

# Designated Space and Equipment for Diaper Changing



*A 2010 E. coli outbreak at a Vancouver, Washington daycare led to the death of a four-year-old boy and four hospitalizations. Investigators believe risky diapering procedures may have been a factor.*

*A 2007 outbreak of shigellosis in Florida affecting 46 children was associated with multiple child-care facilities. The most important risk factor for illness was having a diaper changed.*

## Public Health Reasons

Physical factors, such as diaper-changing equipment, sinks, and toilet availability play a role in the transmission of pathogenic microorganisms. Surfaces that are porous, cracked, or damaged increase the likelihood that pathogens will escape disinfection and allow transmission. Frequently contacted surfaces, such as diaper-changing stations, are at greater risk of transmitting pathogens.

Although many child-care providers have received training on hand-hygiene, the deficiencies in equipment surface and diapering locations in child-care centers may also affect the transmission of pathogenic microorganisms. Also, classroom objects in close proximity to diaper-changing areas can become contaminated. Contaminated objects are a source of gastrointestinal pathogens.

Kotch et al. found that high-quality equipment, characterized by seamless, impermeable countertops and touchless faucets and cabinet doors, are associated with significantly fewer episodes of diarrhea among children and fewer sick days among staff. Improved staff hygiene, sanitation, and disinfecting behavior as well as state-of-the-art diapering and food-preparation equipment are necessary for optimal prevention of gastrointestinal illness.

## Practices

### Diaper-Changing Areas

These areas must:

- *never* be located in food preparation areas
- *never* be used for temporary placement of food or utensils
- be washable, with all surfaces, including the walls and floors, made of a nonporous material with no cracks or crevices that are difficult to clean and disinfect

## Designated Space and Equipment for Diaper Changing

- be designed to prevent contamination of surfaces during, and as a result of, the diaper-changing process
- have at least one diaper-changing table per infant (<1 years old) or toddler (1-4 years old) group to allow sufficient time for changing diapers and for cleaning and disinfecting between uses
- be conveniently located
- take into account whether caregivers must provide simultaneous supervision of other children in the group (the diaper-changing table must be positioned to allow caregivers/teachers to maintain constant sight and sound supervision of other children)
- be used only by those children in one group/class (diaper-changing tables must not be placed between or shared between classrooms)
- be organized to maximize the opportunity for one-on-one time between the child and the teacher/caregiver
- not have carpets, porous fabrics, or other surfaces that can trap soil and potentially contaminate materials

### Containers For Soiled Diapers

- The receptacles must be washable, plastic-lined, and tightly covered, with a firm fitting cover that does not require touching to open.
- The receptacles must be provided within an arm's reach of the diaper-changing table (i.e., the care provider does not have to walk away from the table to dispose of the diaper).
- Separate containers must be used for disposable diapers, cloth diapers (if used), and soiled clothes and linens.
- All containers must be inaccessible to children and must be tall enough to prevent children from reaching into the receptacle or from falling into the containers.
- The containers must be placed in an area that children cannot enter without a care provider's supervision.
- The soiled diaper container must be labeled to show its intended contents.
- Soiled diaper containers must be cleaned daily to keep them free from build-up of soil, pathogens, and odor (see "Cleaning and Disinfecting High-touch Surfaces" fact sheet).
- The following types of soiled diaper containers must *not* be used:
  - those that require the user's hand to push the diaper through a narrow opening
  - those with exterior surfaces that must be touched with the hand
  - those with exterior surfaces that are likely to be touched with a soiled diaper while the user is discarding it
  - those that have lids with handles

### Handwashing Sinks

- Handwashing sinks must be provided within the diaper-changing area.
- They must be within a few steps of the changing area. Every effort must be made to minimize the distance between the changing tables and handwashing sinks.
- A minimum of one handwashing sink must be available for every two changing tables.
- Handwashing sinks must not be used for bathing a child or removing smeared fecal material from clothes, toys, or any other items.
- Shared access to soap and disposable towels at areas with more than one sink is acceptable if the location of these is fully accessible to all sinks.

### Changing Tables

Diaper-changing tables must be:

- made of moisture-proof, nonabsorbent, smooth surfaces that do not trap soil and are easily disinfected
- sturdy
- at a convenient height (between 28” and 32” high) for use by caregivers
- equipped with railings or barriers that extend at least 6 inches above the change surface
- free of restraining straps or any other objects that pose an additional challenge to cleaning and disinfecting after each diaper change
- nonporous, kept in good repair, and cleaned and disinfected after each use to remove visible soil and microorganisms (See “Cleaning and Disinfecting Diaper Changing Surfaces” fact sheet)

# References

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**Published:** March 31, 2013      **Revised:** February 27, 2013

This material is based upon work supported by the Cooperative State Research, Education and Extension Service, U.S. Department of Agriculture, under Agreement No. 2008-51110-04335, the National Integrated Food Safety Initiative of the Cooperative State Research, Education, and Extension Competitive Grants Program. Any opinions, findings, conclusions or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture.



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