Appendix: Use of Disinfectants on Surfaces

General Considerations

- Check the product's label to ensure that the disinfectant is suitable for the type of surface being treated (e.g., vinyl, cloth, plastic, or wood);
- Check that the product label specifies Staphylococcus aureus (many over-the-counter disinfectant products sold in grocery stores, pharmacies, and warehouse stores will have a label claim for Staphylococcus aureus and other bacteria);
- Ensure that the disinfectant is prepared to the proper use concentration and that this working solution remains on the surface of the equipment for the recommended contact time; and
- Unused working solutions of disinfectant can be poured down the drain. Disposable wipe cloths can be discarded as a routine solid waste.

Disinfection Strategies for Steam Bath and Sauna Surfaces

- For nonporous surfaces (e.g., tile, stainless steel, epoxy, and linoleum) use an EPA-registered detergent disinfectant suitable for the type of surface being treated. If an EPA-registered product is not available, a 1:100 dilution (500-615 ppm) of household chlorine bleach can be used for nonporous surfaces.
- For wood surfaces, scrub and disinfect with 1:10 dilution (5,000-6,150 ppm) of household chlorine bleach. Bleach solutions should be left on surfaces for at least 10 minutes to achieve maximum disinfection.
  ‣ If bleach is used, cleaning and disinfection should be done at room temperature and surfaces should be rinsed well with water before restarting the heat.

Staphylococcus aureus or “Staph” is a common bacterium that can cause skin and invasive infections. Over the past several decades, these bacteria have developed resistance to several important antibiotics, thereby making it more difficult to treat infections due to Staph. Infection with methicillin-resistant (antibiotic-resistant) Staphylococcus aureus (MRSA) is common among patients exposed to the bacterium while in a health-care facility (e.g., hospitals or nursing homes) and among persons with histories of repeated or long-term antibiotic therapy.

However, in Los Angeles County and elsewhere, skin and soft tissue infections (boils, abscesses, cellulitis) with MRSA have recently been reported in increasing numbers among persons of all ages without these traditional risk factors. These infections are referred to as “community-associated MRSA” (CAMRSA) and they are often misdiagnosed as spider bites. More on CAMRSA may be found at the Los Angeles County Department of Public Health web site http://lapublichealth.org/acd/MRSA.htm

CAMRSA is found on skin, and the spread of CAMRSA is associated with direct skin-on-skin contact. However, the bacteria can be transferred to environmental surfaces via hand or bare skin contact. Outbreaks of CAMRSA skin infections have been reported in persons exposed to the bacteria in steam baths and among members of athletic teams, where contamination of equipment (in addition to skin-on-skin contact) and sharing of personal items might have contributed to transmission. Close personal contact due to crowded living conditions also facilitates the spread of CAMRSA.

Proprietors of facilities in which patrons and staff have bare skin contact with others or with shared equipment or surfaces (e.g., gyms, health clubs, and spas), or where patrons share close living spaces (e.g., homeless shelters, youth hostels, and camps), should be concerned about the potential transmission of CAMRSA. The Los Angeles County Department of Public Health (LAC DPH), with consultation from the Centers for Disease Control and Prevention (CDC) in Atlanta, GA, has prepared these guidelines for reducing the spread of CAMRSA in non-healthcare settings. Proprietors should consider adopting the following cleaning and hygiene policies to reduce the risk of CAMRSA transmission. The guidelines are voluntary (unless otherwise noted) and are not all-inclusive as settings might vary. Proprietors should report any unusual increase in skin disease among patrons or staff to LAC DPH.
I. Personal Hygiene

While on the premises, patrons and staff should be encouraged to:

• Wash hands using liquid soap and water upon entering and exiting the premises and before and after any hands-on contact with other persons. Alternatively, an alcohol-based hand rub can be used according to label instructions. Visibly soiled hands should be washed with soap and water rather than an alcohol-based hand rub;
• Dry hands with disposable paper towels or air blowers (e.g., avoid sharing towels);
• Keep skin lesions (e.g., boils, insect bites, open sores, or cuts) covered with a clean dry dressing;
• Limit sharing of personal items (e.g., towels, clothing, and soap);
• Use a barrier (e.g., a towel or a layer of clothing) between the skin and shared equipment*; and
• Shower if there has been substantial skin-on-skin contact with another person.

* Use of sports gloves is an option for barrier protection of the hands, provided that this is consistent with safe use of gym equipment.

II. Shared Equipment (e.g., exercise machines and massage tables)

While using shared equipment on the premises, patrons should be encouraged to:

• Use a towel or clothing to act as a barrier between surfaces of shared equipment and bare skin;
• Wipe surfaces of equipment before and after use, especially if the surface has become wet with sweat; and
• Assist facility staff with the disinfection of frequently touched equipment surfaces if spray bottles of disinfectant are made available and instructions for use are provided.

Facility staff should be encouraged to:

• Consider making spray bottles of disinfectant available for patrons and staff to clean frequently touched surfaces of shared equipment between uses and provide instruction (e.g., new user orientation or posters) for the safe use of disinfectant;
• Clean shared equipment surfaces daily to remove soil;
• Disinfect shared equipment surfaces daily with an EPA-registered detergent disinfectant according to manufacturer’s instructions (see Appendix for tips on using disinfectants);
• Check with equipment manufacturers for recommendations on the appropriate maintenance of their products;
• Repair or dispose of equipment and furniture with damaged surfaces that cannot be adequately cleaned;
• Clean large surfaces (e.g., floors and tabletops) daily with an EPA-registered detergent disinfectant according to manufacturer’s instructions; and
• Participate in ongoing assessment and training for appropriate disinfection practices at the facility.

See next page for appendix on the use of disinfectants.

III. Steam Rooms and Saunas

While using these facilities, patrons should be encouraged to:

• Use a towel or clothing to act as a barrier between the benches and bare skin.

Facility staff should be encouraged to:

• Allow steam rooms/saunas to dry at least once a day (this will help to minimize the development of a bacterial biofilm);
• Clean and disinfect frequently touched surfaces daily (see Appendix for disinfection strategies);
• Consider painting wood benches with a waterproof paint, to seal and smooth the surface, facilitate drying, and reduce areas where bacteria may grow;
• Ensure a halide residual (e.g., chlorine) recommended for swimming pools, spa pools and other basins or tanks used for immersion by multiple patrons. In public pools, the California State pool code (California Code of Regulations, Title 22, Section 65529) requires a free chlorine residual of at least 1.0 ppm (parts per million) and a pH between 7.2 and 8.0. LAC DPH recommends the free chlorine residual in swimming pools and spas be maintained between 2.0 and 3.0 ppm and the pH between 7.4 and 7.6; and
• Fill spa pools used for single-use immersion (e.g., tanks or pools that are drained after each use) with tap water and, according to manufacturer’s instructions, clean the pool surfaces with an EPA-registered detergent disinfectant or with a 1:100 dilution (500-615 ppm) of household chlorine bleach.

IV. Laundry

Staff in facility laundries should be encouraged to:

• Wash shared linens (e.g., towels, sheets, blankets, or uniforms) in detergent and water at 160º F for at least 25 minutes, or if a lower temperature wash cycle is selected, use laundry detergent that is appropriate for cold or warm water cycles (e.g., oxygenated laundry compounds);
• Use laundry additives according to the manufacturer’s instructions;
• Use a mechanical dryer on hot temperature cycle (i.e., avoid air drying); and
• Distribute towels, uniforms, etc. only when they are completely dry.

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For more information, please contact the Los Angeles County Department of Public Health (213) 240-7941, or visit http://lapublichealth.org/acd/MRSA.htm or contact: acdc2@ph.lacounty.gov