

WHAT YOU NEED TO KNOW about

CALIFORNIA DEPARTMENT OF PESTICIDE REGULATION



California Department of Pesticide Regulation

1001 I Street
P.O. Box 4015
Sacramento, CA 95812-4015
916-445-4300
www.cdpr.ca.gov

BRANCHES

Enforcement
916-324-4100

Northern Regional Office
916-376-8960

Central Regional Office
559-297-3511

Southern Regional Office
714-279-7690

Environmental Monitoring
916-324-4039

Fiscal Operations
916-324-1350

Human Health Assessment
916-445-4233

Information Technology
916-445-2992

Personnel
916-322-4553

**Pest Management
and Licensing**
916-445-4038

Pesticide Registration
916-445-4400

Product Compliance
916-445-4159

Worker Health and Safety
916-445-4222

Using Disinfectants, Sanitizers, Medical Sterilants, and Other Antimicrobials in the Workplace

What are Antimicrobial Pesticides?

A pesticide is any substance intended to prevent, destroy, repel, or mitigate a pest. Viruses, bacteria, or other microorganisms are pests and the products used to prevent them from causing harm are antimicrobial pesticides. These pests may cause damage or economic loss, or transmit or cause disease.

Disinfectants, medical sterilants, sanitizers, and other “antibacterial” products are antimicrobial pesticides because they are designed to destroy and prevent bacteria and other microorganisms in the settings where they are used.

Fungicides (which target mold, mildew, and other similar organisms) and algicides (which control algae in spas, swimming pools, lakes, canals, and water used industrially or stored) are also antimicrobial pesticides.

Using Antimicrobial Pesticides at Work

State law requires employers to maintain a safe workplace. Chemicals in pesticide products pose a wide range of health and safety hazards. Workers have a right to know what chemicals are used at their workplace. Cal/OSHA law requires that information about these hazards and associated protective measures be communicated to workers.

Many employers and employees are not aware that products they commonly use in their workplaces are antimicrobial pesticides.

Over half of work-related pesticide illnesses reported each year in California involve use

of an antimicrobial pesticide. Common injuries related to use of an antimicrobial pesticide include an employee accidentally splashing bleach or another antimicrobial pesticide into his or her eyes, developing a rash on unprotected skin, or suffering respiratory problems from inhaling fumes. However, more-serious injuries can occur; such as those resulting from breathing the toxic gas released when ammonia is mixed with bleach. Repeated over-exposure to antimicrobial pesticides can also lead to chronic health problems.

The Label is the Law

Pesticide labels are not advisory—they have the force of law. It is illegal to deviate from a pesticide label’s instructions. Failure to follow a pesticide label could result in fines and other penalties.

The product label provides instructions that inform you and your employees about how to use the pesticide effectively, safely, and legally. The label will detail how to apply the pesticide, what safety precautions need to be taken, and if protective clothing or equipment (such as gloves, goggles, or breathing masks) needs to be worn. The label also identifies the pesticide’s active ingredient so medical personnel can provide proper care if an accident or illness occurs.

Copies of this
handout are available from DPR by
calling 916-445-3974.

They can also be downloaded
from DPR’s website: <http://cdpr.ca.gov/docs/dept/factshts/directory.htm>.

What employers need to know

Did you know?

Between 2005 and 2014, 57% of the products involved in pesticide injury and illness at work were antimicrobials.

The top incident settings for non-agricultural use of antimicrobials at work, from 2005 to 2014, were:

28% Service/Retail/
Wholesale Establishments.

23% Hospital/Medical and Residential Institutions.

15% Food Processing Facilities.

12% Schools and Offices/
Businesses.

Worker Protection Laws

The California Food and Agricultural Code and the California Labor Code, and their respective regulations, outline laws designed to protect California's workers from pesticide illnesses and injuries. Cal/OSHA's Hazard Communication Standard (T8 §5194) requires that information about these hazards and associated protective measures be communicated to workers. Worker training must be provided BEFORE the worker begins using the chemical. Employers also must provide any required protective clothing or equipment and must keep all protective equipment in good condition and ensure employees properly use it when it is required.

Employers are also required to post pesticide safety information where the employee usually starts the workday. They may choose to use one of the Department of Pesticide Regulation (DPR) Pesticide Safety Information Series handouts: Safety Rules for Pesticide Handlers in Non-Agricultural Settings (leaflet N-8) or Safety Rules for Pesticide Handlers on Farms (A-8). <http://cdpr.ca.gov/docs/whs/psisenglish.htm>.

Finally, employers must inform employees that they have the right to:

- Know what pesticides they are using or may be exposed to and review Safety Data Sheets (SDSs). SDSs are available from the vendor of the product and are required to be maintained by the employer.
- File confidential complaints about unsafe work conditions without being subject to retaliation by the employer and have those complaints promptly investigated.
- Emergency medical care.

Agencies That Enforce the Laws

The DPR and County Agricultural Commissioner (CAC) offices (in San Francisco, the Department of Public Health) are responsible for enforcing California's pesticide use laws. This includes ensuring employers and employees follow pesticide label instructions and other worker protection laws.

California's pesticide use laws are located in Food and Agricultural Code Divisions 6 and 7 and the California Code of Regulations (CCR), Title 3. http://www.cdpr.ca.gov/docs/legbills/laws_regulations.htm.

Cal/OSHA requires safe and healthful working conditions including protections against chemicals and pesticide exposures for all California workers. Cal/OSHA's workplace safety requirements are in the California Code of Regulations (CCR), Title 8. They can be downloaded from Cal/OSHA's website at: www.dir.ca.gov/counters/t8index.htm.

Cal/OSHA's Health and Safety Rights for Workers fact sheet can be found here: <http://www.dir.ca.gov/dosh/documents/health-and-safety-rights-for-workers.pdf>.

DPR and CACs can enforce California's pesticide labeling requirements and worker protection standards wherever pesticides are used. However, Cal/OSHA also has authority to enforce its workplace safety requirements to protect California's workers.

If Illness or Injury Occurs

In the event of an emergency, employers are responsible for providing prompt medical attention. Employers must inform their employees of the name and location of places where medical care is available.

Physicians are required to report pesticide-related injury or illnesses to the county health officer, who in turn reports the illness to the CAC for investigation. CAC staff investigate pesticide-related illnesses and injuries. They may visit workplaces, and interview employers and employees. Should the CAC find a violation of pesticide laws or regulations, they can levy fines and other penalties.

For more information about your health and safety rights, go to Cal/OSHA's homepage at: www.dir.ca.gov/DOSH/dosh1.html. You can also call (866) 924-9757 (press or say "2" or "Cal OSHA," then enter or say your zip code to find the district office serving your job location. Employers must immediately report to Cal/OSHA any work related death or serious injury or illness.

For questions concerning injury or illness, call the California Poison Control Hotline at: (800) 222-1222.

DPR's Pesticide Enforcement Branch:
(916) 324-4100.



Disinfectants in Schools

~a conversation~

Disinfectants make things cleaner and healthier. What's the big deal? They aren't harmful.

Are you sure? Did you know disinfectants are pesticides regulated by the EPA? They can harm people if they spill, splash, or are improperly mixed.

OK, so what IS a disinfectant?

Great question! A disinfectant is a pesticide used to destroy fungi, bacteria, and some viruses found on non-living surfaces.



Disinfectant Examples

- Pine Oil
- Some surface wipes
- Germ-killing sprays
- Bleach (Sodium Hypochlorite)



When not used properly, disinfectants can damage the eyes, skin, and lungs. Children can be particularly sensitive to the chemicals in disinfectant products.

Is there anything I should know about using disinfectants safely?



DOs

- ✓ Read the label and follow the directions every time you use a product, even if familiar with it.
- ✓ Wash your hands right after using disinfectants.
- ✓ Point containers away when opening, pouring, or pulling wipes from canisters.
- ✓ Note the amount of time a surface must remain wet in order for the product to work.

DON'Ts

- ✗ Never let young children use or have access to disinfectant products.
- ✗ Never put disinfectants in food or drink containers. Store in original containers and clearly label anything that contains a pesticide.
- ✗ Never mix disinfectants with other cleaning products. Mixing bleach and ammonia will produce a toxic gas.

Got it! Where can I get more information?

npic
NATIONAL
PESTICIDE INFORMATION
CENTER
1.800.858.7378

Call NPIC for general questions about pesticides, including the potential risk to humans, pets, or the environment.

**POISON
Help**
1-800-222-1222

Call poison control if someone breathes in, swallows, or gets pesticide in the eyes or on the skin.



Reminders for Using Disinfectants at Schools and Child Cares

Given the concern over the 2019 Novel Coronavirus, many schools and child cares in California are making it a priority to disinfect frequently-touched surfaces.

Disinfectants are pesticides and must be used according to the label.



Reminders for using disinfectants properly at schools and child cares:

- Use EPA-registered disinfectants **and follow all label directions**
- Keep the surface wet for the required **contact time**. The contact time, specific to each product, is the amount of time that a surface must remain wet in order to work. If using disinfectant wipes, multiple wipes may be required.
- Keep all disinfectants **out of the reach of students**. Never allow students to use disinfectants or touch the applied product.

General information about the 2019 Novel Coronavirus:

- **California Department of Public Health Novel Coronavirus 2019 website**
<https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Immunization/nCOV2019.aspx>
- **California Department of Education 2019 Novel Coronavirus Guidance for Schools and School Districts**
<https://www.cde.ca.gov/nr/el/le/yr20ltr0214.asp>
- **Center for Disease Control and Prevention**
<https://www.cdc.gov/coronavirus/2019-ncov/index.html>

DON'T FORGET

Under the Healthy Schools Act, DPR provides **online training** on how to use disinfectants.
<https://apps.cdpr.ca.gov/schoolipm/training/>



school-ipm@cdpr.ca.gov



California
School & Child Care IPM



ccipmlist@cdpr.ca.gov

[SCCIPM 26 (3/2020)]



Health & Safety Notes

Safe and Effective Cleaning, Sanitizing and Disinfecting

What are cleaning, sanitizing and disinfecting?

Sometimes these terms are used interchangeably, but they are not the same. They have different outcomes which the United States Environmental Protection Agency (EPA) defines as follows:

- ▶ To clean means to physically remove dirt, debris and sticky film from the surface by scrubbing, washing, wiping and rinsing. You can clean with a mild soap or detergent and water.
- ▶ To sanitize means to apply a product that reduces germs to safer levels. Sanitizing surfaces destroys enough germs to reduce the risk of becoming ill from contact with those surfaces.
- ▶ To disinfect means to apply a product that destroys nearly all germs when applied to hard, nonporous surfaces. Disinfecting is a higher level of germ killing.

What should I sanitize?

Sanitizing is recommended for food surfaces (dishes, utensils, cutting boards, high chair trays) and other objects intended for the mouth like pacifiers and teething toys.

What should I disinfect?

Disinfecting is recommended for hard non-porous surfaces such as toilets, changing tables, and other bathroom surfaces; blood spills and other potentially infectious body fluids like vomit, urine and feces.

How do I know which product to use?

Sanitizing and disinfecting products are called antimicrobials. These products kill bacteria, viruses, fungi and mold on hard surfaces. The EPA sets standards for products to make sure that they kill germs and don't pose serious immediate health hazards to people.

All products used to sanitize or disinfect must be registered with the EPA. Only products with EPA registration numbers on the label can claim they kill germs if used as directed. Product labels have information about how to use it to sanitize or disinfect, and which germs are killed.

What about bleach?

Bleach is the most common product used for sanitizing and disinfecting in Early Care and Education (ECE) programs. If used correctly, bleach reliably sanitizes and disinfects hard, non-porous surfaces of most common and harmful bacteria and viruses. A small amount of bleach can be diluted with water and it is inexpensive.

Are there problems with bleach?

There are increasing concerns about the health effects of bleach, especially for children and staff with asthma. When bleach is applied to surfaces, fumes get into the air and can irritate the lungs, eyes and the inside of the nose. For staff who mix bleach solutions, contact with full strength bleach can be even more harmful and can damage skin, eyes and clothing.

SAFER WAYS TO DILUTE BLEACH

- ▶ USE ONLY EPA REGISTERED BLEACH and follow the directions on the label.
- ▶ Select a bottle made of opaque material.
- ▶ Dilute bleach with cool water and *do not use more than the recommended amount of bleach*.
- ▶ Make a fresh bleach solution daily; label the bottle with contents and the date mixed.
- ▶ Wear gloves and eye protection when diluting bleach.
- ▶ Use a funnel.
- ▶ Add bleach to the water rather than water to bleach to reduce fumes.
- ▶ Make sure the room is well ventilated.

SAFER USE OF BLEACH SOLUTIONS

- ▶ Before applying bleach, clean off dirt and debris with soap or detergent, then rinse with water.
- ▶ If using a spray bottle, apply bleach using a heavy spray instead of a fine mist setting.
- ▶ Keep the surface wet with bleach according to label instructions (use a timer). This is called contact time or dwell time.
- ▶ Sanitize when children are not present.
- ▶ Ventilate the room and allow surfaces to dry completely before allowing children back.
- ▶ Store all chemicals out of reach of children in a way that will not tip or spill.
- ▶ Never mix or store ammonia with bleach or products that contain bleach.

Caution: Always follow label instructions! Undiluted bleach comes in different concentrations (e.g. 8.25%, 6%, 5.25% sodium hypochlorite). Read the label for exact dilution instructions.

Are there alternatives to bleach?

Commercial products registered with the EPA as sanitizers or disinfectants may be used according to the directions on the label. Look for an EPA registration number. Follow instructions for dilution (different for sanitizing vs. disinfecting) and contact time. Check if the product is safe for food surfaces, if pre-cleaning is needed, and if rinsing is needed.

Some child care programs are using EPA registered products with hydrogen peroxide, citric acid, alcohol, or lactic acid as the active ingredient because they have fewer irritating fumes. In response to consumer demand, more of these products can be found in stores and online.

Non-chemical equipment, like dishwashers and steam cleaners, can be used to sanitize in certain situations. New methods and technologies like high-quality microfiber cloths and mops used with soap and water can also reduce germs. More studies need to be done to see if these alternative methods work as well as chemicals to sanitize in ECE environments.

Resources and References:

American Academy of Pediatrics, American Public Health Association, National Resource Center for Health and Safety in Child Care and Early Education. CFOC Standards Online Database. Aurora, CO; National Resource Center for Health and Safety in Child Care and Early Education; <http://nrckids.org> Accessed 3/14/2019. Appendix J and K

U.S. Environmental Protection Agency. Accessed 3/14/2019. What Are Antimicrobial Pesticides? www.epa.gov/pesticide-registration/what-are-antimicrobial-pesticides#nph