



## Infection Control: CR Tested Products—Quick List 2013

The OSHA Blood Borne Pathogen Standard (*OSHA*) became U.S. Law in March 1992. Since then, attention to infection control (*IC*) practices in the dental office has increased. In December 2003, the U.S. Department of Health and Human Services Centers for Disease Control and Prevention (*CDC*) released “Guidelines for Infection Control in the Dental Health-Care Settings – 2003.” Although these latest guidelines are not law, they became “standard of care.” **Product recommendations are not part of either of these IC standards.**

This report provides a summary list of outstanding products for IC in twelve areas that are deemed critical to dentistry by Clinicians Report (*CR*). Key CR criteria for product efficacy and CDC guidelines are given in each area. Products listed as meeting CR’s criteria were identified through extensive laboratory and clinical-use testing performed on hundreds of products. All costs are retail list prices at time of compilation and are subject to change. For a more exhaustive listing of excellent IC products tested by CR go to [www.CliniciansReport.org](http://www.CliniciansReport.org) and under complimentary information, click on “Infection Control.”

### AIR/WATER & EVACUATION

**CR Criteria:** Sterilizable between patients or disposable. Durable, easy to use, and adaptable to most dental units.

**CDC:** Any removable device that is attached to the air or waterlines should be heat sterilized to ensure that internal components have been sterilized.

**AIR/WATER SYRINGE TIPS**—Excellent sterilizable tips are available from dental unit manufacturers. Excellent disposable options are listed below.

<b>Flashtips</b> (Disposable)	22¢/Tip Adapter free with tip purchase	<b>Sultan Healthcare</b> 800-637-8582 <a href="http://www.sultanhc.com">www.sultanhc.com</a>	<b>Purchase Source:</b> Major Distributors
<b>Seal-Tight</b> (Disposable)	20¢/Tip Adapter free with tip purchase	<b>Total Care</b> 800-841-1428 <a href="http://www.totalcareprotects.com">www.totalcareprotects.com</a>	<b>Purchase Source:</b> Major Distributors

**ORAL EVACUATION TIPS**—Disposable saliva injector tips and high velocity suction tips are readily available at major distributors

### DENTAL UNIT WATERLINES (CDC Guidelines, but not part of OSHA)

**CR Criteria:** Lower organism counts in water emitted from syringes and handpieces to <500 colony forming units per milliliter per ADA Board of Trustees and CDC ’03, require minimal staff intervention, and does not damage dental equipment. Use sterile water for surgical procedures.

**CDC:** For routine dental procedures, use water with <500 colony forming units (cfu) per ml of heterotropic water bacteria. During oral surgical procedures, sterile solutions (e.g., sterile saline or sterile water) should be used as the coolant/irrigator.

### CONTROL OF MUNICIPAL WATER COUNTS

<b>Sterisil System</b> (Continuous treatment for 7–15 ops with deionization and silver ions)	\$5,499 / Direct Feed \$4,790 / Bottle fill with filters	<b>Sterisil</b> 877-755-7873 <a href="http://www.sterisil.com">www.sterisil.com</a>	<b>Purchase Source:</b> Major Distributors
<b>VistaClear 1000-28-HP</b> (Continuous treatment for 1–7 ops by filtration and oxidation/reduction process)	\$5,995 / System	<b>Vista Research</b> 866-559-2837 <a href="http://www.vistaclear.com">www.vistaclear.com</a>	<b>Purchase Source:</b> Major Distributors

### CONTROL OF INDEPENDENT WATER BOTTLE COUNTS

<b>Sterisil Straw</b> (Continuous treatment with silver ions.)	\$149.99 / Year	<b>Sterisil</b> 877-755-7873 <a href="http://www.sterisil.com">www.sterisil.com</a>	<b>Purchase Source:</b> Major Distributors
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### DISINFECTANT FOR PERIODIC TREATMENT TO ELIMINATE RESISTANT ORGANISMS

<b>Sterilex Ultra Powder</b> (1 pack in 8 oz water) (0.5% sodium percarbonate)	\$3.40 / Packet	<b>Sterilex Corp</b> 800-511-1659 <a href="http://www.sterilex.com">www.sterilex.com</a>	<b>Purchase Source:</b> Major Distributors
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### ENVIRONMENTAL SURFACE DISINFECTION (CDC expands beyond OSHA)

**CR Criteria:** Fast acting, broad spectrum kill that includes a resistant bacteria (tuberculosis, TB), and a resistant non-enveloped virus (poliovirus) in presence of heavy bioburden (fresh human whole blood). **Clinical Tip:** Surfaces should be disinfected first and then disinfected a second time to accomplish cleaning. Cleaning of surfaces before disinfection can spread contamination to a larger area and increase potential exposure.

- CDC:**
- Use fresh cleaning or EPA-registered disinfecting solutions daily or as instructed by manufacturers
  - Clean spills of blood or other contaminated fluids and decontaminate surface with EPA-registered hospital disinfectant with low-level (HBV and HIV label claims) to intermediate-level (TB claim) activity
  - Use surface barriers to protect clinical contact surfaces, specifically those that are difficult to clean
  - Avoid carpeting and cloth-upholstered furnishings in operatories, labs, and instrument processing areas

**SURFACE DISINFECTANTS**—See results for 52 disinfectants tested at [www.CliniciansReport.org](http://www.CliniciansReport.org), click Infection Control and open EnvironSurfaceDisinfectants.pdf.

<b>Lysol Brand III IC Disinfectant Spray</b> (58% w/w ethyl alcohol)	\$12.95 / 19 oz can 2¢ / ml	<b>Reckitt Benckiser</b> 800-333-3899 <a href="http://www.reckittbenckiser.com">www.reckittbenckiser.com</a>	<b>Purchase Source:</b> Major Distributors
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### PRE-TREATMENT CHLORHEXIDINE ORAL RINSE

**CR Criteria:** Lower the number of oral microorganisms which may lead to fewer microorganisms aerosolized into the work environment during dental treatment. **Clinical Tip:** Have patient do two 30-second rinses with 0.12% chlorhexidine (CHG) mouth rinse. First rinse removes materials from oral cavity that bind CHG and second rinse lowers microbial counts.

**CDC:** Although addressed, CDC does not provide any recommendations regarding their use.

<b>Gum Chlorhexidine Gluconate Oral Rinse</b> (0.12% CHG, alcohol-free)	62¢ / oz	<b>Sunstar Americas</b> 800-528-8537 www.gumbrand.com	<b>Purchase Source:</b> Major Distributors
<b>PerioGard</b> (0.12% CHG)	50¢ / oz	<b>Colgate Oral Pharmaceuticals</b> 800-225-3756 www.colgateprofessional.com	<b>Purchase Source:</b> Major Distributors
<b>ProDenRx Chlorhexidine Oral Rinse</b> (0.12% CHG)	37¢ / oz	<b>Zila Pharmaceuticals</b> 800-228-5595 www.zila.com	<b>Purchase Source:</b> Zila Pharmaceuticals

**EYE PROTECTION**

**CR Criteria:** Should have side shields, tolerate routine disinfection, comfortable, and economical.

**CDC:** Wear either eye protection with solid side shields or a face shield to protect mucous membranes of the eyes. Clean reusable eye protection between patients; if visibly soiled, clean and disinfect.

**EYE GLASSES FOR OPERATOR**

<b>Googles Professional Eye</b> (Disposable glasses) (1 frame, 25 lenses, and 1 neck strap)	\$27.99 / Kit	<b>Total Care</b> 800-841-1428 www.totalcareprotects.com	<b>Purchase Source:</b> Major Distributors
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**SHIELD FOR OPERATOR**

<b>Schein (Face Shield)</b> (Disposable Shield)	\$2.87 Each (24 / box)	<b>Henry Schein</b> 800-372-4346 www.henryscheindental.com	<b>Purchase Source:</b> Henry Schein
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**EYE PROTECTION FOR PATIENT**

<b>P.A.L. (Protect-a-lens)</b>	58¢ Each	<b>Allpro</b> 800-243-2285 www.allprodenal.com	<b>Purchase Source:</b> Allpro
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<b>Rollens</b> (clear and smoke)	47¢ Each (with adhesive) 40¢ Each (without adhesive)	<b>Rollens</b> 800-898-7474 www.rollens.com	<b>Purchase Source:</b> Rollens
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**HELPFUL ACCESSORIES**

<b>KIMTECH Science Lens Cleaning Station</b>	\$24.49 / Kit	<b>Henry Schein</b> 800-372-4346 www.henryscheindental.com	<b>Purchase Source:</b> Henry Schein
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**FACE MASKS (CDC expands beyond OSHA)**

**CR Criteria:** To maximize protection from aerosols: adapt to facial contours well (peripheral fit), high filtration of very small particles (>95% filtration of 3.0-3.5 micron particles), NOT contact nose or lips, comfortable, and economical. **Clinical Tip:** Change mask every 60 minutes when working in a dry clinical environment (routine exams). Change mask every 20 minutes when working with water cooled instruments (ultrasonic scalers and water cooled handpieces).

**CDC:** Change masks between patients and during treatment when possible if mask becomes wet.

**SOFT PLEATED MASK**

<b>Critical Cover PFL (Positive Facial Lock)</b> (Unique wire around edges of mask adapts to all face shapes. Plastic through center keeps masks from touching nose and lips.)	47¢ / Mask (headband, latex free) 48¢ / Mask (earloops, latex free)	<b>Alpha ProTech</b> 800-749-1363 www.alphaprotech.com	<b>Purchase Source:</b> Major Distributors
<b>Isolator Plus</b> (N95 NIOSH respirator rated – CDC '03 requires respirators available in dental office)	\$1.46 / Mask	<b>Crosstex</b> 800-221-3046 www.crosstex.com	<b>Purchase Source:</b> Major Distributors

**PREFORMED CUP MASK**

<b>Triple Layer Molded</b> (unique additional fabric lining at edges provide peripheral fit)	\$1.04 / Mask	<b>3M ESPE</b> 800-634-2249 www.3mespe.com	<b>Purchase Source:</b> Major Distributors
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**GLOVES (CDC expands beyond OSHA)**

**CR Criteria:** Operating gloves—consistent from year to year in having combination of low number of manufacturing defects, economical, and good clinical characteristics, (e.g., fit, tactile sensitivity, no bitter taste, no tackiness after wetting, resistance to tearing, adequate cuff length).

**CDC:** • Wear a new pair of gloves for each patient and replace gloves that are torn, cut, or punctured.

- Outline plans for education on and diagnosis of contact dermatitis and latex hypersensitivity.
- Use sterile surgeon's gloves and double glove during oral surgical procedures.
- Assure gown, lab coat, or uniform cover forearms.

**LATEX**

<b>Nova</b> (Polymer lined, powder free)	6¢ / Glove	<b>Sentry Medical</b> 800-603-1224 www.sentrymedical.com	<b>Purchase Source:</b> Sentry Medical
<b>Pharmatex</b> (Polymer coated)	8¢ / Glove	<b>Pharmatex</b> 888-742-7628 www.pharmatexusa.com	<b>Purchase Source:</b> Pharmatex and Small Local Distributors

**NON-LATEX**

<b>Alasta</b> (Nitrile)	9¢ / Glove	<b>Dash Medical Gloves</b> 800-523-2055 www.dashmedical.com	<b>Purchase Source:</b> Dash Medical and Major Distributors
<b>Le Soothe</b> (Polychloroprene)	10¢ / Glove	<b>SmartPractice</b> 800-522-0800 www.smartpractice.com	<b>Purchase Source:</b> SmartPractice

<b>Posi-Prene</b> (Polychloroprene)	8¢ / Glove	<b>Clinical Supply Co</b> 800-468-0188 www.clinicalsupplycompany.com	<b>Purchase Source:</b> Clinical Supply Co and Major Distributors
<b>UTILITY GLOVES (REUSABLE)</b>			
<b>IMS Lilac Gloves</b> (Nitrile)	\$3.26 / Glove	<b>Hu-Friedy</b> 800-483-7433 www.hu-friedy.com	<b>Purchase Source:</b> Major Distributors
<b>HANDCARE (CDC expands beyond OSHA)</b>			
<b>CR Criteria:</b> For protection under operating gloves—rapid antimicrobial activity, plus residual and cumulative activity. 4% chlorhexidine gluconate (CHG) hand washes provide this protection against bacteria. High ethyl alcohol concentration hand rubs can be effective antivirals.			
<b>CDC:</b> <ul style="list-style-type: none"> <li>• Perform hand hygiene before and after every patient.</li> <li>• Perform hand hygiene before donning gloves and immediately after removal of gloves.</li> </ul>			
<b>4% CHLORHEXIDINE FORMULATIONS</b>			
<b>Hibiclens</b> (4% CHG)	\$66.45 / Gallon (52¢ / oz)	<b>Mölnlycke Health Care</b> 800-843-8497 www.molnlycke.com	<b>Purchase Source:</b> Major Distributors
<b>HAND RUBS</b> —CR tests show sufficient material must be dispensed to keep hands wet for 30 seconds of vigorous hand rubbing.			
<b>Endure 300</b> (Gel)	79¢ / oz	<b>Ecolab</b> 866-781-8787 www.ecolab.com	<b>Purchase Source:</b> Ecolab and Major Distributors
<b>Purell</b> (Gel)	79¢ / oz	<b>GoJo</b> 800-321-9647 www.gojo.com	<b>Purchase Source:</b> Major Distributors
<b>INSTRUMENT DISINFECTION</b>			
<b>CR Criteria:</b> No touch cleaning and disinfection can be accomplished with instrument washers/disinfectors. If hand processing is necessary, a first step is use of fast acting, broad spectrum kill instrument soak to disinfect prior to scrubbing and packaging for sterilization.			
<b>CDC:</b> Cleaning involves the physical removal of debris and reduces the number of microorganisms on an instrument or device. Automated cleaners increase the efficiency of the cleaning process and reduce the handling of sharp instruments.			
<b>INSTRUMENT WASHER: DISINFECTORS &amp; ACCESSORIES</b> —Instrument washers have three major advantages over hand scrubbing and ultrasonic cleaning: 1) minimize handling of contaminated instruments; 2) eliminate contaminated ultrasonic solutions and their aerosols; 3) deliver instruments clean, dry, disinfected and ready for final sterilization.			
<b>Dental Washer Disinfecter G7881</b> (under the counter)	\$9,450 / Washer	<b>Miele</b> 800-991-9380 www.mieleusa.com	<b>Purchase Source:</b> Major Distributors
<b>Hydrim L110W</b> (under the counter)	\$9,270 / Washer	<b>SciCan</b> 800-572-1211 www.scican.com	<b>Purchase Source:</b> Major Distributors
<b>Mesh Trays</b> (#E146)	\$354 / Tray	<b>Miele</b> 800-991-9380 www.mieleusa.com	<b>Purchase Source:</b> Major Distributors
<b>Mark VI</b> (cassette—16 instruments)	\$148.99 / Cassette	<b>Premier Dental Products</b> 888-773-6872 www.premusa.com	<b>Purchase Source:</b> Major Distributors
<b>3%+ GLUTERALDEHYDE INSTRUMENT SOAKS</b> —Accomplish fast-acting, broad-spectrum kill including a resistant bacteria (tuberculosis) and a resistant non-enveloped virus (poliovirus) in the presence of heavy bioburden (fresh human whole blood).			
<b>Cidex Plus 3.4</b>	31¢ / oz	<b>Advance Sterilization Products (ASP)</b> 800-595-0200 www.aspij.com	<b>Purchase Source:</b> Major Distributors
<b>NEEDLESTICK PREVENTION (OSHA added requirements in June 2001)</b>			
<b>OSHA:</b> 1. Maintain a sharps injury log. All percutaneous injuries from contaminated sharps must be recorded and maintained in a way that protects the confidentiality of the injured employee. This log must contain the following: a) type and brand of instrument involved, b) work area where injury occurred, and c) explanation of how injury occurred.			
2. Add to the office exposure control plan. List work practices the office plans to use to prevent needlestick injuries in the office's exposure control plan. The exposure control plan is part of the original OSHA requirements.			
<b>Jenker Needle Recapper</b>	\$58.69 Each	<b>Dentsply Professional</b> 800-989-8826 www.dentsply.com	<b>Purchase Source:</b> Major Distributors
<b>STERILIZATION</b>			
<b>CR Criteria:</b> Provide sterilization of instruments to meet FDA specification.			
<b>CDC:</b> Heat sterilize intraoral devices that can be removed from air and waterlines.			
<b>CHEMICAL VAPOR HEAT STERILIZERS</b> —Harvey Chemiclave, supported by Thermo Fisher Scientific, is no longer available for purchase.			
<b>DRY HEAT STERILIZERS</b>			
<b>DDS 7000*</b> (Rapid dry heat)	\$4,087 / Sterilizer	<b>Dentronix</b> 800-523-5944 www.dentronix.com	<b>Purchase Source:</b> Dentronix and Major Distributors
<b>STEAM HEAT STERILIZERS</b>			
<b>StatIM G4 (2000, 5000)*</b>	\$6,755 / StatiM 2000 \$6,865 / StatiM 5000	<b>SciCan</b> 800-572-1211 www.scican.com	<b>Purchase Source:</b> Major Distributors

\*FDA cleared for handpiece sterilization

**STERILIZER MONITORING (CDC expands beyond OSHA)**

**CR Criteria:** Chemical indicators (temperature sensitive ink) provide visual confirmation that one parameter of the sterilization process reached a critical threshold but do not assure sterility

- Biological Monitors verify sterilization using 1 million spores of appropriate genus and species. Test strips are processed at least weekly and may be incubated in-office or sent to a monitoring service.

**CDC:** • Use chemical indicators (temperature sensitive ink) within each package. If not visible from the outside, place a second indicator on the outside of the package.

- Use mechanical monitors (timer, temperature, and pressure) for each load. Record results.
- Use biological monitors (spore strips) at least weekly to ensure the effectiveness of the sterilization process. Record results.
- Do not use instruments if monitoring reveals inadequate processing.

**SEND-AWAY BIOLOGICAL MONITOR SERVICE****Maxitest Mail-in-Sterilizer Monitoring Service (order #101-4715) 52 tests**

Includes 2 monitors (the test and control), postage paid envelope, and results returned by mail

\$3.85/Test

**Henry Schein**

800-372-4346  
www.henryschein.com

**Purchase Source:**

Henry Schein

**IN-OFFICE BIOLOGICAL INDICATORS FOR 3 TYPES OF STERILIZERS****Attest 116K Kit**  
(Steam Heat)

\$9.23/Indicator  
\$508.20/System (incubator, indicators)

**3M ESPE**

800-634-2249  
www.3mespe.com

**Purchase Source:**

Major Distributors

**SporView Culturing Set**  
(Dry and rapid heat oven)

\$3.25/Indicator  
\$165 Dry heat incubator  
\$275/Starter kit

**SPS Medical**

800-722-1529  
www.spsmedical.com

**Purchase Source:**

Major Distributors

**Steritest**

(Ethylene oxide)

\$5.95 /Indicator  
\$760/Incubator AN810

**Andersen Products**

800-523-1276  
www.anpro.com

**Purchase Source:**

Andersen Products

**POUCH WITH CHEMICAL INDICATORS****Assure Plus**

8¢–51¢ Each  
(depending on size)

**Sultan Healthcare**

800-637-8582  
www.sultanhc.com

**Purchase Source:**

Major Distributors

**Peelvue Plus**

10¢–60¢ Each  
(depending on size)

**Dux Dental**

800-833-8267  
www.duxdental.com

**Purchase Source:**

Major Distributors

**Sure-Check**

6¢–54¢ Each  
(depending on size)

**Crosstex**

800-707-2737  
www.crosstex.com

**Purchase Source:**

Major Distributors

**REUSABLE POUCH—Require purchase of chemical indicators for inside and exterior of pouch****Enviro pouch**

6¢–11¢/Use  
expect 200+ uses per pouch  
\$12–\$22 Each (depending on size)

**Enviro pouch**

877-632-1991  
www.enviropouch.com

**Purchase Source:**

Enviro pouch

**VACCINES (CDC expands beyond OSHA)**

**CR Criteria:** Render most humans immune to infection. CR recognizes the value of and encourages appropriate immunizations and serological testing to confirm immune status. Hepatitis B (HBV) Vaccination required by OSHA, employer to provide.

**CDC:** • HBV – Immunizations based on current recommendations, employee's medical history, and occupational exposure risk.

- 1 to 2 months after first set of 3-dose series, perform seroconversion test to confirm absence or presence of antibody against HBV. If negative, complete a second 3-dose series preferably with a HBV vaccine from a different manufacturer or determine if person is a carrier of HBV (HBsGg-positive).
- Repeat serological test for antibodies after second 3 dose series.
- Counsel non-responders to the vaccine on their susceptibility to HBV infection. Additional information is available at [wp.hepb.org](http://wp.hepb.org); then search non-responders.

**CDC'S RECOMMENDED IMMUNIZATIONS FOR HEALTHCARE PERSONNEL (HCP) OCTOBER 2009 (See [www.immunize.org/catg.d/p2017.pdf](http://www.immunize.org/catg.d/p2017.pdf))****Hepatitis B (3 inoculations)****Engerix-B, Recombivax HB**

Give 3-dose series, confirm seroconversion, no booster

**Source:**

Local Health Department

**Influenza****Trivalent (Inactivated) Vaccine - TIV  
Live, Attenuated Vaccine - LAIV**

Give 1-dose intramuscularly Fall each year OR  
Give 1-dose intranasally Fall of each year if non-pregnant, healthy,  
and age 49 or younger

**Source:**

Local Health Department

**Tetanus-Diphtheria-Pertussis**

Give 1-dose Tetanus - Diphtheria booster every 10 years  
Give 1-time dose of Tdap to all younger than 65 years

**Source:**

Local Health Department

**If childhood infection not confirmed:****Varicella (Chickenpox)****Measles-Mumps-Rubella (MMR)**

2 doses 4 weeks apart - no booster  
2 doses at least 1 month apart - no booster  
Born before 1957: considered immune, but  
recommend 2 doses MMR during mumps outbreak

**Source:**

Local Health Department