

INTEGRATED PEST MANAGEMENT: DUST

Dust can lead to health problems in children. Two health-related reasons to control dust in a child care center are:

1. To reduce dust mites that trigger asthma and allergies.
2. To reduce exposure to harmful toxins such as pesticides, lead, and flame retardants that collect in dust.

Dust mites

Dust mites are tiny insects that are too small to see. They live anywhere there is dust (for example, in carpets, bedding, upholstered furniture, and stuffed toys). Many children are allergic to the microscopic droppings of dust mites.

Chemical residues

Harmful chemical residues can settle in dust. Children are at risk of exposure since they spend more time playing on the floor where dust collects and frequently put their fingers in their mouths. The following chemicals can be found in dust:

- ▶ **Pesticides** can accumulate in dust. This can happen when pesticides are sprayed in or around the facility or when people who work with pesticides (for example, farm workers) bring residues inside on their clothing and shoes. See *Curriculum*, pages 8–9, for more information on the health hazards of pesticides.
- ▶ **Lead** can be found in dust and soil especially in facilities built before 1978. Lead poisoning leads to a variety of health and learning problems in children.
- ▶ **Brominated Flame Retardants** are often found in dust. Used for three decades to slow the burning of consumer products during a fire, new research shows these chemicals are harmful to human health. They're commonly found in children's nap mats, furniture, carpeting, and electronics.

1 HOW TO REDUCE DUST

- ▶ Use doormats to reduce dust tracked in from outdoors.
- ▶ Replace upholstered furniture with furniture that can be wiped clean.
- ▶ Avoid wall-to-wall carpeting. Use washable throw rugs on hard-surface floors, such as hardwood, linoleum, or tile.
- ▶ Store toys and books in enclosed bookcases, closed cabinets, and containers.
- ▶ Choose washable stuffed toys and wash them weekly and when visibly soiled. Wash them in hot water and dry thoroughly.

2 HOW TO REMOVE DUST

- ▶ Wipe dust from surfaces and objects using a damp cloth. Dry cloths just move the dust around rather than getting rid of it.
- ▶ Clean floors with a damp mop daily, not a broom.
- ▶ Don't allow children to lay their faces or blankets directly on carpeting.
- ▶ Wash sheets, blankets, and pillows once a week in hot water and dry in a hot dryer to kill dust mites.
- ▶ Vacuum carpets and area rugs frequently. Ideally, use a high efficiency particulate air (HEPA) vacuum. If you don't have a HEPA or HEPA-equivalent vacuum, use double-lined vacuum bags to reduce the amount of dust and dirt blown into the air while vacuuming.

NOTE: Clean when children are not present and provide fresh air by opening windows or turning on your ventilation system.

RESOURCES

- California Childcare Health Program (CCHP), *Asthma Triggers and How to Reduce Them*
cchp.ucsf.edu/Reduce_Asthma_Triggers

- California Environmental Protection Agency Air Resources Board, *Air pollution and contaminants at child-care and preschool facilities in California*
www.arb.ca.gov/html/fact_sheets/preschool_exposure.pdf