H.E.L.P. FOR KIDS PROJECT

STATE CHILD CARE HOME ENVIRONMENTAL REVIEW
ACTION PLAN

Provider Name _____ Reviewer _____

Address _____ Date _____

Phone Number _____

This action plan gives you some quick information for making changes to improve the environment in and around your child care home for the children. Each action item that is marked provides solutions for environmental hazards that were identified on the checklist during our visit.

Some of these hazards are more important than others. We have listed the most important ones below, since we recommend that you can make those your top priorities for taking action. The other, less important, items can be tackled when time and money permits.

We understand that to solve some of these problems, you may need more information, help from professionals, or financial assistance. Please look through the resource list that was left during our visit for help in these areas.

We have also given you handouts and pamphlets that provide more detailed information for some of the actions. You will find these handouts listed in this action plan to the right of the appropriate actions.

This action plan is yours to keep. You may want to read through the unmarked action items to increase your awareness of environmental and related health issues in buildings. You can also refer to it whenever conditions in your child care home change or if you move to a new home.

Top Priorities for Action:

_____

_____

_____

_____

_____

Other Recommendations or Comments:

Item #	*Specific Actions Recommended*	*Handout*

Section 1. PROVIDERS / RESIDENTS / CHILDREN ATTENDEES

1A. Background

❑ **1.1** **Children**, from before birth until the end of adolescence, **are very different from adults**. They are growing, with cells multiplying and organ systems developing at a rapid rate. At birth their nervous, respiratory, reproductive and immune systems are not yet fully developed. Exposure to contaminants and toxic materials can affect a child's development.

Health Care

General Safety

Hygiene

Unfortunately, behaviors in early childhood increase a child's chance of exposure to toxic materials. It is common for infants and young children to explore the world by putting things in their mouths, and with many hours spent close to the floor or ground they can easily be exposed to lead by swallowing paint dust, paint chips, or pesticide residues.

Children also spend more time in energetic play than do most adults. Because children breathe more rapidly and deeper than adults and because their respiratory systems are still developing, they take pollutants deep into their lungs and have potentially more harmful effects from air pollutants.

To protect children more effectively, we need to consider why they are more at risk than adults and what types of exposures affect children.

❑ **1.2** ***Take CPR Class*** In case a child's heart or breathing stops due to illness or accident, it is a good idea for a child care provider to be trained in proper CPR (cardiopulmonary resuscitation) techniques for infants and children. CPR and First Aid classes are offered for a small fee through the American Red Cross. For more information in Albuquerque, call the Red Cross at 265-8514.

First Aid & CPR

1B. Asthma, Allergies, and Other Concerns

❑ **1.3** ***Reduce Allergy/Asthma Triggers***

Asthma

Cleaning

Moisture & Mold

a) People with allergies or sensitivities can react to triggers such as dust, molds, cockroaches, pet dander, household products with strong odors, tobacco smoke, and other airborne chemicals. Their symptoms may include frequent sneezing, runny nose, itchy eyes and rashes that can develop into a chronic respiratory condition. For specific actions, see action items 1.4 - 1.10.

b) Those with asthma can react to these same triggers with serious and life-threatening attacks. Therefore, if anyone in the home has allergies or asthma, it is much more important that action be taken to control these conditions (see action items 1.4 - 1.10). These conditions are indicated throughout the checklist with a ✚. Be sure to work with a health care provider on an asthma control program. If your children do not have medical insurance, see the handout on low-cost/no-cost insurance for children.

Item #	***Specific Actions Recommended***	***Handout***

❑ **1.4** ***Reduce Exposure to Tobacco Smoke and Products*** Smoking doesn't mix with clean air and good health. Cigarette smoke contains many toxic chemicals and irritants. Secondhand smoke (or environmental tobacco smoke -- ETS) also contains many toxic chemicals, some of which may be carcinogens, and inhaling it can make asthma worse. People with allergies may be more sensitive to cigarette smoke than others. Children exposed to smoke are more likely to have respiratory infections and asthma than those not exposed. Ear infections are also linked to exposure to secondhand smoke. Common symptoms of smoke irritation are burning or watery eyes, nasal congestion, coughing, hoarseness and shortness of breath. Avoiding the use of tobacco products in a home with children also reduces the risks:

ETS-Secondhand Smoke

a) that children will become future smokers
b) of nicotine poisoning by small children eating tobacco products
c) of fires started by small children that have access to lighted cigarettes, matches, and lighters

- ❷ Ask smokers kindly but firmly to smoke outdoors so household members aren't exposed. Smoke outside, away from windows and doors to prevent smoke from entering your home, especially rooms occupied by children.
- ❷ Wash your hands after smoking. Smoke odors cling to skin, hair, and clothes.
- ❷ If you smoke, quit. Quitting is a difficult process; get support from your family and friends. Talk to your health care provider if needed.

❑ **1.5** ***Reduce Exposure to Pet Dander and Pests*** Many people have allergic reactions to pet dander (small pieces of dried skin that has been shed). Dander from cats is a particularly potent allergen and affects more people than other animal allergens. Dander can collect on clothing, surfaces, or become trapped in materials such as carpet, bedding and upholstery.

Asthma

Cleaning

Pets can also bring dust (and lead-contaminated dust), pests (such as fleas and ticks), and possibly other outdoor contaminants (pesticides, pollen, etc.) into the dwelling. Pet-related problems may be reduced by:

- ❷ More frequent bathing of the pet (although bathing can increase drying and shedding of skin).
- ❷ More frequent and thorough cleaning of surfaces and materials to remove dander, hair, fleas, and other contaminants. Sensitive individuals should not be present during cleaning.
- ❷ Maintaining bird cages. Do not allow children to handle droppings -- droppings can carry disease.
- ❷ Washing pet bedding, vacuum nearby floors, and use flea combs often to control fleas. Use other lower-toxicity flea control measures, such as citrus oils and soap.
- ❷ Removal of fleecy or fabric materials in rooms where pets sleep or spend time
- ❷ Not allowing pets on furniture or beds (especially those used by individuals with allergies or asthma).
- ❷ Keeping pets out of rooms where persons with allergies and asthma spend time.
- ❷ Reduce movement of pets from outside to inside of home to avoid bringing fleas into home.
- ❷ Keeping pets outside. Provide another warm, dry shelter in a garage, shed, etc. An option may be to find another good home for the pet.
- ❷ Considering the use of portable air cleaners to reduce, but not eliminate, allergens (see action item 6.2d).

Item #	***Specific Actions Recommended***	***Handout***

❑ **1.6** ***Prevent and Remove Cockroaches and Rodents and Their Allergens*** Exposure to cockroaches and cockroach debris, and to some extent, rodents and their droppings, can trigger allergies and asthma. Since these pests grow and multiply where there is moisture and food, good sanitation is important to their control, along with sealing openings that the pests use to enter the building. Controlling pests such as insects and rodents with methods that reduce or eliminate the use of pesticides can lower exposure to the irritating and toxic chemicals found in pesticides. This approach is known as Integrated Pest Management. If pesticides must be applied, use the least toxic compound in the smallest quantities that will work and use only as-needed (when pests are observed -- avoid scheduled, or calendar, applications). ***Pest Control***

- ❷ To kill cockroaches, place bait stations (brand names: Maxforce, Combat, Avert) or boric acid where cockroaches have been seen, but out of the reach of children.
- ❷ Clean house thoroughly after treating for roaches to reduce roach allergens. Sensitive individuals should not be present during cleaning.
- ❷ Use mechanical traps to eliminate rodents.
- ❷ Avoid contacting rodent bodies when removing. Take proper precautions during clean-up of areas with rodents to avoid diseases (e.g., hantavirus) carried by the pests. See the handout and resource list for information on avoiding exposure to rodents and the hantavirus.
- ❷ Reduce clutter (papers, boxes, debris) to minimize hiding places and shelter.
- ❷ Eliminate food (unwashed dishes, open food containers, food crumbs) and water (drips, leaks, pet dishes) sources.
- ❷ Block or caulk any openings in walls, floors, under sinks to keep pests from entering.

❑ **1.7** ***Reduce Exposure to Dust Mites*** Dust mites are tiny relatives of the spider, so small you can't feel them and can only see them with a microscope. They are found in mattresses, bedding, upholstered furniture, carpets, and curtains. Dust mites live happily in warm, humid places (like our beds). People with allergies or asthma often have strong reactions to dust mite allergens. Mites eat the flakes of skin that people and pets shed daily. Mite populations can be reduced through the following steps (note that sensitive individuals should not be present during vacuuming): ***Asthma*** ***Cleaning***

- ❷ Consider removing carpeting, stuffed toys, and upholstered furniture from the sensitive person's bedroom (see action item 3.14).
- ❷ Vacuum remaining carpets, furniture, and other fabric surfaces weekly -- twice weekly in the bedrooms of those with asthma and allergies. Use high efficiency filters in the vacuum to trap the dust mites and dust mite particles and keep them from being blown back into the room (see action item 3.15).
- ❷ Damp mop hard floors and damp wipe surfaces frequently to pick up the dust instead of moving it around your house.
- ❷ Use allergy-control covers on pillows and mattresses (see action item 6.2b).
- ❷ Wash sheets and stuffed animals weekly in hot water (greater than 130⑤F). Wash pillows and blankets every two weeks. If the house water temperature is kept below 130⑤F to prevent scalding (120⑤ to 125⑤F is a good range to prevent scalding), consider washing bedding at a laundromat that has hot water. Select fabric softeners and laundry detergents that have no fragrances (see handout for more information).
- ❷ If clothes are dried in a dryer, use the high heat cycle.
- ❷ Reduce humidity in the home if possible (see action items 1.8 and 3.4). Dust mites do not thrive in low humidity environments.

Item #	***Specific Actions Recommended***	***Handout***

❑ **1.8** ***Control Moisture and Molds*** Molds are simple, microscopic organisms found indoors and outdoors. Molds need food (leaves, wood, paper, dust, dirt), a moisture source, and proper temperature to grow. If moisture is available molds can thrive and multiply. Moisture control is the key to controlling mold problems. ***Moisture & Mold***

Sources of indoor moisture that may cause problems include: flooding, backed-up sewers, leaky roofs, humidifiers, damp basements or crawl spaces, plumbing leaks, steam from cooking, shower/bath steam, wet clothes on indoor drying lines, clothes dryers vented indoors.

Mold spores are tiny and lightweight, and can become airborne. Depending on a person's sensitivity, mold can cause respiratory irritations, allergic reactions and even severe poisoning.

- ❷ Identifying and controlling the source of moisture is the most important step in controlling mold contamination. Find and fix water leaks due to plumbing, poor drainage, or leaks in roofs or foundation walls.
- ❷ Use an exhaust fan or open windows to remove moisture from cooking, bathing, or laundering.
- ❷ Where possible, remove and discard moldy materials. Be careful not to spread mold contamination to other parts of the building. Avoid exposing sensitive (allergic or asthmatic) individuals to the moldy materials. In cases of extensive contamination, call in a qualified contractor (see resource list).
- ❷ It is usually not possible to clean moldy materials completely, and the mold can quickly reappear. Fabric or fleecy (porous) materials that contain biological contaminants are especially hard to clean. For hard surfaces, scrub thoroughly with detergent to remove the mold. If scrubbing doesn't remove the mold completely, consider using a chlorine bleach solution (3 tablespoons bleach per quart water) to kill the mold (see handout). Remember to wear a suitable respirator and personal protection, and ventilate your work area, because bleach fumes can irritate the eyes, nose, and throat (see handout for more information). Do not mix products containing chlorine (bleach) with products containing ammonia -- toxic gases can be produced.
- ❷ For fabric or fleecy materials, the contaminated material should be dried and cleaned within 48 hours of becoming wet; otherwise, mold growth may be a continued problem in the material. See the handout and resource list for guidance and professional assistance on cleaning and removal.
- ❷ If humidity levels are high, consider using a dehumidifier (especially in basements).

❑ **1.9** ***Reduce Strong Odors and Fragrances*** For some people, strong odors (from the use of cleaning products, art and hobby materials, paints and thinners) and fragrances (perfumes, fabric softeners, incense, candles, air fresheners) can trigger allergic reactions and asthma. These can be reduced by:

- ❷ Eliminating or using less of a product.
- ❷ Using a different product that has less odor.
- ❷ Using an exhaust fan or opening windows to remove the odors from the building.
- ❷ Avoiding the use of fragrances to cover up odors.
- ❷ Not using the products in the living space.

Item #	Specific Actions Recommended	Handout

❑ **1.10** ***Minimize Exposure to Pollen*** Pollen from surrounding outdoor sources can affect sensitive individuals indoors as well as outdoors. Pollen particles can enter homes along with outdoor air through open windows and doors or be tracked in on shoes, clothing and pets. To minimize exposure: *Asthma* *Cleaning*

- ❷ The sensitive individual should leave the area during raking (molds can also be stirred up by raking), mowing, gardening, or other agricultural activities.
- ❷ Keep doors and windows closed during the pollen season if possible. Don't dry the sensitive person's laundry outdoors.
- ❷ Minimize the number of times pets go in and out.
- ❷ Remove outdoor clothing and shoes on entering the home -- wipe shoes on door mats. Put a doormat at every entrance.
- ❷ Clean surfaces and materials frequently and thoroughly to remove pollens. Use high efficiency filters in the vacuum to trap pollen particles and keep them from being blown back into the room.
- ❷ If you have a forced-air furnace, use compatible high efficiency air filters to remove more small particles from the air.
- ❷ Consider using a portable air cleaner (not an ozone generator) in the rooms where the sensitive person spends the most time.

1C. Personal Hygiene / Disease Transmission

❑ **1.11** ***Wash Hands Frequently and Properly*** Children and adult hands touch many objects during the course of a day. By placing hands in the mouth or on food, children can ingest compounds, chemicals, and germs which can cause illness and disease. *Hygiene*

- ❷ Children and providers should wash their hands in warm water with a mild (preferably liquid) soap.
- ❷ Hands should be rubbed together vigorously for at least 15 seconds.
- ❷ Hands should be rinsed under warm water and dried with a disposable (or single use) towel (never with a shared or common towel).
- ❷ Turn off rinse water with the towel as a barrier between hands and the faucet handle to avoid recontamination.
- ❷ Discard used towel in a plastic-lined trash bin.

❑ **1.12** ***Require or Provide Personal Toiletries for Each Child*** Illness can be spread through shared items such at toothbrushes. Lice can be transmitted from child to child via shared combs and hairbrushes. Each child should have and use their own toothbrush, comb or hairbrush.

❑ **1.13** ***Remove Ill Children From the Child Care Setting*** One infected child can quickly spread a communicable illness through a child care. By not allowing ill children into the child care home, attending children may have reduced exposure to the illness.

❑ **1.14** ***Inform Children's Parents of Low-Cost or No-Cost Health Coverage*** Children should be seen by doctors for regular check-ups (including immunizations), hospital care, dental visits, prescription eyeglasses, and vision and hearing exams. New Mexikids provides low-cost or no-cost health coverage for children in New Mexico. *Health Care*
For more information, contact New Mexikids at 1-888-997-2583

❑ **1.15** ***Require All Attending Children, Family Members and Providers to have Complete Immunizations Including Written Proof*** Immunizing children prevents the spread of preventable, debilitating and deadly diseases. Written proof of immunizations will show proper inoculation and safeguard all attending children.

❑ **1.16** ***Require Parent or Guardian Contact Information*** Parent or Guardian contact information should be immediately available in case of illness or accident. Ask each parent or guardian of each attending child to supply written contact information.

Item #	Specific Actions Recommended	Handout

❑ **1.17** ***Require Medication and Prescription Instructions to be Written*** Medicine, even aspirin, can be poisonous to children if not administered correctly. For any child receiving medication, a parent should provide written instructions, including name of medication and doctor (if appropriate), when it is to be administered, proper dosage and any other relevant information to the provider. The instructions may refer to a doctor's instructions (for prescriptions) or those on the label (for non-prescriptions). Failure to follow instructions can lead to illness or death of the child.

Section 2. OUTDOORS AND NEARBY ENVIRONMENT

❑ **2.1** ***Stop Outdoor Pollutants from Entering the Home*** Outdoor sources of pollution near the home may present health risks to children when they are outside. The pollution can also get into the home along with outdoor air entering through windows and doors, or brought in on shoes, clothing, or with pets. Usually when the source is closer or located upwind of the home, the risk is greater and the odors or noise are more obvious.

Asthma

Cleaning

Air Cleaning Equipment

- ❷ Try to identify the source of pollution and call local authorities to check that it meets air pollution laws.
- ❷ Keep pollutants outside as best as you can by restricting the in and out privileges of pets, using a door mat and removing shoes, and closing doors and windows when the wind is from the direction of the pollution source.
- ❷ Consider using an efficient vacuum cleaner and high efficiency air filters in the furnace (if you have a forced air furnace) or air conditioner to remove more particles that find their way indoors.
- ❷ Consider using portable air cleaners that don't produce ozone in the bedrooms of individuals with allergies or asthma (see action item 6.2d).

❑ **2.2** ***Avoid Area During Raking and Mowing*** Molds and pollens that are stirred up during raking and mowing can trigger allergies and asthma attacks in sensitive individuals. The exposure is worse if the person is outdoors, but can also be a problem indoors. If the person stays indoors:

Asthma

- ❷ Keep doors and windows closed during outdoor activities that stir up pollens and dust
- ❷ Remove outdoor clothing and shoes on entering the home -- wipe shoes on doormats at the outside doors; wash clothing as soon as possible.
- ❷ Consider using a portable air cleaner that doesn't produce ozone in the rooms where the sensitive individual spends the most time (see action item 6.2d).

2A. Drainage

❑ **2.3** ***Correct Specific Drainage Problem*** Drainage problems can allow water to enter the building, attract pests, and encourage molds to grow. You may need qualified professional assistance to solve some of these problems (see resource list).

Moisture & Mold

❑ **2.3a** ***Improve Drainage -- Repair Roof Leaks*** Water can travel many feet from a roof leak causing building materials in attics and ceilings to become wet (often in places you can't see). In northern climates, roof leaks can also result from ice dams in the winter, that force water under the roofing materials. Repair leaks; replace the roof if necessary.

The soil and other materials near the building (including sidewalks and patios) should be graded with a slope that drains water away from the building.

When downspouts are missing or disconnected, water can splash onto the building and puddle near the foundation. These puddles can cause problems such as leaks or dampness in the foundation materials. Repair or attach downspouts, extending the bottom of the downspout away from the building.

Item #	*Specific Actions Recommended*	*Handout*

2B. Lead and Dust Outdoors

❑ **2.4** **Young children** living in many older or remodeled homes are exposed to high health risks from household dust. This dust contains many pollutants that come mainly from outside the home and then build up in rugs and carpets. Pollutants found in house dust include lead, allergens, pesticides, and other toxic chemicals. These pollutants can cause allergies, asthma attacks, learning disabilities, and possibly cancer. *Lead*

Toddlers are most at risk from breathing and swallowing dust because they play on floors and put their hands in their mouths. They also have less resistance to pollutants than adults. If not detected early, children with high levels of **lead** in their bodies can suffer from: damage to the brain and nervous system, behavior and learning problems (such as hyperactivity, slowed growth, hearing problems, and headaches). Make sure children eat nutritious, low fat meals high in iron and calcium -- children with good diets absorb less lead.

A common source of lead indoors is lead-based paint that deteriorates into small particles and dust. Other indoor sources may include drinking water, lead crystal and pottery, vinyl mini-blinds, hobbies, and folk remedies to treat upset stomachs.

Outdoor sources of lead that collect in the soil can include particles of paint peeling from your dwelling or neighboring buildings, emissions from automobiles that used leaded gasoline, smelters, and some abandoned industrial or commercial facilities. The lead in the soil can be tracked into the dwelling.

❑ **2.4a** ***Have Children's Blood Tested for Lead*** Children between the ages of 6 months and 6 years, who may have been exposed to lead, should have a simple blood test performed that measures the lead levels in their bodies. See the resource list for clinics or agencies that provide these inexpensive (or sometimes free) tests.

❑ **2.4b** ***Buildings Constructed Before 1980 May Have a Lead Paint Problem*** Buildings constructed before 1980 may have lead-based paint on outdoor and indoor surfaces. Although the federal government banned lead-based paint from housing in 1978, this paint may have still been available and in use for several more years. Peeling paint may be caused by a moisture or water problem (see action items 2.3, 2.3a, 3.4).

❑ **2.4c** ***Test for Lead in Paint -- If Necessary, Remove/Repair Damaged Paint*** Lead-based paint that is covered by several layers and is in good shape usually poses little risk. However, **peeling, chipping, chalking, or cracking lead-based paint is a hazard** and needs immediate attention. Lead-based paint may also be a hazard if it is in a place that children can chew on or that gets a lot of wear-and-tear: windows and window sills, doors and door frames, stairs and railings, and porches and fences. The paint dust from opening doors and windows may be invisible.

If you rent, notify your landlord of peeling or chipping paint. Have a professional test for lead in paint. Clean up paint chips immediately. Wet mop floors and use a sponge or rag to remove dust from windows. Keep children from chewing on window sills or other painted surfaces. Do not try to make repairs yourself without following the proper procedures -- you could make the problem worse. See handout and resource list for getting advice on testing and reducing lead levels in the home. Call EPA's lead hotline at 800-424-LEAD for more information.

❑ **2.4d** ***Test for Lead in Soil - Keep Children Off Soil - Avoid Track-in of Lead-Contaminated Dust*** If lead-based paint was removed from your building or the next door building (if that building had lead-based paint), paint particles may have contaminated the soil near your dwelling. Consult with a specialist about whether to have the soil tested (see resource list). Children should not play in the nearby soil -- if there is grass, they can play more safely there. Pay special attention to reducing track-in of lead-contaminated dirt and dust (see action items 2.4f and 2.4g).

Item #	Specific Actions Recommended	Handout

❑ **2.4e** ***Follow Special Remodeling Precautions*** Special procedures should be followed during remodeling or repainting of buildings suspected to contain lead-based paint or asbestos. These precautions are intended to reduce the amount of lead dust that is produced, to keep occupants from entering the spaces where the renovation is occurring, and to keep the dust from entering the living spaces of children. See resource list for information on these procedures, professionals who can identify lead and asbestos hazards before the remodeling begins, and companies who are trained to do this work.

❑ **2.4f** ***Reduce Track-in of Dust and Lead Dust*** Take off shoes or install doormats at all entrances. Wiping the bottom of your shoes on the mat will reduce dust significantly. 70-95% of dust on the floor comes into a house on shoes.

❑ **2.4g** ***Use Good Doormats*** Doormats placed both outside and inside of doors to outside will remove dirt and contaminants from shoes and can greatly reduce indoor dust and lead levels. On the outside, a grate or mat made of very stiff bristles works well. In addition, a commercially constructed mat should be placed immediately inside the door. A commercially made doormat works better than carpet samples or remnants, but carpet samples or remnants are better than no doormat.

2C. Pest Control / Pesticides Outdoors

❑ **2.5** **Pesticides are poisons**. While killing bugs and weeds, they may also poison children and pets, irritate eyes or skin, cause cancer, or kill birds and fish. Control pests such as insects and rodents with methods that reduce or eliminate the use of pesticides to reduce exposure to the irritating and toxic chemicals found in pesticides. This approach is known as Integrated Pest Management. It involves eliminating sources of food and water for the pests, sealing openings that the pests use to enter the building, and using non-toxic methods, such as helpful insects and hand-weeding outdoors, and baits and traps indoors. *Pest Control*

Buy native plants that grow well in your climate and have natural pest defenses. Try non-chemical products to control pests. Because some fertilizers are also poisonous, consider using less toxic fertilizers such as compost, aged manure, or slow-release organic fertilizers.

❑ **2.5a** ***Do Not Permit Play Near Pesticide-treated Areas*** Pesticides applied to plants or surfaces outside the building for weed or insect control can linger for a minimum of 3 days. Because pesticides can be inhaled, swallowed, or absorbed through the skin, children should not be allowed to play on or near treated areas for approximately one week after treatment.

❑ **2.5b** ***Help Neighbors to Limit Use of Pesticides*** If pesticides drift onto your property, they can cause harm to your family, pets, and plants. Help neighbors learn about health risks from pesticides. Refer to the resource list for agencies that can help if the neighbors are uncooperative.

❑ **2.5c** ***Eliminate Pests -- Remove Attractants -- Seal Entry Points*** Eliminate the pests, but avoid using toxic chemicals for pest control. Use bait stations or boric acid for cockroaches and mechanical traps for rodents. Eliminate nesting materials, and sources of moisture and food. *Hantavirus*

Seal openings into the attic, basement, or crawlspace that can allow entry for birds, rodents, and insects. All vent openings should be protected by sturdy, thin wire mesh with no larger than 1/4 inch spacing. Seal any gaps greater than 1/4 inch with a rodent resistant material such as brass scrub pad or concrete patch. Use silicone caulk to seal smaller openings.

Take proper precautions during cleanup of areas with rodent or birds, to avoid diseases carried by the pests. See resource list and handout/fact sheet for information on avoiding exposure to rodents and the hantavirus.

Item #	Specific Actions Recommended	Handout

2D. Garage or Other Outbuildings

❑ **2.6** ***Attached Garages Can Supply Pollutants to Home*** Pollutants that are produced or accumulate in attached garages can easily move into the living space through gaps, openings (doors), and heating ducts. Keep the garage and garage floor clean. Install doormat between garage and home to keep pollutants from being tracked into the living area.

Hazardous Household Products

CO Alarms

❑ **2.6a** ***Avoid Idling Car in Garage*** Automobile engines produce the dangerous gas, carbon monoxide (CO), when they are operating. This gas and others can quickly accumulate to dangerous levels in a garage. Drive out immediately after starting. Consider steps to reduce driving if possible.

CO Alarms

❑ **2.7** ***Improve Storage of Hazardous Chemicals in Garage/Storage Buildings*** Try to avoid storing pesticides or other hazardous chemicals in garages that are connected to house. Consider ventilating garages or detached storage buildings to the outside if hazardous chemicals or gas powered tools or vehicles are stored/started there. Make sure hazardous chemicals and pesticides are securely stored in original containers that don't have leaks (see action items 3.18b - 3.18c).

Hazardous Household Products

2E. Outdoor Safety Hazards

❑ **2.8** ***Make Sure the Play Area is Safe*** There can be many hazardous conditions in outdoor play areas. For specific problems see action items 2.9 - 2.17d.

Playground Safety

Sun Safety

❑ **2.9** ***Reduce Sun Exposure*** Research has shown that excessive sun exposure can cause sunburn, premature aging of the skin, and skin cancer. It is estimated that 80% of lifetime exposures occur before the age of 18. Therefore, take these actions:

- ❷ Avoid the sun from 10 a.m. to 4 p.m., the most intense part of the day.
- ❷ Wear a broad hat and clothing that blocks the sun's rays. Wet shirts and many lightweight clothes allow dangerous rays to pass through to the skin.
- ❷ Wear sunglasses that filter ultraviolet (UV) light.
- ❷ Use a sunscreen with an SPF (sun protection factor) of at least 15. Reapply after swimming or vigorous activities.
- ❷ Keep infants out of the sun. When adequate shade or clothing is not available for babies less than six months old, apply minimal amounts of sunscreen to small areas, such as the face and back of the hands.
- ❷ Apply sunscreens liberally to children over the age of six months.
- ❷ Be aware that dark-skinned people are not immune to skin cancer. Dark skin produces more melanin (the pigment that gives skin its color), and so offers more protection, but it can still burn.

❑ **2.10** ***Fence Play Area*** Play areas that are near streets or parking lots, railroad tracks, or a pond or other water source need to be fenced so children are kept away from these hazards.

❑ **2.11** ***Remove Dangerous Items from Play Area*** The play area for children can have common items and materials (trash, pet wastes, tools) that can cause physical injury, or health problems if the children eat them or get them on their skin. Occasionally walk through the area looking for these conditions. Clean up or remove any that are found.

Item #	Specific Actions Recommended	Handout

❑ **2.12** ***Protect Against Drowning Accidents*** Drowning accidents involving children can occur very quickly. Therefore, water hazards, such as pools, hot tubs, Jacuzzis, should be guarded with a 6 foot high fence with a locked gate so children do not have access. The drain cover for a hot tub, Jacuzzi or swimming pool should be securely in place and in good condition (i.e., not cracked or broken). An emergency cut-off switch for the circulation pump motor for hot tubs and Jacuzzis should be clearly visible and unobstructed location nearby. When children are playing in or near pools or ponds, they should be under the constant supervision of a responsible individual, preferably with CPR training (see resource list).

Toddlers can fall head first into a bucket and not be able to get out, so buckets or basins with water are also a water hazard and should be removed.

Fill or securely cover abandoned wells.

❑ **2.13** ***Correct Traps and Suffocation Hazards*** Abandoned appliances and wells can be a hazard to children. Remove and properly dispose of abandoned appliances with doors (such as refrigerators, freezers, and stoves) that children may play in or on. Until old or abandoned appliances are properly disposed of, their doors must be either permanently closed or modified so they can't be completely closed. This will help eliminate potential suffocation hazards for children.

❑ **2.14** ***Install Safe Railings*** All elevated surfaces such as platforms and ramps should have railings to prevent falls. Space posts closer than 3 1/2 inches or farther than 9 inches so children's heads will not be trapped in the gap.

❑ **2.15** ***Maintain Trampoline Safety*** Exposed springs on trampolines are entrapment hazards frequently resulting in broken arms and legs in children. Do not allow trampoline to be used without shock-absorbing pads that completely cover the springs, hooks, and the frame.

Allow only one person on the trampoline at a time. If more than one child is on a trampoline, collisions and the jumping action of one may uncontrollably launch another child off of the trampoline causing serious injury or death.

Place trampoline away from structures and other play areas. Consider removing the trampoline from the premises.

❑ **2.16** ***Learn Which Plants Are Poisonous*** Some common plants may have poisonous leaves, stems, berries, or flowers. Learn the names of the plants in your yard and which ones are harmful to touch or eat. Meanwhile, teach children not to touch or eat any plant until they show it to you and get your approval. Move or remove any of these plants, or keep children away from them. ***Poisonous Plants***

❑ **2.17** ***Safe Playground Equipment*** Playgrounds are common areas for injuries to children. Each year, about 200,000 children are treated in U.S. hospital emergency rooms for playground equipment-related injuries. Almost 60 percent of all injuries are caused by falls to the ground. The simple tips located in the 'Tips for Home Playground Safety' document will help you minimize the risks to children in your play area

Play structures should be spaced at least 9 feet apart to allow children space to circulate or fall without striking another structure. Moving pieces of equipment should be located in an area away from other play structures so children have adequate room to pass from one play area to another without being struck by a moving swing or by another child exiting from a slide.

❑ **2.17a** ***Maintain and Repair the Equipment*** Inspect playground equipment twice a year for changes in safety and performance. Check for loose bolts, rusty, worn or damaged parts, rotting or torn swing seats, modifications or the addition of ropes or other strangulation hazards, etc. Wood equipment may need special attention, such as sanding and re-sealing in the spring and fall to reduce splinter hazards to children.

Item #	Specific Actions Recommended	Handout

❑ **2.17b** ***Remove or Repair Dangerous Parts*** Play equipment should not have sharp points or edges that could cut skin. All protruding bolts should be shortened and/or covered, with no dangerous pieces of hardware at the top or bottom of swings. These can cut children, puncture skin, or catch clothing drawstrings, which could strangle a child.

❑ **2.17c** ***Maintain a Good Landing Surface*** The risk of injury to children from falls is high. Playground equipment should have a landing surface made of a material that softens impacts and reduces injuries. The materials should be approximately 9 inches deep and extend 6 feet beyond the equipment on all sides. Some examples of materials include sand, wood chips, and mulch. Inspect this surface regularly to check for shifting and thin spots.

❑ **2.17d** ***Allow Adequate Spacing for Equipment*** Play structures should be spaced at least 9 feet apart to allow children space to circulate or fall without striking another structure. Moving pieces of equipment should be located in an area away from other play structures so children have adequate room to pass from one play area to another without being struck by a moving swing or by another child exiting from a slide.

Section 3. GENERAL INFORMATION ABOUT THE INDOORS

❑ **3.1** ***Increase Ventilation with Outdoor Air*** All living spaces should get enough fresh outdoor air to remove odors and other pollutants that can accumulate. Usually, your nose knows when there isn't enough ventilation. To increase ventilation, operate exhaust fans or open windows whenever weather, outdoor pollution levels, and security considerations permit. Ventilation systems are available that directly provide outside air to the home (see resource list). There may be times when the outdoor air has high levels of pollutants (dust, pollen) that can cause strong reactions in individuals with allergies or asthma. Minimize outdoor air ventilation with outdoor air during these periods.

Ventilation

To provide adequate fresh outdoor air, and to control odors and pollutants, some building codes require that at least one window in each room can be opened or that a ventilation fan be installed. If possible, repair or install windows that can be opened for ventilation. If necessary, discuss with your landlord.

❑ **3.2** ***Remove Garbage from Indoors Daily and Remove from Premises Weekly*** Collected garbage can be the source of indoor air contaminants and microbiological growth leading to illness in building occupants. Collected garbage may also attract pests such as cockroaches and rodents. Store trash that is removed daily from indoors in an appropriate outdoor container (as provided by your refuse contractor or purchased by you). The outdoor container should be made of a sturdy material such as metal or plastic, with a lid that can be tightly sealed, that is easily cleaned and not accessible to scavengers such as stray pets, raccoons and bears.

Item #	*Specific Actions Recommended*	*Handout*

3A. Moisture and Water Damage

❑ **3.3** ***Remove or Clean Moldy or Contaminated Materials -- Eliminate Moisture Source*** *Moisture & Mold*

Water damaged building materials and carpet give mold and bacteria a good place to grow. Where possible, remove and discard moldy materials. Be careful not to spread mold contamination to other parts of the building and avoid exposing sensitive (allergic or asthmatic) individuals. If there is extensive contamination or contamination caused by sewage backup, you may need to consult with an expert.

It is usually not possible to clean moldy materials completely, and the mold can quickly reappear. Fabric or fleecy (porous) materials that contain biological contaminants are especially hard to clean. For hard surfaces, scrub thoroughly with detergent to remove the mold. If scrubbing doesn't remove the mold completely, consider using a chlorine bleach solution (3 tablespoons bleach per quart water) to kill the mold (see handout). Remember to wear a suitable respirator and personal protection, and ventilate your work area, because bleach fumes can irritate the eyes, nose, and throat (see handout for more information). Do not mix products containing chlorine (bleach) with products containing ammonia -- toxic gases can be produced.

For fabric or fleecy materials, the contaminated material should be dried and cleaned within 48 hours of becoming wet; otherwise, mold growth may be a continued problem in the material. See the handout and resource list for guidance and professional assistance on cleaning and removal.

To control future mold problems, it is very important to eliminate the sources of moisture that caused the mold growth (for example, repair leaks, improve drainage, exhaust cooking and bathing moisture - see action items 2.3, 2.3a, 5.4, 7.1). Moisture and water can cause paint to peel, flake, and bubble, and wall paper to detach from the wall surface.

❑ **3.4** ***Reduce Moisture Sources*** Windows that are frequently fogged on the inside usually indicate a strong moisture source inside the building, such as leaks, flooding, or cooking and bathing activities. Fogging is also common in cold climates on windows with only one layer of glass. Eliminate or reduce the moisture sources and use exhaust fans or open windows while cooking and bathing (see action items 2.3, 2.3a, 5.4, 7.1). Also consider using a dehumidifier in the home. *Moisture & Mold* *Ventilation*

3B. Other Indoor Air Pollutants and Sources

❑ **3.5** ***If You Suspect the Presence of Asbestos, Consider Testing and Control*** Asbestos is a mineral fiber that has been used commonly in a variety of construction materials for insulation and as a fire retardant. The most dangerous asbestos fibers are too small to see. After they are inhaled they can remain in the lungs. Asbestos can cause lung cancer. Symptoms don't show up for many years. Smoking combined with exposure to asbestos increases the risk of lung cancer. *Asbestos*

Today, asbestos is most commonly found in older homes in pipe and furnace insulation materials, "popcorn" ceilings, and floor tiles. Some remodeling practices such as cutting or sanding may disturb the asbestos and release asbestos fibers into the air. If asbestos is left undisturbed the fibers will not release into the air.

For professional advice on testing of suspected material and options for control or removal, see the resource list.

Item #	Specific Actions Recommended	Handout
❑ 3.6	***Consider Measuring Radon Levels in Your Home*** Radon is a colorless, odorless, radioactive gas. Exposure to high levels of radon can lead to lung cancer. The most common source of indoor radon is in the soil or rock on which homes are built. It enters homes through dirt floors, cracks in concrete floors and walls, and floor drains. In some areas, water from wells is also a major source of radon in a home. The underlying soil and geologic features in some regions of the country are more likely to cause high radon levels in buildings. The U.S. EPA recommends that all homes should be tested for radon. See the resource list for testing information and services.	***Radon***
❑ 3.7	***Control Radon, If Levels are 4 pCi/L, or Above*** If indoor radon levels measured on the ground floor were 4 pCi/L, or higher, and the home is on well water, consider having the radon level in the water tested. The U.S. EPA recommends reducing the level of radon in homes with an average radon concentration of 4 pCi/L or greater. There are several ways to reduce indoor radon levels, but it generally requires a specialist to diagnose and install these options. Consult the resource list or the Radon Hotline (800-323-9727) for information on reducing radon.	***Radon***
❑ 3.8	***Use Methods Other than Ozone Generators for Reducing Indoor Air Pollution*** Some air cleaners produce ozone when they are used. Even at low concentrations, ozone can cause health effects, including lung and throat irritation and shortness of breath. It may also aggravate chronic respiratory disease, such as asthma. Because it can be difficult to control the ozone levels in a room during air cleaner/ozone generator use, levels can exceed public health standards. At levels below these standards, ozone generally has little, or no, effect on reducing indoor air pollution. Instead of using an ozone generator, consider eliminating the pollutant source(s), adding outdoor air ventilation, or using proven portable air cleaners that don't produce ozone (see action item 6.2d). See the handout for more information on ozone generators.	***Ozone***

3C. Lead Indoors

❑ 3.9	***Test for Lead -- Clean Frequently and Thoroughly*** Remodeling and paint removal can produce small lead-contaminated particles and dust that settle on surfaces, furniture, and carpeting in the home. Consider having a professional lead test performed on dust and other materials in your home (see resource list). Conduct thorough and frequent cleanings to remove particles and dust (see action items 3.15 - 3.17).	***Lead***
❑ 3.10	***Test Old Painted Toys and Furniture for Lead*** Lead exposure is of highest concern for children under 7 years old. Some old painted toys and furniture may contain lead-based paint. If you have toys or furniture such as these you may want to consider having them tested for lead. See the resource list for testing resources.	***Lead***
❑ 3.11	***Remove Vinyl Blinds that May Contain Lead*** Use only mini-blinds that are lead-free. Look at the packaging and labels on new blinds. If there is no lead-free label, then assume that the blinds have lead additives. When exposed to sunlight and heat, vinyl blinds that contain lead can produce lead dust, which is easy for children to swallow when playing indoors.	***Lead in Vinyl Blinds***

3D. Pest Control Inside the Home

❑ 3.12	***Repair or Replace Damaged Screens*** Damaged window screens can allow insects, rodents, and birds to enter the home. The sharp edges can also injure children.	***Pest Control***

Item #	Specific Actions Recommended	Handout

3E. Carpet

❑ **3.13** ***Precautions with Wall-to-Wall and On Slab Carpet*** Wall-to-wall carpet tends to gather dust and other settled contaminants, because it is more difficult to clean than hard surfaces. These contaminants can be stirred up into the air and cause respiratory irritation for sensitive individuals; they are also a good food source for developing molds. Frequent and thorough vacuuming using vacuums with high-efficiency filters/bags, especially in areas with heavy traffic, can remove much of the dirt. However, periodic deep carpet cleaning, such as hot water or 'steam' extraction, is also recommended (carpet and pads must be dried within 24 hours to prevent mold growth). Carpeted concrete floors that are above a water source (such as a high water table), or have poor drainage underneath or around the edge are more likely to develop moisture condensation and mold growth in the carpet, carpet pad, and on the concrete floor.

Carpet
Moisture & Mold
Cleaning

❑ **3.14** ***Consider Removing Old Wall-to-Wall Carpeting*** Dust, mold spores, pet dander, dust mite allergens, and pesticides settle in carpets and, because it can be difficult to clean carpets thoroughly, they accumulate as the carpet ages. Consider removing old carpet, to alleviate asthma or allergies. However, since new carpets may have high levels of chemicals that may be hazardous when breathed, consider buying 'green label' carpet, airing out new carpet in a garage or other unoccupied space before installing, or installing hard surface flooring (tile, wood, etc.).

Carpet

3F. Cleaning

❑ **3.15** ***Vacuum Carpeting and Damp-Mop Bare Floors Daily*** Children, in particular those with allergies and asthma, can be sensitive to airborne dust and allergens indoors. Accumulated dust, mites, and other debris can be stirred up into the air by someone simply walking across a dirty floor or carpeting. Lead dust can also be ingested by children who are on the floor. Because of the high traffic volume in child care homes, carpets should be vacuumed daily using a filtered vacuum. High efficiency vacuum bags are available at most stores for various types of vacuums and decrease the amount of particles that the vacuum blows back into the air.

Use high efficiency bags, labeled 'microfiltration' or 'HEPA', that can be purchased at most retail stores like Wal-Mart or Target. These bags will cut down on the amount of dust released into the indoor air. Check bag and/or belt monthly. Replace bag when half full.

Similarly, damp-mopping bare floors will keep dust and allergens from accumulating on bare floors. Using a damp mop will minimize the amount of dust that becomes airborne while cleaning. If possible, vacuum and damp-mop after children have left the child care home.

Cleaning
Carpet

❑ **3.16** ***Damp-Dust Furniture, Shelves and Window Sills Weekly*** Inhaling dust and allergens can cause allergic reactions and trigger asthma attacks in sensitive individuals. Furniture, shelving and window sills should be kept free of dust and debris to reduce the amount of contaminants and allergens that can become airborne due to normal activities. Using a damp cloth to dust will minimize the amount of dust that becomes airborne while cleaning. If possible, dust surfaces after children have left the child care home.

Cleaning

❑ **3.17** ***Perform Thorough Cleaning*** A very thorough cleaning of <u>all</u> surfaces can reduce accumulated dust, dust mites, and pet dander so that less is available to irritate sensitive individuals. These thorough cleanings have been found to have a long-lasting effect on particle levels in buildings. Pay special attention to vacuuming upholstered furniture (use high efficiency filters/bags on the vacuum -- see action item 3.15) and consider removing very old cloth-covered furniture. Dust, dust mites, and pet dander will build up in old cloth furniture and may cause asthmatics and people with allergies to sneeze, wheeze, and have difficulty breathing.

Cleaning
Carpet

Item #	Specific Actions Recommended	Handout

3G. Hazardous Household Products

❑ **3.18** **Exposure to hazardous materials** in cleaners, art and hobby supplies, and pesticides can take place from swallowing, inhaling, or absorption through the skin. Accidental swallowing is the most likely cause of trouble for children, but strong odors and fragrances can also cause problems. Keep children away from areas where hazardous materials or pesticides are used and store all hazardous materials in locked cabinets.

When they play with paints and markers, children are likely to put them in their mouths or decorate their hands and faces. Make sure children use only products that are non-toxic and be sure that they wash their hands after playing with any art materials.

Hazardous Household Products

Arts-Crafts-Hobbies

Poison

❑ **3.18a** ***Secure Tobacco, Alcohol, and Medicines*** Since children often explore by putting things in their mouth, and by mimicking adult behaviors, make dangerous items such as tobacco and alcohol products and medicine inaccessible by storing them in a locked cabinet. Overdoses of medicine or swallowing tobacco products or cigarette butts can be toxic and/or fatal to children 6 years in age, or younger.

❑ **3.18b** ***Make Hazardous Products Inaccessible*** To make hazardous products less accessible to children, move these products above the reach of children, and place in a storage cabinet with a lock, preferably above floor level. Where possible, remove hazardous products from the living space.

❑ **3.18c** ***Safely Store and Dispose of Hazardous Products*** Never store hazardous products in pop or milk bottles. It is easy for children to mistake poisons for beverages when they are in familiar drink containers. Even in an inaccessible and locked cabinet, leaking fluids from damaged containers can come into contact with children.

Never dispose put pesticides or hazardous products down a septic (toilet or sink) or storm sewer drain, in the trash, or dumped on the ground. Follow label instructions when disposing of these products. Use them up (if they haven't been banned since their purchase) or take them to a hazardous waste collection site. See the resource list and handout for more information.

3H. Arts, Crafts, and Hobbies

❑ **3.19** ***Use Safe and Non-toxic Arts and Crafts Materials*** Children, in particular those with asthma, can be sensitive to compounds or chemicals in art and craft materials. Some chemicals can lead to illness in children. Arts and crafts supplies identified by 'CP' (Certified Nontoxic Product), 'AP' (Approved Nontoxic Product), or simply 'Non-Toxic' on the label are safer for children to use. In any case, children should always be supervised while using arts and crafts materials. Do not permit eating around art materials. Other countries do not have the same safety regulations as the United States; it is safest to buy art materials made in the United States.

Hazardous Household Products

Arts-Crafts-Hobbies

Poison

❑ **3.20** ***Ventilate Rooms where Arts and Crafts Take Place*** Children, in particular those with asthma, may be sensitive to fumes and gasses given off by various arts and crafts materials. You can ventilate rooms while arts and crafts are taking place by turning on an exhaust fan or opening an exterior door or window.

Ventilation

Item #	Specific Actions Recommended	Handout

❑ **3.21** ***Perform Hobby Activities with Adequate Ventilation and Away from Children*** Hazardous art and hobby products include adhesives, paints, spray coatings, markers, photography chemicals, and many specialized products for different hobbies. Of special concern is lead from soldering activities and products used by children, since children are more susceptible to toxic chemicals than adults.

Products that are used often and in unventilated areas can be very dangerous. It is best to engage in these activities out of the living area: outdoors, or in a ventilated garage, shed, or room separate from the home. The ventilation can be provided by opening 2 windows and using a fan, or by operating an exhaust fan.

Consider conducting these activities away from the children's areas and preferably when the children are not present.

Learn more about the risks of these activities and appropriate safety equipment to minimize hazards to you and children in your home.

Hazardous Household Products

Arts-Crafts-Hobbies

Ventilation

3I. Drinking Water

❑ **3.22** ***Adjust Hot Water Temperature*** Hot water below 110⑤F is not hot enough to kill all the disease organisms that may be in the water, and is also less effective for cleaning and proper hand washing. However, at temperatures of 130⑤F, and above, the risk of scalding increases, especially for children, disabled, and the elderly. Water temperatures of at least 130⑤F are required to kill dust mites during washing of bedding, rugs, etc. Therefore, in homes where dust mite control is important, temperatures should be kept at 130⑤F, while in other homes, 120⑤ to 125⑤F may be a better setting. Also, anti-scalding devices can be installed on faucets, bathtub, and showers. Bedding could also be washed at a laundromat where hot water is available. For assistance, see the resource list.

Drinking Water

❑ **3.23** ***Consider Testing for Lead in Water*** Some water pipes, fittings, and fixtures may contain lead. The lead may leach out of pipes into tap water. Contact your water supplier (see resource list) for information about the likelihood of lead in the water pipes in your area. If you suspect that the plumbing contains lead, consider having your water tested for lead. See the resource list for agencies and companies that can help with testing.

Drinking Water

❑ **3.24** ***Reduce Lead in the Drinking Water*** If you suspect that you have lead in your house plumbing, or are unsure, and water from the faucet hasn't been used in 6 hours, flush pipes by running cold water for at least 2 minutes. Use only cold water for drinking, cooking, and especially for making baby formula. Hot water is more likely to leach lead from pipes.

Drinking Water

3J. Indoor Safety Hazards

❑ **3.25** ***Install and Test Smoke Detectors*** To alert your family to possible fires in the dwelling, equip your home with at least one smoke detector on each floor, preferably located outside the bedrooms. Test them monthly and replace batteries twice a year (for example, at the change-over to and from daylight savings time).

Smoke Detectors

❑ **3.26** ***Purchase a 2A10BC Fire Extinguisher*** A proper fire extinguisher can put out small fires before they get out of control. A multi-type extinguisher such as a 2A10BC can put out many different types of fires effectively, such as chemical, electrical and grease fires. A charged 2A10BC fire extinguisher should be located in an easily accessible area, such as the kitchen, in case a fire occurs. Instruct each attending adult provider in the proper use of the fire extinguisher (instructions are included in each new package). If the fire has already begun to spread or the fire extinguisher was unable to extinguish the fire, all occupants should evacuate the building and the fire department should be contacted. Remember, fires can spread very rapidly -- they double in size every minute -- and quickly block exits and escape paths.

Fire Extinguishers

Item #	Specific Actions Recommended	Handout
❑ 3.27	***Identify and Show Children at least Two Major Emergency Exits*** In an emergency, a single exit may become blocked by fire or other obstacles. Having multiple exits available will reduce the chances of an unnecessary tragedy.	
❑ 3.28	***Create and Practice a Fire Escape Plan*** Both children and providers can become confused and disoriented during a fire due to thick smoke and loss of power to light fixtures. Practicing a fire escape plan will instill confidence and calm during an actual emergency. If you have questions on how to create an appropriate fire escape plan, contact your local fire department via their non-emergency phone number.	
❑ 3.29	***Install a Telephone (If Possible) and Post Emergency Numbers Nearby*** A telephone is the quickest way to have emergency response teams come to your aid. Teach all children and providers how to contact 911 and poison control services in case of an emergency.	***Poison***
❑ 3.30	***Remove or Cover Trip and Fall Hazards*** A major cause of injuries to children involve falling, being caught on, and knocking over sharp, hard, or heavy objects. Do not allow running inside the child care home. Furnishings should be kept in good condition. Furnishings should be stable and should not present a topple hazard. Carpets and rugs should be secured to the floor underneath to prevent slipping or tripping on wrinkles and turned-up edges. Sharp objects should be removed or covered with padding. Objects at the head-height of children should be removed.	***General Safety***
❑ 3.31	***Do Not Use Infant Walkers*** Infant walkers can be the cause of serious injuries to infants. An infant is more likely to move out of range of supervision quickly and can be exposed to dangerous conditions in areas the infant was not expected to be in. Falls are another serious concern with infant walkers. Block all stairways and drop-offs with an infant safety gate. Consider removing the infant walker from the premises.	***General Safety***
❑ 3.32	***Store Plastic Bags and Small Objects in Locked or Inaccessible Areas*** Children often do not recognize the danger of plastic bags and choking hazards until they begin choking on or become entrapped in the item. Do not allow children to play with plastic bags, un-inflated balloons and similar choking/suffocation hazards. Furthermore, store these items away from children in an inaccessible or locked drawer or cabinet.	***General Safety***
❑ 3.33	***Cover Unused Electrical Outlets*** Cover unused electrical outlets with safety caps to prevent small children from inserting their fingers and being injured from electrical shock.	***General Safety***
❑ 3.34	***Secure Electrical Cords Out of Way*** Secure lamp and appliance cords so children can't pull them down or trip over them.	***General Safety***
❑ 3.35	***Tie Up Long Cords*** Keep window covering cords out of reach of children. They can become entangled in the cords and strangle.	***General Safety***
❑ 3.36	***Shield Hot Surfaces*** To prevent burns, children should not be able to touch devices that can reach very high temperatures, such as fireplaces, wood stoves, floor furnaces, radiators, and electric heaters.	***General Safety***
❑ 3.37	***Improve Gun Safety*** Install trigger locks on all guns and/or store guns in a secure and sturdy locked box or cabinet -- preferably metal. Curious children, especially those between the ages of 8 to 13 years, often look for guns, then pull the trigger even if they know the gun is real. These accidental shootings often result in serious injury or death. Store ammunition separately from the guns. Put the keys to the trigger and cabinet locks on your car key ring.	

Section 4. LIVING AND FAMILY ROOMS

Item #	Specific Actions Recommended	Handout
❑ 4.1	***Keep Pets Off Furniture and Beds*** To minimize the exposure of persons with allergies and asthma to pet dander, keep pets off furniture and beds. If they do sleep on these items, vacuum the surfaces or launder the bedding more frequently. See action item 1.5.	*Asthma* *Cleaning*

Section 5. KITCHEN

❑ 5.1	***Consider Removing Carpeting*** It is difficult to keep carpets in the kitchen or bathroom dry and clean. Food crumbs can collect in the kitchen carpet and attract roaches and rodents. Moisture in carpet can promote mold growth. Consider removing kitchen and/or bathroom carpeting. Replace carpeting with hard, smooth flooring, or use washable rugs with slip-proof pads underneath.	*Carpet*
❑ 5.2	***Unvented Combustion Appliances*** Kitchen stoves and ovens that use gas, propane or wood can give off hazardous combustion gases and particles. For example, carbon monoxide (CO) can have short-term health effects and at high levels can cause death; nitrogen dioxide (NO_2) can cause respiratory irritation and long-term respiratory problems; and wood smoke can cause cancer. See action item 9.1. Cooking appliances are usually not vented to the outdoors. They can be safe to use if they are properly tuned and an open window or exhaust fan is available to remove the gases and particles.	*Carbon Monoxide & Combustion Appliances* *Ventilation*
❑ 5.3	***Tune Stove or Oven Burners*** A properly tuned gas kitchen range and oven produces a steady blue flame and produces small amounts of carbon monoxide. A gas range or oven that has flickering or steady bright yellow or orange colors in the flames may be producing larger amounts of this pollutant. In this case, the range and/or oven burners should be tuned by a professional (see resource list). Common causes of yellow flames are dirty burners and gas being supplied at too high a pressure.	
❑ 5.4	***Install and Use Kitchen Exhaust Fan/Range Hood*** Using a kitchen exhaust fan/range hood, properly vented to the outdoors, when the cook top or oven are used will help improve indoor air quality by removing odors and moisture produced during cooking. And for gas ranges and ovens, the fan will also remove the more hazardous combustion pollutants such as fine particles and carbon monoxide. If there is no fan, open kitchen windows during cooking. A dirty or malfunctioning fan should be replaced.	*Ventilation*

Item #	Specific Actions Recommended	Handout

5A. Pest Control

❑ **5.5** ***Clean Up To Avoid Roach And Rodent Problems*** — *Pest Control*

a) Bags of flour, sugar, open boxes of cereal, etc. should be sealed in durable plastic, metal, glass, or ceramic containers.
b) Frequently wash off kitchen counters and table with a clean damp sponge.
c) Avoid leaving empty pop bottles and cans, litter, or unwashed dishes around.
d) Eliminate water leaks, drips, or standing water.
e) Store garbage in a container with a tight fitting lid.
f) Mop the kitchen floor every week.

❑ **5.6** ***Store Hazardous Products Away From Food*** Store hazardous products away from food to avoid contamination. In addition, many chemicals look like food and can be easily mistaken (mothballs and gumdrops, apple juice and wood cleaner, mouthwash and window cleaner). — *Hazardous Household Products*

❑ **5.7** ***Never Use Insect Sprays Around Food*** Sprayed insecticides are more likely than liquids or solids to contaminate foods and preparation surfaces. The pesticides can then be eaten along with the food. Don't spray kitchen counters for roaches or other pests. Use sprays as a last resort. — *Pest Control*

5B. Food Preparation / Food Safety

❑ **5.8** ***Clean and Separate*** — *Food Safety*

Dirty or contaminated food preparation equipment can spread disease and illness by passing germs to uncontaminated food.

- ❷ Wash hands properly and often (see action item 1.11).
- ❷ Wash cutting boards, dishes, utensils and counter tops with hot soapy water after preparing each food item and before you go on to the next food.
- ❷ Use plastic or non-porous cutting boards (run them through the dishwasher or wash in hot soapy water after use).
- ❷ Use a sanitizing solution of 1 tablespoon chlorine bleach in 1 quart of water or 1/4 cup bleach in 1 gallon of water.

Don't Cross Contaminate

- ❷ Separate raw meat, poultry and seafood from other foods in your grocery cart and in your refrigerator.
- ❷ Clean food preparation items as described above after they come in contact with any meat.
- ❷ Never place cooked food on a plate which previously held raw meat, poultry or seafood.

❑ **5.9** ***Cook and Chill*** — *Food Safety*

Food that is improperly stored can begin to spoil in as little as two hours and can cause serious illness in both children and adults.

- ❷ Keep Hot Foods above 140°F, Keep Cold Foods (and Store Leftovers) below 45°F.
- ❷ Reheat Foods to at Least 165°F.
- ❷ Illness causing bacteria multiply rapidly between 45°F and 140°F. To prevent food from spoiling always keep it above or below this temperature range unless serving.
- ❷ Do not leave served food out for more than 2 hours.
- ❷ Do not thaw meat at room temperature (place in refrigerator overnight or use a microwave instead).
- ❷ Refrigerate leftovers in shallow, covered containers. It takes a bowl of leftovers 2 inches deep 2 hours to cool to 45° in a refrigerator. It takes a bowl of leftovers 8 inches deep 32 hours to cool to 45° in a refrigerator!
- ❷ When in doubt about a food's safety, throw it out.

Item #	Specific Actions Recommended	Handout
❑ 5.10	***Reduce the Refrigerator Temperature to 35⑤ to 40⑤F*** Disease-causing bacteria grow more rapidly in food stored in refrigerators with temperatures greater than 45⑤F.	*Food Safety*
❑ 5.11	***Lower Freezer Temperature to 0⑤F, or Lower*** The freezer temperature should be 0⑤F, or lower, to keep foods fresh and safe for an extended period of time.	*Food Safety*

Section 6. BEDROOMS

❑ 6.1	***Raise Temperature of Closet*** To reduce moisture and mold problems in closets, consider leaving closet doors open or ajar to warm closet walls, especially on outside walls of the home. Leaving an approved ceiling light on in the closet may also be enough to raise the temperature of the closet.	*Moisture & Mold*
❑ 6.2a	***Consider Removing Carpeting, Stuffed Toys, Or Upholstered Furniture*** These furnishings can collect dust, dander, and dust mites and can aggravate the health conditions of individuals with asthma or allergies (see action items 1.5, 1.7, 3.13, 3.14).	*Cleaning*
❑ 6.2b	***Consider Purchasing Allergy Control Covers*** These covers for pillows and/or mattresses may help those with allergies or asthma. We spend the most time in our homes sleeping in bedding that can provide a wonderful home for dust mites (and dust mite allergens). Encasing pillows and mattresses will significantly reduce exposure to dust mites and their allergen. The covers are available from some department and bedding stores or from specialty supply mail order companies (see resource list).	*Asthma* *Cleaning*
❑ 6.2c	***Keep Pets Out Of Bedrooms*** Reducing exposure to pet dander during sleeping hours can reduce symptoms for people with asthma and allergies.	*Asthma*
❑ 6.2d	***Consider Using a Portable Air Cleaner*** Small, portable air cleaners can help to reduce airborne dust and some allergens that are triggers for people with allergies or asthma. These devices work well in small rooms, such as bedrooms. The devices must be regularly maintained (usually replacement of filters) to continue to operate properly. Avoid devices that produce ozone. See the handout for more information.	*Air Cleaning Equipment*
❑ 6.3	***Air Out Dry Cleaned Clothes*** The chemicals used to dry clean clothes are hazardous pollutants that can linger in clothing. Remove plastic bag coverings and air out dry-cleaned clothing outdoors -- or in a garage, to avoid collecting pollens or dust on the clothing if the wearer has allergies or asthma -- before storing in closets. Dry clean only those clothes that require its use. As an alternative to dry cleaning some businesses now offer wet cleaning processes that do not use toxic chemicals, but still clean all types of clothing.	
❑ 6.4	***Air Out Any Clothing Stored In Mothballs*** Air out mothballed clothing**,** outdoors or in a garage (to avoid collecting pollens or dust on the clothing if wearer has allergies or asthma), before wearing or storing in the home. Avoid breathing in mothball chemicals; they are possible carcinogens. Mothballs can be mistaken for gum drops or other candy. Keep out of reach of children. Consider alternatives to mothballs, such as cedar chips and strips.	*Hazardous Household Products*

6A. Crib Safety

❑ 6.5	***Keep Cribs Safe*** Babies can suffocate or strangle in unsafe cribs when they become trapped between poorly fitting or broken parts. The crib should have sturdy latches, slats spaced no more than 2 3/8 inches apart, fitted mattress with no more than 2 finger width to crib side, and rail 36 inches above top of mattress. Use only crib sheets that do not easily come loose from the mattress. Repair, modify, or replace unsafe cribs.	*Crib Safety*

Item #	Specific Actions Recommended	Handout
❑ 6.6	***Babies Should Sleep on Back or Side*** Place babies on their back or side in a crib with a firm, flat mattress and no soft or fluffy bedding or pillows underneath to reduce risk of suffocation, or sudden infant death syndrome (SIDS).	*Crib Safety*

Section 7. BATHROOMS & UTILITY ROOMS

❑ 7.1	***Install and Use a Bathroom Exhaust Fan*** To reduce moisture and mold, install a bathroom exhaust fan that is properly vented to the outdoors and preferably connected to a timer. Operate the bathroom exhaust fan during bathing. If a timer is available, to continue operating the fan for 30 minutes after bathing. Another option is to always open a window. Also use a squeegee to wipe down shower walls and tub. A dirty or malfunctioning fan should be repaired or replaced.	*Moisture & Mold* *Ventilation*
❑ 7.2	***Furnish Restrooms with Toilet Paper, Soap and Single-Use Towels*** Restrooms without toilet paper can lead to poor sanitary conditions throughout the child care setting. In home-based child care settings, many children using cloth towels in the bathroom can increase the potential spreading of illnesses and diseases. The use of soap and single-use (paper) towels in bathrooms can help reduce the spread of illness. Soap, preferably liquid soap, should always be used by children after using the bathroom. A proper hand washing procedure is described in action item 1.11.	*Handwashing*
❑ 7.3	***Clean and Sanitize Bathroom and Diaper Changing Surfaces Daily*** The spread of illness and disease can be prevented by properly cleaning and sanitizing bathroom surfaces daily. A sanitizing solution of 1 tablespoon chlorine bleach in 1 quart of water or 1/4 cup bleach in 1 gallon of water should be used.	
❑ 7.4	***Vent Clothes Dryers to the Outdoors*** The exhaust from clothes dryers contains large amounts of moisture, lint fibers and particles and should be vented to outdoors. Gas dryers also produce combustion pollutants, with carbon monoxide a special concern. When vented to an indoor or enclosed space, the accumulation of moisture can cause mold problems to develop, and build-up of lint can create a fire hazard.	*Moisture & Mold* *Ventilation*

Section 8. BASEMENT OR CRAWLSPACE

❑ 8.1	***Correct Moisture Problem*** Repairs may involve drainage, downspouts, and foundation dampproofing. See action item 8.2 for crawlspaces. Consult with a specialist (see resource list) on correcting a basement/crawlspace moisture problem. Carpeting on concrete floors, especially in basements, is more likely to cause moisture condensation and mold development in the carpet, carpet pad, and on the concrete. To control the moisture and mold in basement carpets: ❷ Inspect carpet and pad regularly for mold and moisture ❷ Increase the basement temperature ❷ Use a dehumidifier ❷ Control other moisture sources (see action items 2.3, 2.3a, 5.4, 7.1) Remove moldy carpets and pads. Consider replacing the carpet with a hard flooring material, since new carpet may also become contaminated.	*Moisture & Mold* *Crawlspaces*
❑ 8.2	***Cover Exposed Crawlspace Soil with Plastic Sheeting*** In areas with high water tables and wet soil conditions, the amount of moisture that enters a crawlspace from the soil should be reduced. Cover bare soil in the crawlspace with durable plastic sheeting (such as 6 mil black plastic). Overlap the edges of the sheeting approximately 12 inches and anchor with boards, gravel, bricks, or other weights.	*Crawlspaces*

Item #	Specific Actions Recommended	Handout

Section 9. HEATING AND COOLING EQUIPMENT

❑ **9.1** Combustion appliances (gas or propane stove or furnace, wood stove, fireplace) have a strong influence on ventilation in a home. All combustion appliances need air to burn their fuel. When operating, the demand for air is quite high. If that air is being drawn from inside the home, then a combustion appliance causes outdoor air to be pulled in through cracks around windows and doors. Even properly operating combustion appliances produce small amounts of carbon monoxide and other pollutant gases. But in faulty appliances, these pollutants can be produced in much larger quantities.

Carbon monoxide is a colorless, odorless gas that interferes with the delivery of oxygen throughout the body. At high concentrations it can cause unconsciousness and death. Lower concentrations can cause dizziness, headaches, weakness, nausea, confusion, and disorientation. Carbon monoxide from improperly operating combustion appliances causes many deaths every heating season. Some air conditioning equipment, that operates by burning gas, also has the potential for causing a carbon monoxide problem during warm weather.

Carbon Monoxide & Combustion Appliances

CO Alarms

❑ **9.2** ***Don't Heat Your Home With Unvented Combustion Appliances*** Unvented combustion appliances release dangerous pollutants, including carbon monoxide, directly into the dwelling. They should not be used to heat the home. Vent or remove kerosene or portable propane heaters in the home. Do not use a cooking stove to heat your home. Burning charcoal generates large amounts of carbon monoxide.

Carbon Monoxide & Combustion Appliances

CO Alarms

❑ **9.3** ***Inspect Wood Stove/Fireplace -- Inspect for Leaking Fuel or Gases*** If you can see or smell smoke inside the dwelling during use of a fireplace or wood stove (after initial start-up), it usually means the device is not venting properly. This smoke contains many hazardous compounds and particles. There can be many reasons for poor venting, but opening a nearby window during use of the fireplace or wood stove, sometimes helps. Otherwise, have the fireplace/wood stove checked by a professional (see resource list). Consider repairing or replacing wood stove or venting equipment, or using it less often.

Leaking combustion gases are hazardous to your family's health. Leaking fuels (including heating oil, natural gas and propane) can lead to fires or explosions. Have heating equipment checked for proper operation by a heating specialist (see resource list). Call the gas company immediately if you smell propane or natural gas.

Carbon Monoxide & Combustion Appliances

CO Alarms

❑ **9.4** ***Inspect and Repair Damaged Vent Pipe*** A damaged vent pipe can cause combustion gases, including carbon monoxide, to leak into the living space. Call a qualified heating specialist to inspect the vent pipe and repair it if necessary.

Carbon Monoxide & Combustion Appliances

CO Alarms

❑ **9.5** ***Consider Professional Testing for Backdrafting and Spillage*** Indoor air quality researchers suspect that much of the heating equipment in homes has a problem with proper venting of hazardous combustion gases. Typical problems include:

Ventilation

- ❷ "Spillage": when the gases do not enter the vent (chimney) but "spill" into the home for a prolonged time after start-up
- ❷ "Backdrafting": when pressures in the house cause air to move down the vent and into the house rather than pulling the combustion gases out of the building.

These conditions can be difficult to identify and detect -- tests should be performed by a professional (see resource list).

Item #	*Specific Actions Recommended*	*Handout*
❑ **9.6**	***Install Carbon Monoxide Alarm*** Install a carbon monoxide (CO) detector/alarm as a precaution against CO poisoning from all sources, including combustion appliances. A CO alarm should be installed near each separate bedroom area. For each bedroom area, the best location for the alarm is at the entryway to the most frequently-used bedroom of an adult. The alarm can warn you of dangerous levels of CO and give you time to leave the home before becoming ill. A basic CO alarm can be purchased at many retail or hardware stores for $25-35.	***Carbon Monoxide & Combustion Appliances*** ***CO Alarms***
❑ **9.7**	***Take Prompt Action -- Call Immediately for Emergency Services*** If the CO alarm has sounded, it has indicated the presence of dangerous levels of CO. If anyone has symptoms of CO poisoning (see action item 9.1), then determine if everyone in the home is accounted for, evacuate the home, and call for emergency medical and repair services from a phone outside the home. If there are no symptoms, try resetting the alarm. If the alarm persists, open all doors and windows, turn off all CO sources (furnaces, stoves, heaters, etc.), and call immediately for an emergency service visit by a specialist (see resource list) to inspect the possible causes of high CO levels. Do not wait for the alarm to sound again before calling.	***CO Alarms***
❑ **9.8**	***Replace Air Filters More Frequently*** Routinely replace the air filters in the heating/cooling equipment to get rid of the dirt and contaminants that were removed from the air and captured by the filter, and to keep the heating/cooling equipment operating efficiently. Replace air filters in heating equipment at least once each year, and if air conditioning is also used, the air filters should be replaced at least one more time each year. Choose replacement filters that have a moderate to high efficiency and do not degrade the performance of the heating/cooling equipment. They will remove more of the fine particles that can get into your lungs. Pleated filters are becoming available in common sizes and are more efficient than the inexpensive, flat fiberglass filters. Consult with a heating and cooling contractor on upgrading your filters, or visit a local building supply store (or Sears) to make your own selection.	
❑ **9.9**	***Service Heating Equipment Regularly*** A heating specialist should inspect, clean, and if necessary, adjust/repair all heating equipment (including hot water tank) at least once each year (preferably before the heating season). This routine maintenance will improve the equipment's performance, reduce its production of pollutants, and correct other hazardous conditions before they get worse.	
❑ **9.10**	***Service Cooling Equipment Regularly*** A specialist should perform routine maintenance of cooling equipment at least once each cooling season to remove unwanted sources and accumulated moisture, and mold/bacterial growth. All cooling equipment either produces or uses water as part of its operation. If not properly maintained, this water can blow into ducts, overflow or leak from plugged or rusty drip pans. This will cause mold to grow in ducts and other equipment components, on coils, in drip pans, and on evaporative cooler pads. The cooling pan in evaporative cooling units should be inspected monthly during cooling season (can often be performed by occupants).	

Note: *The use of brand names in these actions is not an endorsement of the products by the project sponsors.*

Tracking Information

Provider Name _____ Reviewer _____

Address _____ Date _____

Phone Number _____

Follow-up

❑ Mailed postcard back to [***local organization***] _____

❑ Reminder phone call (2 weeks after visit) _____
Outcome: _____
_____
_____
_____
_____

❑ Follow-up call (6 weeks after visit): _____
Outcome: _____
_____
_____
_____
_____