

Health and Safety Recommendations for Natural Materials and Loose Parts in Childcare Settings

Child care programs sometimes have natural materials and loose parts for play. Some examples of these are pinecones, sticks, leaves, cardboard, paper towel rolls, nuts, and bolts. If these materials are not from a safe source, or are used incorrectly, they may become a hazard. Here are some recommendations on how to choose, maintain and safely handle natural materials and loose parts.

When bringing these materials into a childcare program, consider:

1. What is this item going to be used for (sensory table, craft activity, decoration)? The intended use may determine the amount of handling by children and the potential for reuse.
2. What is the age of children who will be using this item? Younger children are more likely to place items near or in their mouths and will be more susceptible to choking hazards.
3. Can the item be cleaned and disinfected? If so, how will it be cleaned and disinfected? Cleaning may involve removal of visible soil (e.g., brushing the dirt off acorns) rather than traditional cleansing with soap and water.

Standard precautions for uncleanable items, include:

1. Checking regularly for visible soiling, broken pieces, and excessive wear. Use discretion to determine when to discard these items.
2. Ensuring that children wash hands before and after contact with un-cleanable materials.

Material	Potential Health and Safety Concerns	Recommendations
Cardboard	<ul style="list-style-type: none"> • Uncleanable • Sharp edges on staples 	<ul style="list-style-type: none"> • Discard if wet, soiled or damaged. • Remove any staples.
Dirt	<ul style="list-style-type: none"> • May contain fertilizer or other chemicals for plants • Mold 	<ul style="list-style-type: none"> • Use soil with no additives. Check soil packaging for information about chemicals or fertilizer. • Check the soil for any contaminants or mold. • If dirt becomes wet (mud), change daily.
Paper towel/toilet paper rolls	<ul style="list-style-type: none"> • Not cleanable 	<ul style="list-style-type: none"> • Discard if wet or soiled.
Food products (Rice, Beans)	<ul style="list-style-type: none"> • Not cleanable • Choking hazard 	<ul style="list-style-type: none"> • Discard when soiled. • Activities should be age appropriate and directly supervised to prevent choking hazards. • Consider children's allergies when deciding whether materials are appropriate.

Precautions for specific materials:

Material	Potential Health and Safety Concerns	Recommendations
Leaves	<ul style="list-style-type: none"> • Not cleanable • Bring bugs and dirt inside 	<ul style="list-style-type: none"> • Discard when soiled. • Inspect before use to ensure items are free of bugs, dirt, or other hazards such as mold.
Nuts, bolts	<ul style="list-style-type: none"> • Choking hazard • Sharp edges 	<ul style="list-style-type: none"> • Activities should be age appropriate and directly supervised to prevent choking hazards. • Inspect regularly for particularly sharp or jagged edges. • Clean and disinfect on a regular schedule.
Pine Cones	<ul style="list-style-type: none"> • Not cleanable • Bring bugs and dirt inside • Choking hazard: Pieces may become brittle and break off into smaller pieces • Sharp edges 	<ul style="list-style-type: none"> • Discard when soiled or damaged. • Inspect before use to ensure items are free of bugs, dirt, or other hazards such as mold. • Activities should be age appropriate and directly supervised to prevent choking hazards. • Inspect regularly for particularly sharp or jagged edges.
Rocks	<ul style="list-style-type: none"> • Choking hazard • Difficult to clean • Sharp edges 	<ul style="list-style-type: none"> • Activities should be age appropriate and directly supervised to prevent choking hazards. • Choose rocks that can be cleaned and disinfected if possible (e.g. smooth, no cracks). • Inspect regularly for particularly sharp or jagged edges.
Unfinished wood	<ul style="list-style-type: none"> • Not cleanable • Slivers and poking • Bring bugs and dirt inside • Choking hazard 	<ul style="list-style-type: none"> • Discard when soiled. • Discard broken pieces that can cause slivers. • Inspect before use to ensure items are free of bugs, dirt, or other hazards such as mold. • Activities should be age appropriate and directly supervised to prevent choking hazards.
Seashells	<ul style="list-style-type: none"> • Difficult to clean • Choking hazard • Sharp edges and chipping • Allergen 	<ul style="list-style-type: none"> • Clean and disinfect on a regular schedule. • Activities should be age appropriate and directly supervised to prevent choking hazards. • Inspect regularly for particularly sharp or jagged edges. • Consider children’s allergies when deciding whether shells are appropriate.

Material	Potential Health and Safety Concerns	Recommendations
Sensory tables (with natural materials and/or loose parts)	<ul style="list-style-type: none"> • Choking hazard • Bring bugs and dirt inside • Not cleanable • Allergen 	<ul style="list-style-type: none"> • Activities should be age appropriate and directly supervised to prevent choking hazards. • Inspect before use to ensure items are free of bugs, dirt, or other hazards such as mold. • Discard natural materials in sensory tables when wet, soiled or damaged. • Replace any natural materials regularly (e.g., for frequent/daily use, weekly replacement may be appropriate). • Consider children’s allergies when deciding whether materials are appropriate (e.g. oats or wheat).
Sticks, twigs	<ul style="list-style-type: none"> • Not cleanable • Bring bugs and dirt inside • Slivers and sharp edges • Difficult to clean or not cleanable • Poking hazards when damaged/broken 	<ul style="list-style-type: none"> • Discard if wet or soiled. • Inspect regularly for particularly sharp or jagged edges. Use wicker baskets with a surface sealant so they can be cleaned. • Inspect regularly for particularly sharp or jagged edges. Repair or replace baskets when damaged/broken.
Water beads (e.g. Orbeez)	<ul style="list-style-type: none"> • Can be harmful if swallowed. • Can expand to hundreds of times their original size causing hearing damage when stuck inside an ear canal or bowel obstruction when swallowed. 	<ul style="list-style-type: none"> • Water beads as sensory play items should only be allowed for children over 5 years old under supervision. • If water beads are stored in the facility, restrict the access to staff only. Water beads should be stored out of sight and reach of children. • Water beads can be safely played as long as they are contained. Consider replacing loose water beads with bead balls with durable outer materials filled with water beads and other media.

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