has been validated. Vials will continue to incubate for 48 hours. Data from each of these tests are to be recorded in the Biological Monitoring Record which is included on each ADCF truck.

Sterilizers are to be used in **Pouches Mode**. In this mode, the sterilizer runs at 270 degrees F. for 5 minutes followed by a 30-minute drying cycle. Instruments must dry for the entire dry cycle. They may be removed from the sterilizer after a 10-minute cool down. This allows both sterilizers and instruments to cool slightly before the next cycle is run. Instruments in paper sterilization pouches should be run to completion including the full drying cycle. Failure to do this can result in the paper bag tearing resulting in re-sterilization of the instruments. Paper pouches containing personal instruments shall be labeled with the Doctor's name.

In order to satisfy concerns with wicking, the process whereby air born particulates penetrate porous materials or wet paper pouches, ADCF uses all nylon pouches which are impervious to

contamination from air born particulates. ADCF provides nylon pouches donated by Henry Schein Cares. Approximately 12,000 are used at each 100 operatory clinic. Level 4 or higher internal indicators are to be placed in each bag. ADCF instruments are only to be sterilized using these nylon pouches.

Sterilizers are to be loaded, operated and unloaded in accordance with manufacturer's guidelines.

States should be aware of the Single Use Guidelines. If an item is marketed as single use it shall not be sterilized and reused. These items are usually confined to burs and endo files but when securing supply donations or purchases you should make sure of the product you are getting. The process of reusing an item that is labeled single use is against the law.

ADCF utilizes Zirc cassettes for standard instrument sets- PURPLE for dental hygiene, GREEN for restorative or general dentistry and BLUE for oral surgery. These as well as all other specialized instruments provided by ADCF come to the event pre-sterilized and ready for use.

Sterilization volunteers must inspect pouched instruments after set up to find punctured or unsealed pouches. Any compromised pouches must be resterilized.

Sterilization Set Up

ADCF provides:

- 16 sterilizers
- 2 power stations
- Confirm10 Biological Indicator Incubator and test vials
- Instruments in see through plastic bins (see attached list)
- Biological Monitoring Record
- 2 portable sterilization sinks
- 6 Ultrasonic cleaners
- 12,000 Nylon pouches
- Adequate water for autoclaves
- Class 4 Internal Indicator Strips
- 5 Assistina Handpiece stations

States must provide:

- Table covers
- Paper pouches for personal instruments
- Ultrasonic cleaning solution
- PPE gear
- Signs to identify dirty instruments and clean instrument areas
- Towels
- Needle stick, HIV, and other clinic infection control protocols
- Puncture proof containers with lids to transport contaminated instruments. Ideally, multiple containers should be placed in each department to collect all instruments used in that department.
- Hand sanitizer
- Hot pads for handling sterilization trays
- Small baskets for burs to use in ultrasonic cleaners (small tea strainers work best)
- Heavy duty utility gloves
- Scrubbing brushes for use at the sterilization sinks

The best set up for the sterilization area is to have an inner ring of tables with the 2 power stations inside the ring. Areas must be set up to receive ADCF dirty instruments, personal dirty instruments, handpiece station, clean ADCF instruments, clean personal instruments, sinks and ultrasonic cleaners.

All sterilization volunteers must wear appropriate PPE and must have a Hepatitis B vaccination. No open toe shoes are allowed in the sterilization area. Gloves must be worn by all volunteers who touch dirty instruments and volunteers handling any contaminated instruments must wear heavy duty utility gloves.

Instruments are all banded to identify each type of instrument. Clean, pouched instruments are placed in bins which are labeled with the instrument name along with an identifying picture. Personal instruments should be kept separate from ADCF instruments so that personal instruments do not get put into ADCF bins.

Some volunteers should be designated as dirty instrument volunteers. These volunteers may, clean instruments, sort dirty instruments, check cassettes and bag dirty instruments. These volunteers may also place trays of dirty, bagged instruments into the sterilizers. Clean volunteers should start the sterilizers, remove clean instruments from sterilizers, and sort the instruments into the appropriate bins.

Steps for processing instruments:

1) Instruments are dropped off on at the designated "dirty" or "used" location. Instruments will then be briefly inspected to make sure there are no foreign objects i.e. teeth, sharps, gauze, cotton rolls or any other items that are not an instrument.
2) Instruments will then go into the ultra-sonic cleaners for the designated amount of time. Wiping of instruments before placing them in the ultra-sonic cleaners is highly discouraged. Due to the high volume of instruments, minimal contact with those contaminated instruments is recommended.
3) Upon completion of the ultra-sonic cycle, instruments are then transferred to the sinks for rinsing. At this time instruments will again be inspected and any stubborn blood or debris can be lightly scrubbed and removed. Instruments should not be scrubbed with disinfecting wipes or gauze pads.
4) After rinsing, instruments are transferred to an area where they can be sorted and dried. This area will also be where instruments are bagged.
5) Instruments should be bagged individually unless they are in a cassette or they are a doctor's personal instruments. An internal indicator strip will also be placed in each bag with a single instrument or in each cassette at this time. Instruments with a hinge should be placed in the sterilization bag with the hinge open. When bagging instruments, you should be aware of the proper manufacturer's instructions which states that bags should be folded and sealed at the appropriate point. Bags folded in half are not considered by the manufacturer to be sterile. Check for a perforated line or a simple dotted line. This is where the bags are intended to be folded over and sealed.
6) After instruments are bagged appropriately and placed on trays they can be transferred to a sterilizer. Please note it is very important that the trays are not overloaded trays with instruments. This may cause bags to stick together, cassettes to melt and/or over heating of the sterilizer. If you experience any of these upon the completion of the sterilization cycle please make note and correct those that may be overloading. If the sterilizer over

heats, the cycle will not complete. Instruments should be moved to another sterilizer and the overheated unit shall not be used until ADCF staff has had a chance to examine it.

7) Upon completion of the sterilization cycle, doors to the units will automatically open. Instruments must stay in the sterilizers for the full duration of the 30-minute dry cycle. A 10-minute cooldown period is recommended after completion of the dry cycle. This allows the instruments to cool slightly and it also allows the sterilizers to cool. With the frequency of use, if not allowed to cool down slightly between each load, the sterilizer may overheat. Instruments and trays will be hot when removed so appropriate heat protection (pot holders) should be used. If manufacturer's directions are not followed and a full drying cycle is not completed, the bags run the risk of tearing due to moisture and you will have to resterilize. Half paper/half nylon pouches should only be used for personal instruments.
8) Instruments are then transferred to an area designated as "clean" where they can be examined for tears or gaps in the seal one last time. Bags should be checked to determine that the bags are free of tears and instruments should be checked to ensure no debris is present. At this point instruments will be sorted and placed in their corresponding bins to be recirculated back into the clinic for use.
9) Handpieces- Handpieces should not go through the ultra-sonic cleaner or be rinsed under water. When a hand piece is returned for processing it is to be run for one cycle on the Assistina and then wiped with alocohol or a disinfecting wipe. Handpieces can be processed with the other instruments and steps 5-8 apply when processing hand pieces.
10) If instruments are returned unused and still in their all nylon packaging, they shall be inspected for tears. If the sterilization bag has not been compromised the bag shall be wiped with the appropriate disinfecting wipe and then returned to its bin for redistribution. If the bag is partially made of paper the instrument must be rebagged and resterilized.