



## FACT SHEET

### STANDARD AND UNIVERSAL PRECAUTIONS AS THEY APPLY TO CHILD CARE SETTINGS

The terms “Standard Precautions” and “Universal Precautions” were developed for applications in medical and industrial settings. They apply to early education and child care programs with some adjustments from their meaning in other settings. The Centers for Disease Control and Prevention uses the term “Standard Precautions” while the Occupational Safety and Health Administration uses the term “Universal Precautions.” Standard Precautions cover all situations where body fluids might be present. Universal Precautions do not apply to stool, nasal secretions, sputum, sweat, tears, urine, saliva, and vomit unless these contain blood. The procedures that apply to early education and child care settings when either term is used are nearly identical.

#### ***What are Standard Precautions?***

Standard Precautions apply to contact with non-intact skin, mucous membranes, blood, all body fluids, and excretions except sweat, whether or not they contain visible blood. They include general methods of infection prevention and are indicated for both children and adults in the early education and child care setting. These methods reduce the risk of transmission of microorganisms (germs) that can cause infection, even when those spreading the microorganisms do not appear to be ill.

Standard precautions involve using barriers to prevent contact with the body fluid of another person, cleaning, and sanitizing contaminated surfaces. Unlike medical care settings, gowns and masks are not required in early education and child care facilities. Appropriate barriers to use include materials such as moisture-resistant disposable diaper table paper, disposable towels, and gloves. Use of disposable, non-porous gloves is optional except when blood or blood containing body fluids may be involved. Gloves are not required for feeding human (breast) milk, or for cleaning up spills of human milk. Using gloves for diapering is optional. Hand hygiene is always needed, even if gloves are worn

#### ***How do sanitizing and disinfecting differ?***

Sometimes people use these terms as if there is no difference. As defined in Appendix J of *Caring for Our Children*, 3<sup>rd</sup> edition, they are different:

Sanitizing: “Sanitizer is a product that reduces germs on inanimate surfaces to levels considered safe by public health codes or regulations. A sanitizer may be appropriate to use on food contact surfaces (dishes, utensils, cutting boards, high chair trays) toys that children may place in their mouths and pacifiers.”

Disinfecting: “Disinfectant is a product that destroys or inactivates germs on an inanimate object. A disinfectant may be appropriate to use on non-porous surfaces such as diaper

changing tables, countertops, door and cabinet handles, and toilets and other bathroom surfaces.”

Look for the U.S. Environmental Protection Agency (EPA) registration number on the label of any product to be used as a sanitizer or disinfectant. A very large number of EPA registered products are available. To select environmentally friendly products, look for the Design for the Environment (DfE) label authorized by the EPA that indicates that “based on currently available information, EPA predictive models, and expert judgment – the product contains only those ingredients that pose the least concern among chemicals in their class.”

<http://epa.gov/dfe/pubs/projects/formulat/label.htm> Federal law requires that all EPA-registered products must be used according to the instructions on the manufacturer’s label.

Properly diluted household bleach that is 5-8% hypochlorite and is not EPA-registered is a practical and inexpensive alternative to an EPA-registered product for sanitizing or disinfecting. See Appendix K in *Caring for Our Children*, third edition for the routine schedule of when and how to treat different surfaces. Use the following instructions adapted from Appendix J of *Caring for Our Children*, third edition to safely prepare bleach solutions for sanitizing or disinfecting.

Add bleach to cool water in a bottle made of opaque material. Make bleach dilutions fresh daily since bleach tends to evaporate over the course of the day. Label the bottle with the contents, date mixed, when and on which surfaces the dilution should be used. Use eye and skin protection, a funnel and measuring device, and a well-ventilated space to prepare the dilutions. Apply it as a heavy spray close to the surface or pour the solution to wet the surface to glistening. It may help to prevent confusion between the two dilutions if the disinfecting dilution is kept in a spray bottle and the sanitizing dilution is kept in a pour bottle. Avoid putting bleach into the air or on surfaces other than those intended to be treated. Allow at least 2 minutes of contact time.

Sanitizer dilution of bleach: 1 teaspoon bleach/quart or 1 tablespoon of bleach/gallon of water. This is the solution to use on most surfaces that

Disinfectant dilution of bleach: 1 tablespoon bleach/quart or ¼ cup/gallon of water

Note: the surface must be visibly clean before sanitizing or disinfecting it. If it is not visibly clean, wash the surface with detergent solution, and then rinse with water before applying the sanitizer or disinfectant. Some sanitizers/disinfectants require rinsing the surface after the chemical is applied for the require contact time. Be sure to read labels and follow the manufacturer’s instructions for use.

### ***What method should be used to apply Standard Precautions?***

For spills of body fluids, urine, stool, vomit, blood, saliva, nasal discharge, eye discharge, injury or tissue discharges, use the following step-by-step approach:

1. Wear gloves if you suspect you may contact blood or blood-containing body fluids, including blood-containing tissue or injury discharges. Either single-use disposable gloves or utility gloves should be used except when blood is involved. Disposable gloves should always be used when blood may be present in the spill. Pick up the spill using disposable towels and tools that can be disinfected afterward. Be careful not to splash any of the contaminated materials around.

2. Use a detergent to clean all surfaces in contact with the spill. Rinse with water. Blot the spill to remove the fluid as quickly as possible before the spill penetrates the surface to lower layers. Then clean and sanitize by spot-cleaning with a detergent-disinfectant, shampooing, or steam-cleaning the contaminated surface. Cleaning and sanitizing rugs without damaging them may require use of special cleaning (detergent-disinfectant) agents designed for use on rugs, or steam cleaning. Consult with local health departments for additional guidance about cleaning contaminated floors, rugs, and carpeting.

For spills of vomit, urine, human milk, or stool, on floors, walls, bathrooms, tabletops, toys, kitchen counter tops, or diaper-changing tables: first clean the surface with a detergent solution and water, then rinse with water. Apply a disinfecting solution. Dispose of any blood-contaminated material in a plastic bag with a secure tie.

3. Use single-use disposable gloves only once and then discard them into a hands-free, covered receptacle that is lined with a leak-proof, plastic bag that can be securely tied or sealed when you remove it to put it in the trash. Avoid handling the contaminated gloves. If you use utility gloves, keep them on your hands while you clean them after every use with soap and water and then dip them in a disinfecting dilution of bleach up to the wrist. Then take the gloves off and hang them to dry. Wash your hands afterward, even if you wore gloves.

***What should caregivers do when there has been a possible exposure to blood through a skin wound or contaminated fluid getting into the mouth, nose or eyes?***

Stay calm and rational. Bacteria and viruses carried in the blood, such as hepatitis B virus, pose a small but specific risk in the child care setting. Blood and blood-derived fluids (such as watery discharges from injuries) pose the highest potential risk, because these body fluids contain the highest concentration of germs. Hepatitis B virus can survive in a dried state in the environment for at least a week and perhaps even longer. Some other body fluids such as saliva contaminated with blood or blood-associated fluids may contain live virus (such as hepatitis B virus) but at lower concentrations than are found in blood. Other body fluids, including urine and feces, do not pose a risk with blood borne diseases unless they are visibly contaminated with blood, although these fluids do pose a risk with other infectious diseases.

Mucous membrane exposure to blood is unlikely to cause disease unless the person whose blood was transferred has a blood-borne disease. Instances in which one child draws blood of another individual during biting or otherwise gets blood from another person on mucous membranes are very rare. Child bites rarely break the skin and when the skin is broken, bleeding begins a few seconds later, usually after the biter releases the bitten flesh. Even though biting is a common behavior by young children, transmission of blood borne disease by biting in child care has not been reported. Nevertheless, if blood transfer occurs and exposes a mucous membrane to blood from another individual (e.g. blood from another individual is visible in the mouth of a biter), you need to treat this as an accidental exposure to a potential HIV-containing body fluid. HIV testing may not account for a potential exposure to the virus from the time between a previous test and the exposure. The person who has had a mucous membrane exposure to blood should be tested up to 9 months after the exposure if the status of the donor of the blood is unknown.

When a mucous membrane blood exposure occurs:

- Inform the exposed adult or the parents/legal guardians of the child who had a mucous membrane exposure to someone else's blood that:

- 1) The adult or child was exposed to another person's blood;
- 2) The risk of transmission of HIV is very small;
- 3) The exposed adult or the parents/legal guardians of the exposed child should notify the primary care physician of the exposure;
- 4) The person who was exposed to blood should have a baseline test for HIV. Inform the person whose blood was involved (or the parents/legal guardians if that person is a child) about the incident and ask:
  - If the person whose blood is involved ever had an HIV test and, if so, if those results could be shared with the exposed adult or parents of the exposed child;
  - If that person does not know or has never had an HIV test ask if that person would be willing to have one and share results with the exposed adult or the parents of the child who was exposed.

Some children and adults may unknowingly be infected with HIV or other infectious agents, such as hepatitis B virus, as these agents may be present in blood or body fluids. Thus, the staff in all facilities should adopt standard precautions for all blood spills and possible exposure to blood. The Occupational Safety and Health Administration (OSHA) requires a facility plan and annual training of staff members who may be exposed to blood as a condition of their employment. These OSHA requirements apply to child care workers who are employees. The sanctions for failing to comply with OSHA requirements can be costly, both in fines and in health consequences. Child care providers should take the necessary steps to meet OSHA requirements. Regional offices of OSHA are listed with other federal agencies in the telephone directory. ECELS-Healthy Child Care PA has an online Self-Learning Module (*Keeping Safe While Touching Blood*) that guides early education and child care providers through the development of a facility plan at [www.ecels-healthychildcarepa.org](http://www.ecels-healthychildcarepa.org).



For additional information, see:

American Academy of Pediatrics, American Public Health Association, National Resource Center for Health and Safety in child Care and Early Education. 2011. Caring for our children: National health and safety performance standards; Guidelines for early care and education programs. third edition. Elk Grove Village, IL: American Academy of Pediatrics; Washington, DC: American Public Health Association. Standard 3.2.3.4: Prevention of Exposure to Blood and Body Fluids.

Also available at <http://nrckids.org>

**Reference:** American Academy of Pediatrics and the American Public Health Association. Caring for Our Children: National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs, 3<sup>rd</sup> Edition, 2011.

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