

Dealing with Allergy Ailments in Children during Disasters

Japanese Society of Pediatric Allergy and Clinical Immunology
May, 2011



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Introduction

Among the many people affected by the Great East Japan Earthquake of March 11, 2011 are children who suffer from allergic ailments. For these children, who are sensitive to any negative change in their living conditions, this disaster constitutes a particularly dire situation. We have been listening to many stories of their troubles and those of their guardians.

This pamphlet was mainly created to aid those children living in the evacuation shelters. To help those families, who are living in places where infrastructure has not been completely restored, or who have been evacuated to an unfamiliar place, the Japanese Society of Pediatric Allergy and Clinical Immunology has put together this information in conjunction with medical specialists, non-profit organizations, and parent-organized support groups.

Every page here is organized according to its theme, so they can be used all together as a pamphlet, or the needed sections can be printed out and distributed separately to the shelter residents, to those caring for children with allergic conditions, and to administrative personnel.

It is our hope that the information in these pages will be of service to those children near us who have been affected by the disaster.

Japanese Society of Pediatric Allergy and Clinical Immunology
May, 2011



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Dealing with Allergy Ailments in Children during Disasters

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Our thanks go out to the many medical specialists, patients, and family support groups whose cooperation made this work possible.

For Residents Caring for Children with Asthma

In evacuation shelters, where the rhythm of life is different from what they are used to, children with asthma will be more susceptible to coughing fits and asthma attacks. The following points will help to prevent further aggravation of these symptoms.

1) Avoid things that trigger asthma attacks

- Bedding (blankets, futons, etc.) is often home to house dust mites, which are a cause of asthma attacks. Because of this, please be careful when spreading or folding bedding to avoid exposing children to the dust they emit. You might be able to partially prevent dust inhalation during sleep by placing a clean towel over the child's pillow or futon/blankets. Whenever possible, hang the bedding out in the sun. This will help to reduce the dust mites living inside.
- Please avoid exposing children to smoke from cigarettes, fires, mosquito coils, etc. Also, dust from post-disaster debris contains many harmful particles which can cause an asthma attack. Children should wear masks whenever they are in close proximity to smoke.
- Some children with asthma also suffer from pet allergies. If a child becomes itchy or develops a runny nose when close to a certain kind of animal, try to keep them from being together with that kind of animal for long periods of time.

2) Continue all preventative medication (Please consult with a doctor about the points below.)

- People with regular regimens of preventative asthma medication should continue them. If nighttime coughing fits or asthma attacks continue in spite of regular medication, it might be necessary to increase the dosage or change the medication.
- If asthma sufferers are unable to use their nebulizers due to lack of access to electricity, it is possible to use a supplemental aerosol device called an asthma spacer to administer inhalation drugs. Also, a paper cup with a hole punched in the bottom can be used in lieu of an asthma spacer if one isn't available.
- Even those patients who don't normally take medication should begin a regular regimen of preventative medication if they begin to suffer from nighttime coughing fits or asthma attacks.

3) Be ready for when an asthma attack occurs

- If asthma relief medication (oral or inhalable) is not on hand, please obtain a prescription.
- When an attack first occurs, have the sufferer drink water and tell them to take slow, deep breaths. Give them their asthma relief medication then have them lean back and rest. If in spite of this treatment the sufferer continues exhibiting symptoms such as sleep disturbance or suddenly sitting down because of shortness of breath, an emergency medical examination is needed.

For more information about allergies in children please contact us (Consultations are free of charge.)
email: sup_jasp@gifu-u.ac.jp (any time)
phone: 090-7031-9581 (weekdays 11am to 2pm)



To All Residents and Staff

Please Be Considerate of Children with Asthma

Asthma (bronchial asthma) is an allergic condition where, due to a number of factors, a person becomes prone to coughing, as well as to the more serious “asthma attack,” which is characterized by wheezing sounds from the chest, difficulty breathing, etc. Life in a completely new environment such as in an evacuation shelter can cause asthmatic conditions to worsen. However, with a little extra care a child with asthma will be able to lead a happy daily life. Therefore, we ask all of you who have been brought together under difficult circumstances to understand the following points, and to show consideration for children with this condition.

1) Dust, smoke, and other things with strong smells are the triggers of asthma attacks.

- Breathing in the dust that rises when spreading or folding bedding, as well as the smoke from cigarettes, fires, or mosquito coils can lead to an asthma attack. Therefore, please be careful when you are near children with asthma. Also, the dust from post-disaster debris contains many kinds of harmful particles that can enter the lungs and cause an asthma attack. Please make sure that asthmatic children near such conditions wear masks.
- Since some children with asthma are also allergic to certain animals, please be considerate of this as well.

2) Taking preventative asthma medication regularly is very important.

- Just like for people with high blood pressure or diabetes, taking preventative asthma medication every day is very important for asthma sufferers to live happily. Among the many inhalable drugs commonly used to treat asthma, there are some that the patient inhales using an electric device called a nebulizer. In this situation, please give these children priority access to electric power. One use of the nebulizer takes about 10-15 minutes.

3) Seek immediate medical attention if the child looks to be having trouble breathing.

- In a severe asthma attack the act of breathing becomes extremely difficult. If the child exhibits symptoms such as repeated waking due to discomfort or suddenly sitting down because of shortness of breath, they need an emergency medical examination. Please understand that children with these symptoms need to be able to get to a medical facility at any time, day or night.
- Even if the symptoms don't escalate into an asthma attack, children with asthma will sometimes break into coughing fits or suddenly start crying during the night. While this may be a nuisance to those living in the same space, we ask that you understand that the child is suffering from a serious condition.

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To Administrative Personnel Please Be Considerate of Children with Asthma

In order to prevent asthma attacks in asthma patients (both children and adults) it is important for these people to 1) avoid breathing in allergens (mites or other things that trigger allergies) or the fine dust that rises from post-disaster debris, and 2) take their long-term control medication regularly. Since a severe asthma attack can put a person's life at risk, please be ready with an emergency response to such events.

- Since the dust from blankets or futons often contains house dust mites, which are a cause of asthma, please take steps to keep dust clouds from rising when handling bedding. Provide new bedding as often as possible, and hang older items out in the sun on clear days. Anti-mite bedding might be present among the donated supplies. Please give residents with asthma priority access to these items.

- Both the fine dust that rises during the removal and cleanup of post-disaster debris and the smoke from incinerating used materials can induce an asthma attack. When engaged in restoration activities, please take care to control the emission of smoke and dust.

- The foundation of asthma treatment is a daily regimen of inhaled steroid or anti-leukotriene drugs known as the patient's long-term control medication. Depending on the evacuation shelter environment, it may be necessary for them to take a larger dosage or more kinds of medicine than in normal circumstances. This temporary increase is unavoidable. Sufficient self-control will be important in preventing an asthma attack. Please take steps to ensure that residents are able to obtain the medicine they need.

- When an asthma attack occurs, the sufferer should immediately take their fast-acting "rescue" medication (known as bronchodilators) either by inhalation or orally. Please make sure that residents with asthma can have this medication near to hand. If the sufferer's complexion turns pale, if their lips turn purple, if they are unable to lie on their back, or if they suddenly sit down because of shortness of breath, they may be having a life-threateningly serious attack. Please make arrangements for them to receive emergency medical attention.

- Asthma sufferers may have to use an electric machine called a nebulizer to administer their fast-acting and/or control medication. We know that in an evacuation shelter electricity is precious, but for children with asthma it could be a matter of life and death. We hope that you will understand, and allow these residents priority access to electricity for this purpose (regularly 1-2 times a day for control; at any time during an attack).

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For Residents Caring For Children with Atopic Dermatitis

In this environment where life is completely different than before, keeping a child's atopic dermatitis in check is a very difficult task. In cases where the child is unable to shower or bathe as often as in regular life, the following ideas will help at least in part to keep their skin condition from deteriorating.

- If baths or showers are unavailable, please wet a towel with mildly hot water and gently clean the child's entire body using a patting motion. This will remove the dust and sweat that has collected on the skin. After this, the skin will dry out quickly, so you should immediately apply the child's topical medication (topical steroids or moisturizing cream).

- * If you use commercial products such as wet towels or baby wipes, the skin might become chapped due to the alcohol or fragrance these products contain. Test the product on a small area before applying it to the entire body.

- If baths or showers continue to be unavailable, skin health will generally get worse. Because of this, we recommend that people using topical steroid medications switch to a stronger steroid type. For those people who usually only need to use moisturizing creams, we also suggest that you start using a topical steroid medication if the skin's condition worsens. If you don't have topical steroid medication close at hand, you should consult a doctor. This temporary increase in or start of steroid medication can be stopped once you are in a position to properly care for your skin again.

- If the topical steroid medication you've used up until now isn't on hand, it's okay to use a different medication that has roughly the same strength and effect. Using commercial moisturizers in lieu of your regular moisturizing cream is also not a problem. However, depending on the person, the skin might react badly to certain products. When trying out a new product, test it on a small area of the skin first.

- Severe itchiness is caused not only by improper skin care but also by many kinds of stress and poor health. Cooling the itchy parts with a cold, wet towel can provide temporary relief for itching. (However, take care not to leave the wet towel in direct contact with the child's skin for too long, and make sure the child doesn't get a chill.) Thoroughly apply topical steroids in cases of severe skin inflammation. Also, distracting the child from their discomfort by playing with them, etc., can also be effective sometimes.

- If opportunities for showers or baths are available, talk to a supervisor and explain your child's symptoms in order to get priority access to these facilities. If possible, it's best to wash the child's skin with soap and rinse thoroughly every day. However, showering without soap is also effective. Washing and rinsing the skin right after the child has been sweating is especially effective. If in spite of the above treatments the skin condition worsens, or if the child continues to lose sleep, we recommend that the child be taken to a hospital for treatment.

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To All Residents and Staff

Please Be Considerate of Children with Atopic Dermatitis

Atopic dermatitis is an allergic condition where, due to a number of factors, the skin breaks out in an itchy, scaly rash. This condition occurs frequently in children. In places like an evacuation shelter, where the rhythm of daily life is radically different from before, this condition can worsen, causing severe itching.

In this situation the family of the child will likely be worried about causing trouble for the other shelter residents. Therefore, we ask that you take a moment to read and understand the following facts about atopic dermatitis. Understanding the facts will help you show consideration to those suffering from this condition.

1) Daily Showers or Baths Are a Part of Treatment

- Just like medicine for someone with high blood pressure or physical therapy for someone with an injured leg, keeping the skin clean by showering or bathing is an extremely important part of the treatment of atopic dermatitis. Please understand that parents bathing children suffering from this condition are not being wasteful or extravagant.

2) Atopic Dermatitis Is Not a Contagious Disease

- Even the most severe case of atopic dermatitis will never spread to another person. Therefore, holding a child with this skin condition, playing with them, or sharing a bath with them is perfectly safe. Their warm feelings might spread to you, but their atopic dermatitis or the predisposition for it absolutely will not.

3) As the Condition Worsens the Itching Becomes Extremely Severe

- If the patient is unable to shower or bathe, or if topical allergy medication is not applied often enough, the rash will worsen and severe itchiness will persist at all times of the day, causing severe discomfort. Because of this, children with this condition will often cry through the night. While this may be a nuisance to those living in the same space, we ask that you understand that the child is suffering from a serious condition.

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To Administrative Personnel

Please Be Considerate of Children with Atopic Dermatitis

Daily skin care is essential in the treatment of atopic dermatitis. Ideally, the patient should shower or bathe as often as in regular life and apply topical medication afterwards. Please consider hospitalization for children exhibiting serious symptoms such as sleep loss due to severe itchiness, fluid oozing from the skin, or bleeding.

- Keeping the skin clean by showering or bathing daily is an extremely important part of the treatment of atopic dermatitis. In order to remove the sweat, dirt, and germs that cause the symptoms to worsen, the patient should wash with soap at least one time per day. However, since some ingredients in soap can induce rashes in cases of atopic dermatitis with sensitive skin, please try to use natural products with no artificial preservatives or fragrance. (Low-priced products are not a problem.)
- If soap is unavailable, shower rinses to cleanse the skin of sweat and relieve symptoms are also effective. If no shower is available, a slightly less effective method would be to soak a towel in hot or cold water and wipe the skin clean. Please be careful of products like wet towels or baby wipes, since many of these contain alcohol or preservatives which can aggravate symptoms.
- The outward appearance of atopic dermatitis often causes insensitive people to harbor prejudices toward people with the condition, and even to resent being together with them. Even if no residents feel this way, the family of the child with this condition will often be very worried about the opinions of the people around them. It would be helpful to give these families a private space, even if just for the time it takes for the parent to apply the child's skin medication.
- Children with symptoms such as continued sleep loss due to severe itchiness, fluid oozing from the skin, or bleeding should be taken to a hospital. It would be helpful to consider hospitals equipped to treat children with atopic dermatitis.

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For Residents Caring For Children with Food Allergies

It is important to always be thinking about 1) how to prevent a food allergy reaction and 2) what to do if one does occur. We want to help people caring for children with allergies to prevent accidental ingestion of their allergy "offending food." It's also important that we get the other shelter residents to understand these children's conditions. Try to consult the shelter supervisor or administrator for ideas on how to do this.

1) Keeping children with allergies from accidentally eating offending foods

- Check the allergy labels on emergency food supplies.
 - Look carefully at the product labels on food packages and check to make sure that they don't contain the child's allergy offending food. Eggs, milk, wheat, peanuts, buckwheat (soba), shrimp, and crab will always be listed by the Food Sanitation Act if present. Other products might not be listed because they are present only in small amounts, so please be careful.
- Be careful with emergency food. / Do your cooking individually.
 - Always check with the person in charge of cooking to make sure that communal meals don't contain the offending food. If you are in a situation where you can cook your own food, there might be a way for you to have your food rationed to you separately. Try to consult the shelter supervisor or cooking supervisor.
- Check to see if hypoallergenic foods have been donated.
 - If hypoallergenic food or milk products are available, try asking the shelter supervisor or administrator for priority access to these items as soon as you can.
- The child in your care might receive food from other shelter residents or volunteers, so be careful.
 - Using an allergy awareness plate (picture on the right) is an effective method of letting the other shelter residents know about your child's allergy.

2) If the child accidentally eats the offending food

Respond swiftly and suitably to the severity of the symptoms.

• **Mild Symptoms:** hives around the mouth or eyes, itchiness, discomfort in the mouth or throat, swelling of the lips or eyelids, nausea, mild abdominal pain, runny nose, mild cough, etc.

- Response: There's no need to panic, but an adult should stay with the child to watch their condition and see if the symptoms progress. Administer antihistamine medication if it's available.

• **Mild-Level Symptoms:** full-body hives, severe itching, severe facial swelling, multiple instances of vomiting, severe cough, etc.

- Response: Don't wait to see how things turn out; bring the child to a medical facility.

• **Severe Symptoms:** blockage of the throat or chest, hoarseness, severe abdominal pain, constant vomiting, wheezing, gasping, pale face, limpness, loss of consciousness, etc.

- Response: The child is in a state of shock or near-shock. Bring them to a medical facility immediately, by ambulance if possible. If the child has an adrenaline autoinjector (Epipen, picture on the right) quickly administer the shot.

* Food allergy incidents can happen at any time. Life in an evacuation shelter presents more risks than in normal life, so try to think beforehand about what you will do in the worst-case scenario

Always Bring the Child to A Hospital Immediately If,

- The Symptoms Appear All Over the Body
- The Symptoms Are Severe
- The Child Looks to Be in Pain
- The Child Goes Limp

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To All Residents and Staff

Please Be Considerate of Children with Food Allergies

A food allergy is a kind of allergic reaction that occurs when a person eats a certain “offending food.” Symptoms include hives or itchiness, coughing, wheezing, difficulty breathing, and vomiting and so on. For children with food allergies, even the all-important emergency food supplies become not just “foods I can’t eat” but “foods I mustn’t eat” if they contain the food that triggers the allergy. In this difficult situation, the families of children with food allergies are bound to feel stressed every mealtime. We have all been brought together under difficult circumstances, but we ask for everyone’s understanding of the following points.

1) In emergency food supplies and donated foods, there are things that people with food allergies can and cannot eat.

- When distributing food, please call out “Is anybody allergic to any foods?” or “Please tell us if there is any kind of food you can’t eat.”
 - The causes of allergies differ from person to person. Food allergy sufferers need to keep their offending foods out of every meal of every day, and emergency food is no exception. In this time of emergency, people with food allergies or their families might feel hesitant to speak up about this, so we’d like everyone to strive for good communication and help them get accurate information about the contents of emergency food by checking our supplies carefully.
- Please understand the need for individual cooking of emergency food.
 - Large-scale group cooking makes it difficult to respond to individual food allergy needs. Please understand that if possible the families of people with food allergies may have their emergency food supplies rationed to them separately and then do their cooking by themselves. If anyone in the shelter is allergic to eggs, milk, or wheat, please try to devise a way in which these ingredients are not included in the communal emergency food.
- If hypoallergenic food or milk is present, please give residents with corresponding food allergies priority access to these items.
- Be careful when you give snacks or sweets to children with food allergies.
 - Because children with food allergies may not understand what they can and can’t eat, it’s necessary to check before giving a child snacks or sweets.

2) Eating the allergy offending food can cause any number of allergic symptoms.

If any of the following occur, seek immediate medical attention!

**severe hives or itching • hoarseness • constant coughing • wheezing • severe stomachache
repeated vomiting • limpness or paleness • sedated behavior or loss of consciousness**

In any of the above cases, please send the patient (preferably by ambulance) to the nearest medical facility.

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To Administrative Personnel

Please Be Considerate of Children with Food Allergies

Food allergies are present in approximately 5% of all children ages 0-6years old, and thus these conditions are definitely present within the evacuation shelters of Japan. We hear quite often that in these times of emergency the guardians of children with food allergies feel pressed and otherwise suffer due to other people's lack of understanding.

Because of this, we are asking the administrators and supervising staff of the evacuation shelters to actively try to understand and show consideration for residents with food allergies, as well as to promote understanding of these ailments among the shelter populations. Also, in very rare cases ingestion of the allergy "offending food" can induce shock, putting the patient's life at risk. In these times of emergency, it is especially important that patients with food allergies are able to maintain a safe and dependable diet. Therefore, please refer to the following tips for preventing allergy-related incidents and for dealing with such incidents if they occur.

1) Understanding the needs of residents with food allergies and promoting understanding of the ailment among the shelter population

- Administrators and supervising staff should know which residents have food allergies, and should develop a system to implement the following considerations. In places where general understanding of food allergies is poor, the families of allergy sufferers frequently encounter inconsiderate treatment from other residents. We ask that you make it general knowledge among the shelter population that no matter how valuable the emergency food is, a person with a food allergy cannot eat it if it contains their offending food.

- If a child has no guardian, please explain to volunteers and residents that they should avoid giving that child snacks or sweets. Fitting the child with a plate explaining the child's allergy and allergy offending food is one effective preventative measure.

2) Taking care to prevent ingestion of offending foods

- In times of emergency, food allergy patients or their guardians may feel hesitant about voicing concerns about food allergies. Staff distributing emergency food should regularly ask, "Is anybody allergic to any kind of food?" or "Please tell us if there is any food you can't eat due to a food allergy."

- In particular, give people with multiple trouble foods priority in choosing their foods.

- If hypoallergenic food or milk products are present in the emergency food supply, please keep these important items out of general distribution. Distribute them exclusively to residents with the corresponding food allergies.

- With packaged or processed foods, eggs, milk, wheat, buckwheat (soba), peanuts, shrimp, or crab will be listed on the product label by the Food Sanitation Act if present even in small amounts. Other ingredients in small amounts might not be listed. Please try to give accurate information regarding food labels to residents with food allergies or their guardians.

- The most common food allergies are eggs, milk, and wheat. Please try to devise a system where these ingredients are not included in the communal cooking. In situations where individual cooking is possible, ration out those residents' food separately and allow them to cook for themselves.

3) Taking swift and suitable actions when food allergy symptoms appear

Symptoms usually appear within 30 minutes of eating the allergy offending food. Symptoms range from mild to severe, with treatment differing based on the degree of severity.

- Mild Symptoms: localized hives or itchiness, mild abdominal pain, mild cough or runny nose, etc.**

- Response: Observe how symptoms develop over time. Administer antihistamines if available. Symptoms will usually go away, but please observe the sufferer carefully to make sure the symptoms do not progress to mid-level severity.

- Mid-level Symptoms: full-body hives or severe itching, evident abdominal pain, vomiting, a general sickly appearance, etc.**

- Response: Prompt medical attention is needed

- Severe Symptoms, Shock: In addition to mid-level symptoms – severe abdominal pain, repeated vomiting, diarrhea, wheezing or gasping, evident decrease in energy (limpness), sedated behavior or loss of consciousness, incontinence, etc.**

- Response: immediate medical attention is needed. If the patient has an adrenaline autoinjector (Epipen), administer the shot.

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**For any questions or concerns
regarding allergies in children...
Please contact our Pediatric
Allergy Advice Center**

Trained medical specialists will address any concerns you may have related to children's allergies, including asthma, rhinitis, atopic dermatitis, and food allergies.

Contact us by phone at: 090-7031-9580

Hours: Monday – Friday (excluding national holidays)

11:00 AM – 2:00 PM

Contact us by email at: sup_jasp@gifu-u.ac.jp

We have prepared a pamphlet, *Dealing with Allergic Ailments in Children during Disasters*, which contains information about asthma, atopic dermatitis, and food allergies. (The information in the pamphlet was made for the guardians of children with allergic conditions, residents of evacuation shelters, and those involved in their management.)

The pamphlet is available for download at: <http://www.iscb.net/JSPACI>



Japanese Society of Pediatric Allergy and Clinical Immunology

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