

## Administrative Summary for MRSA

### 1. MRSA Background

- a. MRSA (Methicillin-Resistant Staphylococcus Aureus) is a common staph infection that has become resistant to antibiotics. Every cut that gets infected (red, swollen, pus) is a staph infection and a small percentage of those are MRSA.
- b. The ONLY way to get it is through a break or opening in the skin

### 2. How to Do Daily Activities

- a. There are standard guidelines in the M&O section to handle routine day to day activities such as cleaning and disinfecting.
- b. For wrestling mats, weight benches and other athletic equipment, disinfection should be done by wiping it down with a bleach solution. This is normally the responsibility of the athletic department and not the M&O department. Many coaches have the students wipe down the equipment.

### 3. If a student gets a MRSA infection:

- a. A single case is not enough to warrant calling all the parents in the school. Calling the public health department to keep them informed is a good idea.
- b. Keep them out of team sports. They may still attend classes. They may return to team sports when there is no wound drainage and there are no signs of infection.
- c. Make sure they have some sort of medical treatment. MRSA can get worse quickly and can be fatal if it is ignored. It is rarely fatal with good medical attention. Ensure the parents are notified when there is a suspected MRSA case.
- d. Students with weakened immune systems are especially vulnerable.
- e. Make sure they keep the wound covered at all times.
- f. Watch the wound closely.
- g. Try to determine if the infection occurred at school. It is most likely during contact sports. Wrestling is a common source. It can also be picked up from shower floors through openings in the feet. The cleaning procedures of the coaches may need to be addressed. There are some checklists in the M&O section for athletic departments.
- h. There is no need to perform any special cleaning or other types of special responses.

### 4. If an employee gets MRSA:

- a. Make sure they have some sort of medical treatment. MRSA can get worse quickly and can be fatal if it is ignored. It is rarely fatal with good medical attention.
- b. Make sure they keep the wound covered at all times.
- c. There is no need to perform any special cleaning or other types of special responses.

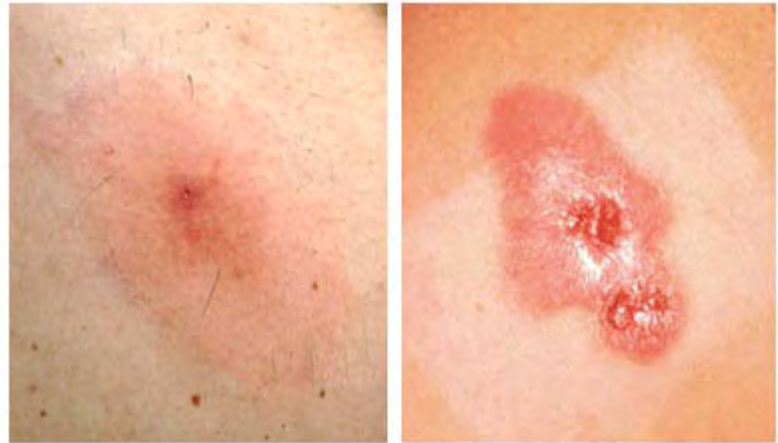
### 5. For numerous cases, contact County Health.

- a. Closing the school is almost never necessary.
- b. Disinfecting the entire school with special cleaners is not required or recommended.

## MRSA – Administrative Summary

### MRSA: Understand your risk and how to prevent infection

MRSA — or methicillin-resistant *Staphylococcus aureus* — has been a problem in hospital and health care settings for years. But this highly drug-resistant bacterium has recently gained increased media attention. The attention is in part because of an October 2007 Centers for Disease Control and Prevention (CDC) report on MRSA. MRSA has also played a role in several deaths among otherwise healthy school-age athletes. Are such infections on the rise? What are the real risks of MRSA infection for you or your child? And what can you do to protect against MRSA infection? James Steckelberg, M.D., an infectious disease specialist at Mayo Clinic, Rochester, Minn., answers these and other common questions about MRSA.



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**Staph infections, including MRSA**, generally start as small red bumps that resemble pimples, boils or spider bites. These can quickly turn into deep, painful abscesses that require surgical draining. Sometimes the bacteria remain confined to the skin. But they can also burrow deep into the body, causing potentially life-threatening infections in bones, joints, surgical wounds, the bloodstream, heart valves and lungs.

### What is MRSA, and why is it sometimes referred to as a "superbug"?

- **MRSA in hospitals.** MRSA infection is caused by *Staphylococcus aureus* bacteria — often called "staph." Many years ago, a strain of staph emerged in hospitals that was resistant to the broad-spectrum antibiotics commonly used to treat it. Dubbed methicillin-resistant *Staphylococcus aureus* (MRSA), it has been called a "superbug" by the media because of its multiple drug resistance. MRSA can cause serious, sometimes fatal, infections that resist treatment with all but a few drugs — for example, vancomycin, linezolid or daptomycin. Some extremely rare strains of MRSA that are resistant even to vancomycin are starting to turn up in some hospitals.
- **MRSA in the community.** In the 1990s, a type of MRSA began showing up outside hospital settings — in the wider community. These strains aren't the same as those associated with health care settings and hospitals. Today, these forms of staph, known as community-associated MRSA, or CA-MRSA, are responsible for many serious skin and soft tissue infections and for a serious form of pneumonia.

A variety of staph bacteria are normally found on the skin or in the nose of about three in every 10 people at any given time. If you have staph on your skin or in your nose but aren't sick, you are considered to be "colonized" but not infected. Staph bacteria are generally harmless unless they enter the body through a cut or other wound, and even then they often cause only minor skin infections in healthy people. But sometimes, usually in older adults and people who are ill or have weakened immune systems, ordinary staph infections can cause serious illness.

Although 30 percent of the population may be colonized with ordinary staph at any given time, just a small percentage of those people are colonized with MRSA. Healthy people can be colonized with MRSA and have no ill effects. However, they can pass the germ to others by sharing items such as towels, clothing and athletic equipment.

Several antibiotics continue to be effective against MRSA in the community, but this type of MRSA is a newly evolved bacterium, and it may be a matter of time before some community associated strains become resistant to most antibiotics.

### **Why is MRSA suddenly in the news?**

A CDC report published in an October 2007 issue of the Journal of the American Medical Association suggested that MRSA infections are more prevalent than previously thought. This doesn't necessarily represent an increase in MRSA, however, because MRSA has simply not been measured in this way before. At about the same time, news reports emerged of student staph infections and deaths in several states, including the death of a previously healthy 17-year-old football player in Moneta, Va. The combination of those school events and the new data is doubly distressing, especially for parents.

### **How did MRSA evolve from a mainly hospital problem to a community problem?**

It isn't known how MRSA in the community has evolved. It didn't originate from the hospital variety. One explanation is that drug-resistant bacteria may have developed from the overuse and misuse of antibiotics.

The vast majority of MRSA infections — 85 percent — are still found in hospitals and other health care settings rather than in the community. However, clusters of community-associated MRSA skin infections have been found in athletes, military members, children, Pacific Islanders, Alaskan Natives, American Indians, men who have sex with men, and prisoners. Risk factors in these groups may include:

- Close skin-to-skin contact
- Openings in the skin such as cuts or abrasions
- Contaminated items and surfaces such as clothes and athletic equipment
- Crowded living conditions
- Poor hygiene (although even very clean people can get staph infections)

### **Is MRSA spreading rampantly, or is it just being monitored more closely?**

Staph infections have always been among the most common, and potentially the most serious, infections. The proportion of those infections now resistant to antibiotics (MRSA) has risen in comparison with those without such antibiotic resistance. This may be because of overuse and misuse of antibiotics and transmission of the virus between hospital patients. Also, the number of people at risk of such infections — such as those with a chronic illness, on kidney dialysis, exposed in a health care setting, or who use intravenous catheters or other implanted medical devices — has steadily risen with changes in health care and an aging population.

### **What's the best defense against MRSA in the community?**

Protecting yourself from MRSA in the community — which might be just about anywhere — may seem daunting, but these common-sense precautions can help reduce your risk:

- **Wash your hands.** Careful hand washing remains your best defense against germs. Scrub hands briskly for at least 15 seconds, then dry them with a disposable towel and use another towel to turn off the faucet. Carry a small bottle of hand sanitizer containing at least 62 percent alcohol for times when you don't have access to soap and water.
- **Keep personal items personal.** Avoid sharing personal items such as towels, sheets, razors, clothing and athletic equipment. MRSA spreads on contaminated objects as well as through direct contact.
- **Keep wounds covered.** Keep cuts and abrasions clean and covered with sterile, dry bandages until they heal. The pus from infected sores may contain MRSA, and keeping wounds covered will help keep the bacteria from spreading.
- **Shower after athletic games or practices.** Shower immediately after each game or practice. Use soap and water. Don't share towels.
- **Sit out athletic games or practices if you have a concerning infection.** If you have a wound that's draining or appears infected — for example is red, swollen, warm to the touch or tender — consider sitting out athletic games or practices until the wound has healed.
- **Sanitize linens.** If you have a cut or sore, wash towels and bed linens in a washing machine set to the "hot" water setting (with added bleach, if possible) and dry them in a hot dryer. Wash gym and athletic clothes after each wearing.
- **Get tested.** If you have a skin infection that requires treatment, ask your doctor if you should be tested for MRSA. Doctors may prescribe drugs that aren't effective against antibiotic-resistant staph, which delays treatment and creates more resistant germs. Testing specifically for MRSA may get you the specific antibiotic you need to effectively treat your infection.
- **Use antibiotics appropriately.** When you're prescribed an antibiotic, take all of the doses, even if the infection is getting better. Don't stop until your doctor tells you to stop. Don't share antibiotics with others or save unfinished antibiotics for another time. Inappropriate use of antibiotics, including not taking all of your prescription and overuse, contributes to resistance. If your infection isn't improving after a few days of taking an antibiotic, contact your doctor.

### **Is it necessary to sanitize buses and close schools for cleaning?**

Most MRSA is spread through skin-to-skin contact or through shared items such as towels, razors and bandages. In most cases, it's not necessary to close schools unless an outbreak of MRSA cannot be controlled otherwise. It's possible that surfaces — such as a bus seat — may be contaminated for hours to days, but infection is not a likely result. Following the tips above is the most effective means of preventing MRSA infection.

### **If you suspect an MRSA infection, what should you do?**

Closely watch minor skin problems — pimples, insect bites, cuts and scrapes — especially in children and older adults. If wounds become infected, see your doctor. Indications of an infected wound include increasing skin redness, swelling, warmth, tenderness, pus drainage and sometimes fever. If you test positive for staph infection, ask that the skin culture growing staph be tested for MRSA. Drugs that treat ordinary staph aren't effective against MRSA. Using these ineffective drugs could lead to serious illness and more resistant bacteria.

## M&O Summary for MRSA

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- b. The ONLY way to get it is through a break or opening in the skin.

### 2. Daily Cleaning

- a. Staph, including MRSA, can live for weeks on surfaces.
- b. There are standard guidelines in this section to handle routine day to day activities such as cleaning and disinfecting.
- c. As a rule of thumb, good cleaning practices are sufficient for most of the school areas.
- d. When using disinfectants, pay attention to contact time.
- e. Spraying or fogging has not been shown to be nearly as effective as targeting those surfaces that are commonly touched: doors, handles, lockers, etc.
- f. Special attention should be paid to athletic equipment that comes in contact with skin, such as weight benches. This is typically done by the athletic department although M&O may help out on larger jobs.
- g. Attached is a checklist for cleaning.

## M&O Responses to a MRSA Infection

### 1. Single Infection of a student

- a. There is no special response that needs to be made for a single infection. Let admin know that there is an infection as they may know of others.
- b. If there are a number of infections, they will likely be associated with athletics. That issue is usually a result of improper daily cleaning and the response should come from those responsible for daily cleaning, usually the coaches.

### 2. Single infection of a custodian

- a. The issue here has to do with leaving MRSA germs in the environment. They are not normally airborne and so the consideration of surfaces should be the focus.
- b. Usually, keeping the wound covered is enough to eliminate the contamination of surfaces, especially during cleaning and disinfecting tasks. Change the dressing daily or when visibly dirty.
- c. There is no reason to withhold them from regular duty.

### 3. Numerous infections

- a. With more than one, and certainly with several, county health should be notified. Their recommendations should be followed.
- b. It is extremely unlikely that they will recommend closing the school.
- c. It is also unlikely that they will require a "special cleaning". Staph, and therefore MRSA, exists on all of us and the sterile conditions after cleaning are compromised as soon as humans enter.
- d. Collect the facts regarding the source of the infection. It is possible that inadequate cleaning has occurred. Addressing procedures and training are often needed.



## *School Custodians*

### *Clean for Health*

Methicillin-resistant *Staphylococcus aureus* (MRSA) is a type of bacteria that is not easily treated with common antibiotics. MRSA can cause skin infections that may look like spider bites, infected turf burns, impetigo, boils or abscesses. It is spread by touching the infection/drainage or by touching surfaces that have come in contact with the infection/drainage. MRSA can stay alive on surfaces for weeks, even months.

**Frequent hand washing** is the best way to prevent MRSA. **Cleaning and disinfecting surfaces** that may have come in contact with the MRSA bacteria is necessary **to keep the environment healthy**.

Cleaning not only makes our schools look nice, it is also helps make schools healthy and safe places. Removing “dirt” we can see by cleaning is the first step. Once the dirt we can see is removed, we disinfect, or remove germs, by wiping down surfaces with a school-recommended cleaning product. Germs (bacteria and viruses) are killed during routine cleaning and disinfecting activities. Allergens (mold, pollen, dust mites and other irritants) are removed during cleaning activities like vacuuming, sweeping and mopping.

Our recommendations, listed below, may refer to policies that are already in place, as well as policies that should be developed or adopted.

#### General Guidance

1. Hard surfaces and equipment such as floors, light switches, door handles, hand-rails, tables, and desks should be cleaned routinely.
2. Athletic equipment and areas such as wrestling mats, wall padding, locker rooms, and shower facilities should also be cleaned routinely.
3. If during a sporting event there is a release of bodily fluids (blood, pus or drainage) cleaning and disinfecting should be completed before the activity is allowed to continue.

#### General Guidance-Athletic Areas

1. All hard surfaces that *may* come in contact with body fluids should be cleaned<sup>1</sup> and disinfected<sup>2</sup> daily with an EPA-approved disinfectant, including benches, weights, workout machines, etc.
2. All floors/wall padding in athletic settings should be washed daily (if room is used).

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<sup>1</sup> Clean all visibly soiled areas, using friction.

<sup>2</sup> Disinfect or sanitize “clean” areas to remove bacteria. Always wear gloves when using disinfectants.

3. Locker rooms, including any shower areas should be cleaned daily, if used.
4. If soap is furnished, it should be accessible from a wall dispenser.
5. Ensure that athletic areas, locker rooms and restrooms all have *separate* cleaning mops and buckets, and that all mops (washable micro-fiber heads or disposable mop cloths preferred) and buckets are cleaned regularly.

### Wrestling Room and Mats

1. Wipe down padding along walls, benches and door pulls/knobs with a quaternary ammonium (quat) or bleach solution (household bleach diluted 1:100 with water) after practices/matches. Please refer to the manufacturer's directions for recommended contact times for the various disinfectants.
2. Clean floors when mats are stored and before mats are used again.
3. Use "dedicated" mops to clean athletic areas, and wash mop heads on a regular basis. May use Swiffer style mop with disposable mop cloths that are discarded after each use.
4. Clean and sanitize mats before and after practice and matches. When mats are rolled up, all sides of mats should be cleaned before they are rolled up.
5. Use "dedicated" mop heads to clean mat surfaces. Wash these mop heads on a regular basis; athletic department may be responsible for this.

### Weight Room

1. Wipe down grips on weights and lifting belts at least daily.
2. Clean floors, benches, supports, pads, light switches and door pulls/knobs daily.

### Locker Rooms/Shower Rooms

1. Soap dispensers should have disposable soap "unit" refills.

### Sports Equipment

*(May be responsibility of Athletic Department)*

1. Schedule regular cleanings for sports equipment: balls (football, basketballs, baseballs, softballs, volley balls), racket grips, bats, gloves, pads, etc.
2. Clean and sanitize sports equipment that comes in direct contact with the skin of players, such as wrestling headgear, football helmets and fencing equipment (including wires) after each use.

# What to do about MRSA in School Athletic Programs



## Infection Control Policies and Procedures Checklist

Please review the policies and procedures below. Use this tool to determine which policies/procedures you already have, if they are being followed, and which policies and procedures you need to put in place.

### Policy/Procedures

Exist  
(x)

Followed  
(x)

Needed  
(x)

### General

All hard environmental surfaces that may come in contact with body fluids are cleaned and sanitized daily with EPA-approved disinfectant (if area in use).

All floor and wall padding in athletic area(s) are washed daily, if athletic area is used.

Separate mop heads/ buckets are used for each activity area, locker rooms and rest rooms. Mop heads and buckets are cleaned regularly. (Washable micro-fiber heads or disposable mop cloths are preferred.)

Towels/ linens laundered on premises are washed at a minimum of 160°F and dried in a hot dryer.

*Notes:*

### Wrestling Room and Mats

Wall padding, benches and door knobs are wiped-down with quaternary ammonium (quat) or 1:100 bleach solution after each practice and meet.

Floors are cleaned before and after any moveable mats are used.

Mat surfaces with *small* holes or tears are repaired with mat tape. When mat sides are in poor condition, mats are taped together for meets *and* for practice.

Mat surfaces are replaced promptly when there are *large* holes or surfaces are excessively worn.

Both sides of mats are thoroughly cleaned before and after each use for practices and meets.

A separate mop head/ bucket is used specifically for cleaning mats; mop heads and buckets are washed regularly.

*Notes:*

### Weight Room

Weight machine padding is inspected regularly, and promptly replaced if punctured or torn.

Grip areas on weight bars, dumbbells and machines are not taped.

Grip areas on weight bars, dumbbells, and machines, and lift belts are wiped down daily.

Wall dispensers of hand gel ( $\geq 60\%$  alcohol) are placed at each entry/exit. Athletes and coaches are instructed to use when entering/leaving room-minimum use, may use more often.

Floors, benches, supports, pads, light switches and door knobs are cleaned daily (when room in use).

*Notes:*

### Locker Rooms/Shower Rooms



Wall dispensers for liquid soap are located next to showers.

Soap dispensers should have "unit" refills.

All shower and locker room areas are cleaned daily (if used).

*Notes:*



TUOLUMNE JPA Infection Control Policies and Procedures Checklist (continued)	MRSA SECTION		
	Exist (x)	Followed (x)	Needed (x)
Page 9 of 9 Policy/Procedures			
<b>Sports Equipment</b>			
Sports equipment (balls, racket grips, bats, gloves) is cleaned regularly.			
All shared equipment that comes in direct contact with the skin of an athlete (wrestling head gear, football helmets, and fencing wires) should be cleaned and sanitized after each use.			
<i>Notes:</i>			
<b>First Aid</b>			
Hand sanitizer (60% alcohol or greater) is in first aid kit –to be used when soap & water is not available.			
When caring for any athlete injury, disposable gloves are used and hands are sanitized, both before and after providing first-aid.			
Scoops are used (not hands) to take ice out of cooler to make ice packs for injuries. Scoop is cleaned daily when in use and NOT stored in ice container.			
Single-use portions of antibiotics, salves and other ointments are removed from any larger dispensing unit prior to application. Any un-used product is NOT returned to the original dispenser, but discarded.			
Athletes with open, potentially contagious wounds are kept from participating in contact sports until wounds have healed. Athletes are prohibited from wrestling until wounds have healed—even if wounds are covered.			
Athletes with potential skin infections are referred to the team physician or their own medical provider.			
<i>Notes:</i>			
<b>Education of Athletes/Parents</b>			
Athletes are encouraged to follow good hygiene practices, including frequent hand washing, showering immediately following each practice or competition, and NOT sharing “drinking” water bottles.			
Athletes are instructed to NOT share personal hygiene items (bar soap, razors etc.), or topical ointments, antibiotics and salves.			
Athletes are encouraged to promptly report abrasions, lacerations or skin infections to a coach/team trainer, or school nurse.			
Athletes are encouraged to refrain from cosmetic shaving and from using whirlpools or common tubs.			
Athletes who use weight room are encouraged to wear workout clothes that minimize skin contact with benches and equipment.			
Athletes are reminded to wash practice clothes/uniforms with soap and warm water and dry in a hot dryer.			
Patients are informed of infection control precautionary measures, such as the importance of hand washing, showering immediate after sports activities, and washing practice clothes/uniforms after they are worn once.			
<i>Notes:</i>			
Signature: _____		Date: _____	
  <span style="float: right;">2/13/07</span>			



# Los Angeles County Department of Public Health Guidelines for Reducing the Spread of Staph/CAMRSA in Non-Healthcare Settings v. 2

*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.

# Guidelines for Reducing the Spread of Staph/CAMRSA in Non-Healthcare Settings v. 2

## 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.

## 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 160° 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.

See next page for appendix on the use of disinfectants.



## 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.

