

Haha no Sho

Mothers' Note from Fukushima:
Protecting Mind and Body from Nuclear Disaster



‘Haha no Sho’ means ‘mothers’ note’ in Japanese. This book offers a practical guide to help mitigate the damage from a nuclear disaster if one ever happened again. The stories in the book are of actual experiences told by mothers who were affected by the nuclear meltdown at Fukushima Daiichi Nuclear Power Station owned by Tokyo Electric Power Company (TEPCO) in March 2011. We hope the lessons from the experience of disaster survivors will help those living in disaster-prone countries, encourage all to be prepared for such disasters, and prevent similar heartbreaks.

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NPO Mothers' Radiation Lab Fukushima – TARACHINE

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NPO Mothers' Radiation Lab Fukushima – TARACHINE

TARACHINE is a certified non-profit organization in Japan. After the meltdown at Fukushima Daiichi Nuclear Power Station on March 11, 2011, the NPO was founded by mothers in the affected areas. Our NPO started measuring radiation levels in search of safe food to protect the health and lives of our children and local residents from radiation exposure. With an eye toward the distant future and on behalf of many generations to come, our NPO has been working on various activities to address the long-term effects of environmental contamination by radiation which is invisible, odorless, and cannot be felt.

Website: <https://tarachineiwaki.org/english>

Protecting Our Bodies

Notice the Way the Wind Blows

Paying attention to the way the wind blows is critical when working to avoid exposure to radiation. This is because radioactive materials released into the air by a nuclear meltdown will be inevitably carried by the wind.

When the nuclear meltdown happened at Fukushima Daiichi Nuclear Power Plant (NPP), many residents ended up evacuating to regions downwind, to where the very radioactive materials were carried by the wind. They had believed it was more important to get as far away as possible from the nuclear disaster site, and had been uninformed about the need to pay attention to the direction of the wind to determine where to evacuate. Some later regretted how their actions ended up exposing themselves to even more radiation.



Caution Against Rain and Snow

Radioactive materials can mix with rain and snow; contact with the contaminated rain or snow can lead to radiation exposure.

When the meltdown occurred at Fukushima Daiichi NPP, the nearby regions that had rain or snow were highly contaminated by radiation. Large surface area in snow and raindrops allows many radioactive particles to stick to them. Paying attention to the weather and preventing contact with rain and snow after a nuclear disaster is critical in reducing exposure to radiation.



Radiation Can Penetrate... A Simple Shelter You Can Make

Being inside wooden buildings or staying near the windows offers no protection from the negative impact of radiation. Radiation can penetrate through roofs, walls, and glass windows and reach the interior. Radioactive materials can also enter through the smallest of openings. Seal up the windows and door frames and close the curtains to minimize the amount of radioactive materials entering your home.

Water has the ability to shield from radiation. You can protect yourself from radiation by making a simple shelter using cardboard boxes that contain plastic water bottles. Staying in simple shelters for a time can help reduce you and your children's initial exposure to radiation.



Scan the QR code in the picture for a video instruction on how to build a simple shelter.

Stay Indoors for 2 Weeks

Radioactive iodine-131 and other materials emitted from a nuclear meltdown pose danger to our bodies, because they are easily absorbed by our thyroid glands. Radioactive iodine-131 has a half-life of 8 days. As radiation levels gradually decrease, staying indoors for about 2 weeks is an effective way to protect against radiation exposure.

At time of the meltdown, local residents had no knowledge about radioactive iodine-131, therefore, many children were sent out to schools, kindergartens, and nurseries as usual, while the radiation level had become 10 to 60 times higher than normal. Their mothers were tormented by guilt and regret afterwards for having exposed the children to dangerously high levels of radiation.



Stable Iodine Tablets

Are you familiar with stable iodine tablets? When you take enough stable iodine, your thyroid gland becomes saturated with iodine. Because the thyroid gland can only absorb a certain amount of iodine, if the thyroid gland is filled with stable iodine first, it is less likely to absorb radioactive iodine-131 which can cause thyroid cancer. Stable iodine is said to be effective when taken within 24 hours before radioactive iodine-131 is absorbed into the body, or immediately after it is absorbed.

When the 2011 nuclear meltdown occurred, the city hall in Iwaki, where our NPO TARACHINE is located, had a stockpile of stable iodine tablets. On September 30, 1999, a critical nuclear accident occurred at the JCO Tokai Nuclear Fuel Processing Facility in Tokai Village, Ibaraki Prefecture, which is not far away from Iwaki. Since 667 people were exposed to radiation, Iwaki's municipal offices had stockpiled stable iodine tablets as a precautionary measure. However, the tablets were not distributed to the citizens in a timely manner at the time of the 2011 meltdown, when it could have been effective.



If the tablets had been distributed on that day, we could have taken them at the right time and been able to minimize the initial radiation exposure.

Stable iodine is available in tablet and also in other forms, such as jelly which is easier for young children to swallow. Please make an inquiry to your local municipal office on a regular basis to prepare for an emergency.

When Stable Iodine Tablets Are Unavailable

Eating seaweed or nori is a good alternative when stable iodine tablets are not available. Kombu kelp is especially high in stable iodine. Oshaburi-kombu (a chewing-gum-typed kelp) from a candy store can be a good substitute.



Tap Water Can be Contaminated

Tap water was also contaminated after the nuclear meltdown. In some affected regions, the concentration of the radioactive materials in tap water became 8,000 to 16,000 times higher than normal.

The local citizens were not informed about the contamination at the time, and they used the highly contaminated tap water to cook for their families. The mothers who later learned of the contamination are still fearful, wondering "What if it has harmed my children's health?"

If a nuclear accident occurs, measure the radiation levels of your tap water and drink bottled water until tap water is confirmed as safe to drink.

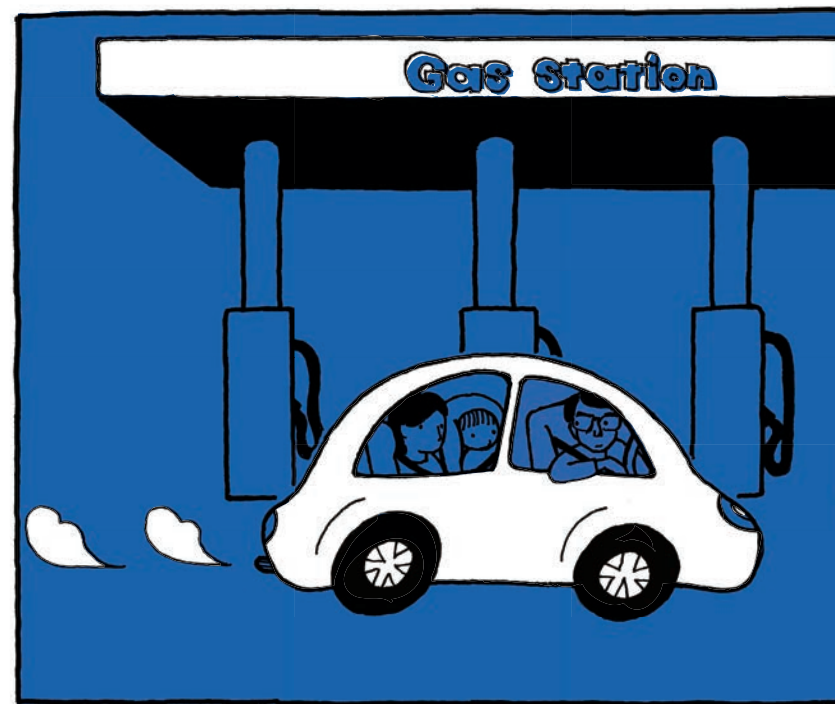


Keep a Full Tank of Gasoline in the Car

In the event of a nuclear accident, you may need to evacuate hundreds of kilometers away. Always keep a full tank of gasoline in your vehicles.

During the meltdown at Fukushima Daiichi NPP, many people were unable to evacuate far enough away because they did not have enough gasoline in their vehicles. Wide spread fear of radioactive contamination led to stoppage in supply deliveries, including gasoline, from outside to Fukushima Prefecture for several days.

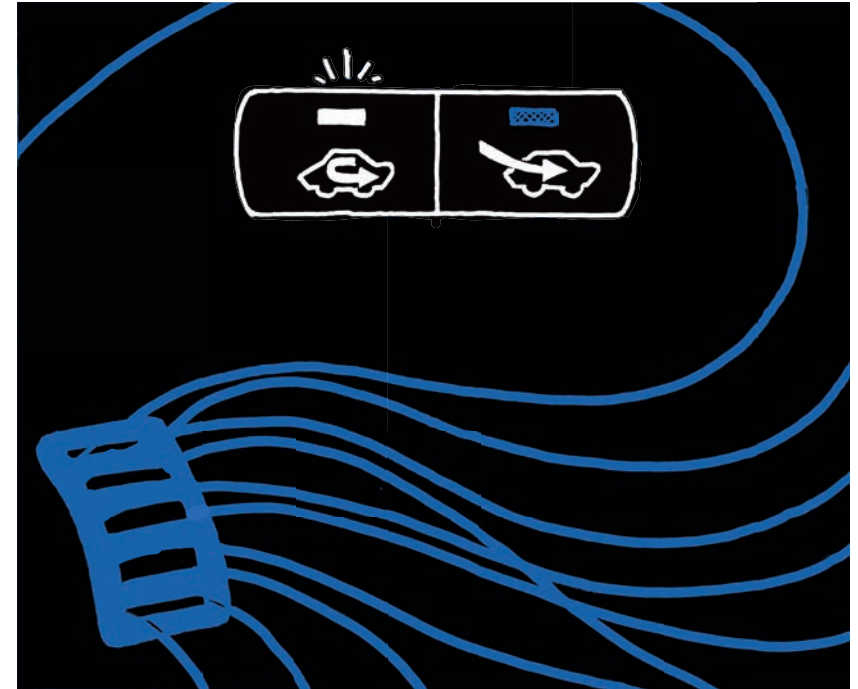
Cars are an important means of transportation to seek safety. Keeping a full tank of gasoline is one way of mitigating disaster.



Set Your Car Air Conditioner to Internal Circulation; Turn Off the Ventilation Fans

In the event of a nuclear accident, turn off the ventilation fans and air conditioners in the car to prevent outside air from coming in. This will prevent radioactive materials from entering to your house or car.

During and after the meltdown at Fukushima Daiichi NPP, some people evacuated long distances by car, and other people stayed in their homes. Leaving the air conditioner on allowed outside air to enter and caused radioactive contamination. When the radiation levels of the air conditioner filters were measured, they indicated high levels of radiation contamination.



Stay Indoors Even in Evacuation Centers

While staying in evacuation centers, please stay indoors for your safety. Radioactive materials also fall from the sky. Be careful not to be exposed to the wind or rain.

When the nuclear meltdown occurred, a woman stayed outside of an evacuation center while it was snowing because she worried about not being able to hear critical public announcements from the town if she had stayed indoors. She later learned that the snow contained radioactive materials, and this fact keeps her worried about her exposure.



Evacuate 100 Kilometers Away from the Source of Radiation

Clouds of radioactive materials, or radioactive plumes, released by nuclear meltdown will be carried with the wind. At the meltdown of Fukushima Daiichi NPP, the wind carried the radioactive plumes as far as Shizuoka Prefecture, which is 300 kilometers away from Fukushima. When evacuating, aim to get more than 100 kilometers away from the affected locations. Get as far away as you can.

An elderly couple in Okuma Town, where the nuclear meltdown occurred, didn't evacuate but locked themselves in their house. When Japan's Self-Defense Forces personnel came to their aid, he told them to evacuate immediately and get at least 100 kilometers away. After hearing this, the couple contacted their daughter who was living in Iwaki, and together they evacuated to a more distant location.



Always Carry a Portable Radiation Detector

Radiation is invisible to the eye. When a nuclear accident occurs, it is essential to carry a portable radiation detector at all times. Whether you stay in a designated evacuation center or inside of your residence, you will likely need to go outside once in a while. During a nuclear meltdown, radioactive clouds (radioactive plumes) will move and spread randomly, even reaching locations 100 kilometers away from the radioactive source.

Do you know the radiation levels in your town under normal conditions? Knowing the typical radiation levels around your house as a baseline will help you recognize any changes in the levels after a nuclear disaster. You can purchase a portable radiation detector for a moderate price. Please become familiar with the radiation levels around your house.

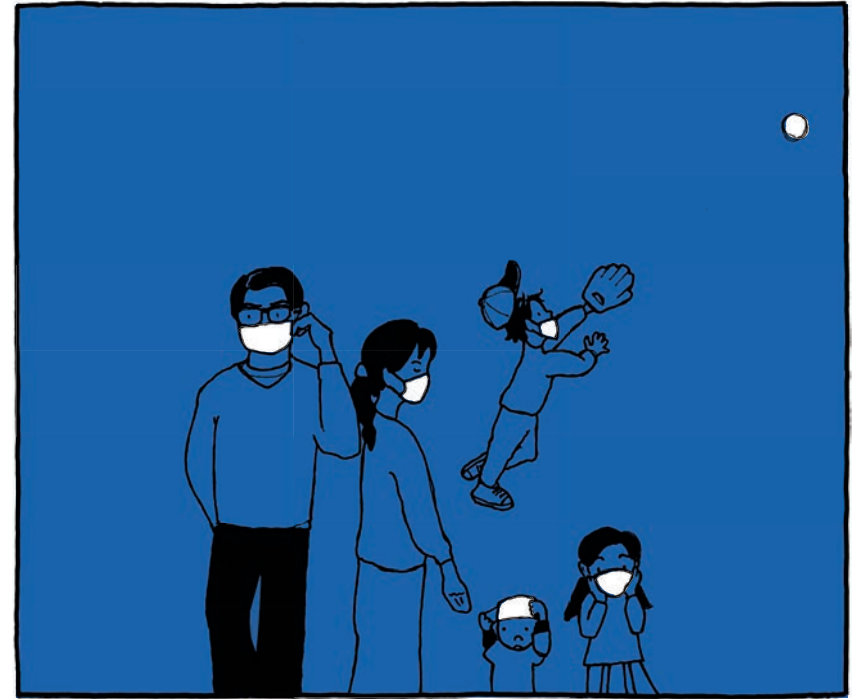
When the nuclear meltdown happened, many local residents in Fukushima did not know the importance of measuring radiation levels. They could not get an accurate grasp on the situation,



therefore, they became more and more fearful with time. Wearing a portable radiation detector makes it easier to assess the situation you are in, and you will be able to act calmly.

Wear a Mask

Inhaling radioactive materials causes internal radiation exposure. To ensure that you do not inhale these particles, cover your nose and mouth with a mask or handkerchief when you go outside. Radioactive materials can stick to dust and dirt in air through static electricity, so there is a risk of inhaling them into the body.

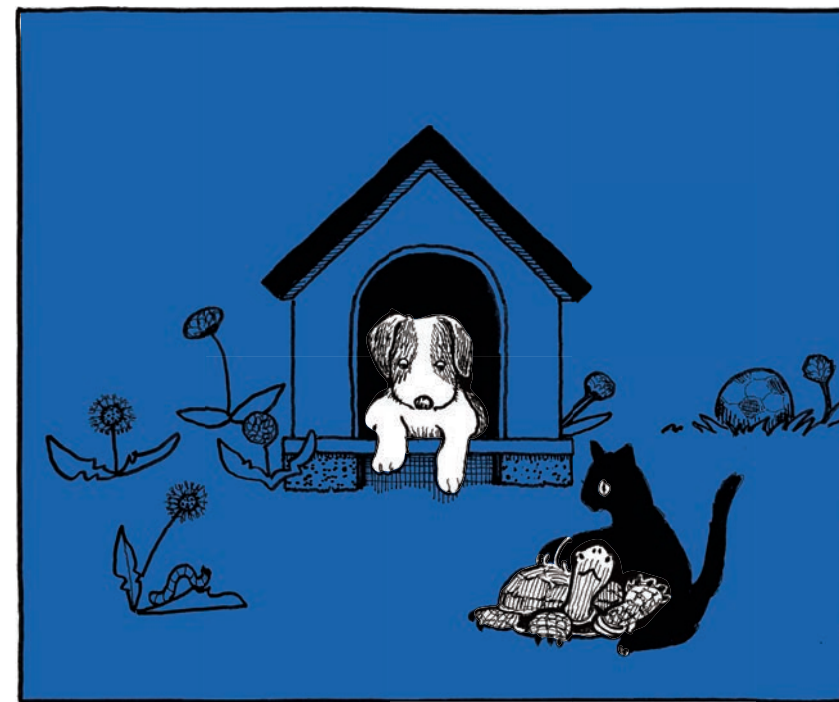


Protect Your Pets from Radiation Exposure

Due to static electricity and other factors, radioactive materials can adhere to your pets' hair and fur. Pets can be contaminated with radiation when out for a walk. Until safety is confirmed, be cautious when you walk your pet outdoors.

During the meltdown in Fukushima, a family came to TARACHINE, our radiation measuring facility, to measure their levels of internal radiation exposure. Of the family members, only the junior high school boy showed a high radiation dose. The family discussed and speculated that this was due to his being the primary carer of the pet dog, walking it outside, holding it, and brushing it.

One day, another pet owner came to measure internal radiation exposure of her cat. The cat had been free to roam around outside. The measurement results showed high levels of internal exposure to radiation. Remember that pets get exposed to radiation as humans do. When pets are exposed to radiation, humans inevitably become exposed.



Wigs

Radioactive materials can also adhere to wigs and hair extensions. Please do not leave your wig or hair extensions on all the time.

During the meltdown, this family had to move among evacuation centers repeatedly. At the screening area in each evacuation center where their radiation levels were measured, the grandmother was the only family member found to have a high radiation level. She changed her clothes and took a shower as everyone did. The family wondered why she was the only one to show a high radiation level, and they came to the realization that she hadn't washed her wig. When the wig alone was measured again, a high level of radiation was detected.

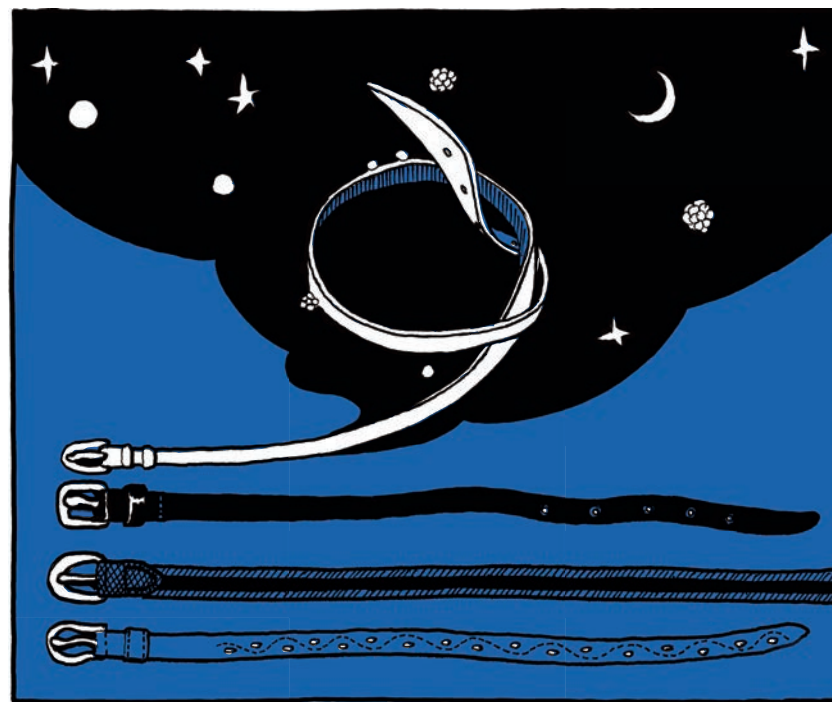
Even if you keep your body clean, it's still dangerous if the clothing you wear is contaminated.



Belts

Be careful with belts. Since we do not wash them as we do clothes, radioactive materials tend to stay on them.

A man came to our facility to have his internal exposure measured. Since the initial measurement showed a high level, we asked him to take off his clothes and change into a new gown, and then we took another measurement. The radiation levels went down significantly. This showed that what he was wearing was contaminated, not his body. He wondered why that was so, since he washed and changed his clothes every day. Measuring each item of his clothing separately showed that the radioactive materials were on his belt. Please note that radioactive materials tend to be found on the clothing items that are usually difficult to wash, such as belts and neckties.



What to Wear When Going Outside

Please put on a raincoat, rubber boots, a mask, and rubber gloves when you go outside. Take off your clothes at the entrance to avoid bringing radioactive materials into the residence.

After the meltdown in Fukushima, radioactive materials that entered houses from outside remained inside as dust. For over a decade, measurements carried out by our center have shown high levels of radiation in dust collected from domestic vacuum cleaners.

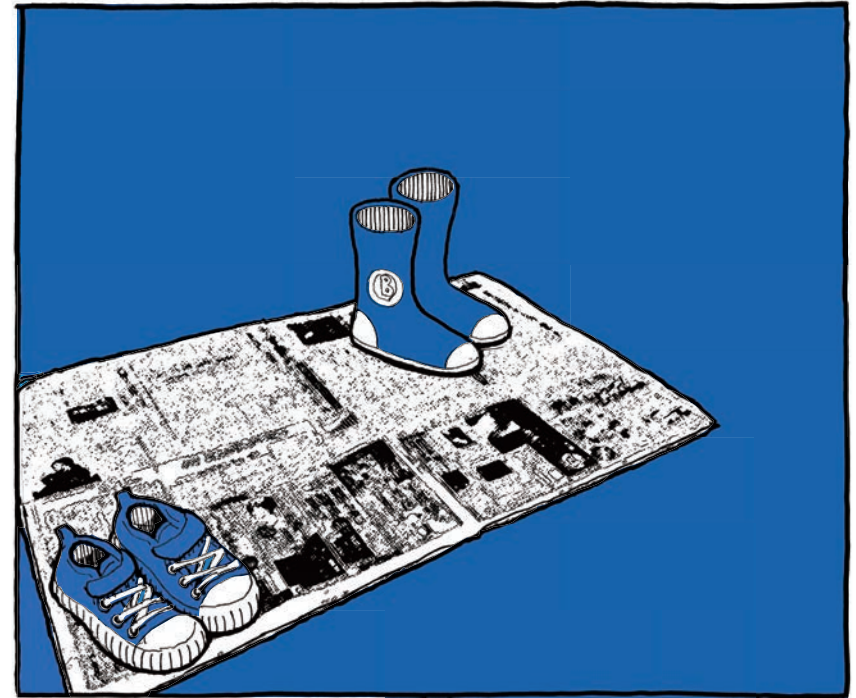
If radioactive materials adhere to the clothes that you wear often, they can get deep into the fibers and cannot be removed by washing. High concentration of contamination is expected immediately after the meltdown. Please try to avoid bringing contamination into your house.



Place Wet Newspaper at the Entrance to Your House

Radioactive materials stick to the soles of your shoes when walking outside. Placing wet newspaper at the entrance to your house and wiping the soles of your shoes can minimize the amount of radioactive materials from being brought into the house.

After the meltdown in Fukushima, radioactive materials that adhered to the soles of people's shoes were carried and spread widely as people traveled. They were detected even in countries across the ocean because of airplane travel.



Beware of Hotspots

Radioactive hotspot means a hazardous area that is highly contaminated with radioactive materials. Affected by rain, snow, and wind, radioactive contamination travels from highly concentrated places to less concentrated places. Radioactive particles also densely adhere to tree bark and leaves. Please stay away from rain gutters, puddles, and places where fallen leaves have accumulated.



Of the family members who came to TARACHINE to have their internal radiation exposure measured, only the grandfather showed high levels of contamination. Everyone in the family wondered, "Why is that so?" Even though we ate the same food and drank the same water! The grandfather had been cleaning up fallen leaves coming from the highly contaminated mountain behind his house. The family discussed it and realized that this might be the cause.

Radioactive materials adhere heavily to both sides of fallen leaves. The larger the surface area of the fallen leaves, the higher the risk of contamination. When sweeping the floor, you can also inhale fine dust and dirt contaminated with radioactive particles.

There was another instance where only the father who worked in the fields, showed high levels of internal radiation exposure.

Radioactive hotspots can affect not only children's health but also adults' health. Take care of your health for yourself and your family.



Keep Records of Your Actions

A nuclear accident is a man-made disaster. You may have to evacuate far away, or your health may get compromised. Many people forget the details under the stress of navigating through chaos. Keeping records of your actions helps you recall critical details when needed later on.

After the nuclear meltdown in Fukushima, many evacuees had to move through dozens of shelters and evacuation centers. All evacuees underwent screenings for radiation exposure on the surface of their bodies at each and every evacuation center as they moved from one location to another. In the midst of chaos, few people kept records of their screening results. Such records at the time may later become important in assessing your radiation exposure. Try keeping records whenever possible.



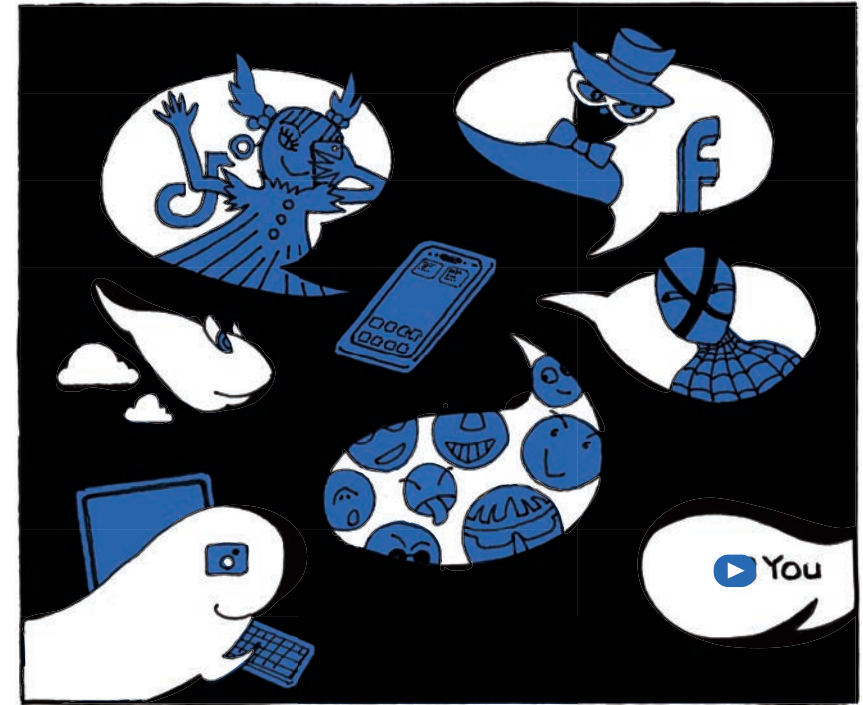
Protecting Our Hearts

Caution Against Social Media

When a nuclear accident occurs, all kinds of rumors and information spread quickly. Some are accurate, but others are not.

At the time of the meltdown at Fukushima Daiichi NPP, a rumor spread that "if you don't have stable iodine tablets, you can swallow a gargle solution called "Isojin". Some people actually drank it without verifying the accuracy of this information. Some mothers tried to force their reluctant children to drink it.

Because they had never experienced anything like this before and lacked accurate knowledge, mothers may have taken unforeseen actions with intention to protect their children. They are later emotionally tormented by their own actions that they took. If you have any doubts about the accuracy of information, take a deep breath first, and work to verify the facts before taking any action.



Caution with Homegrown Vegetables

Homegrown vegetables may be contaminated by radioactive materials. Don't eat homegrown vegetables until radiation level has been measured first to confirm their safety for consumption.

Many local residents came to our facilities to have their homegrown vegetables measured for the radiation levels after the meltdown in Fukushima. One mother said, "I suspect the vegetables from our field are contaminated, but I feel bad about voicing my concerns because my in-laws grow them for us, so I cook the vegetables for my children to eat. I'm really worried. I want to have them measured to know if they're really safe to eat."

Like this mother, many people were in a terrible dilemma. While feeling scared of the invisible radiation, they couldn't voice their worries about the safety of the homegrown food because it might lead to family discord. Have the food measured first to confirm its safety. Being able to see the radiation levels by measuring and having a shared understanding can lead to a resolution of emotional tensions among family members.



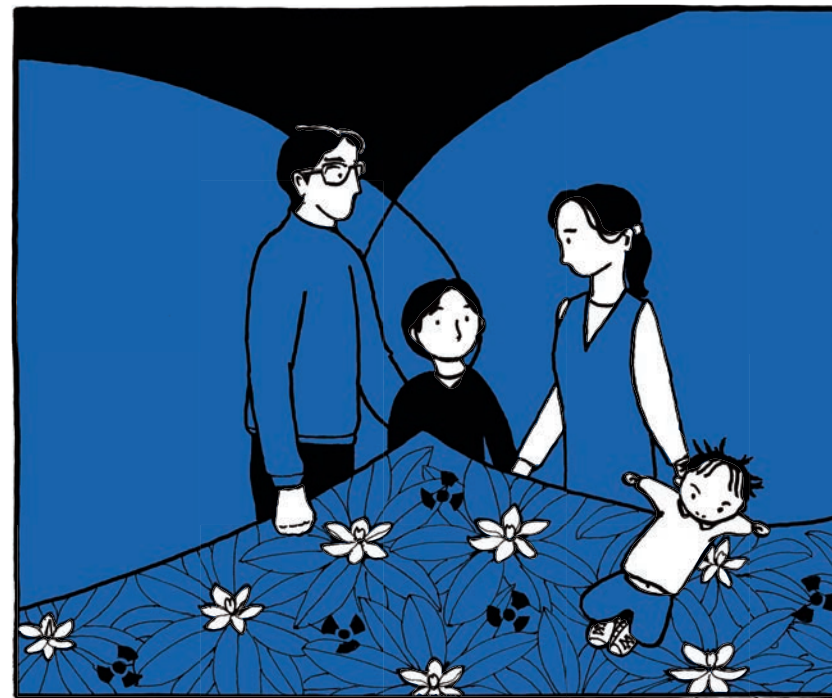
After seeing the measurement results, the mother and her mother-in-law were able to make an informed decision together against letting the children eat the homegrown vegetables.

Protect Lives! Treat Others with Kindness and Consideration

A nuclear accident is a disaster that cannot be seen with the eyes. Even within a family, the way people feel fear about invisible things is not the same. Each person will have different opinions about whether to evacuate or not, and about the way to protect against radiation. However, once a nuclear accident happens, contamination will spread widely and quickly, and, even if it is invisible, there is no question that danger is imminent.

How can we protect our children and families? We all share the same desire to protect the lives of those whom we care about. Please ensure your safety and prioritize protecting your lives. Please discuss this matter thoroughly with kindness and consideration.

Many people were unable to overcome these issues which created emotional divisions among families and communities in the affected regions in Fukushima. This was a very distressing situation. Please take proactive actions to prevent similar heartbreaks from happening.



How to Face the Fear of Radiation Exposure I

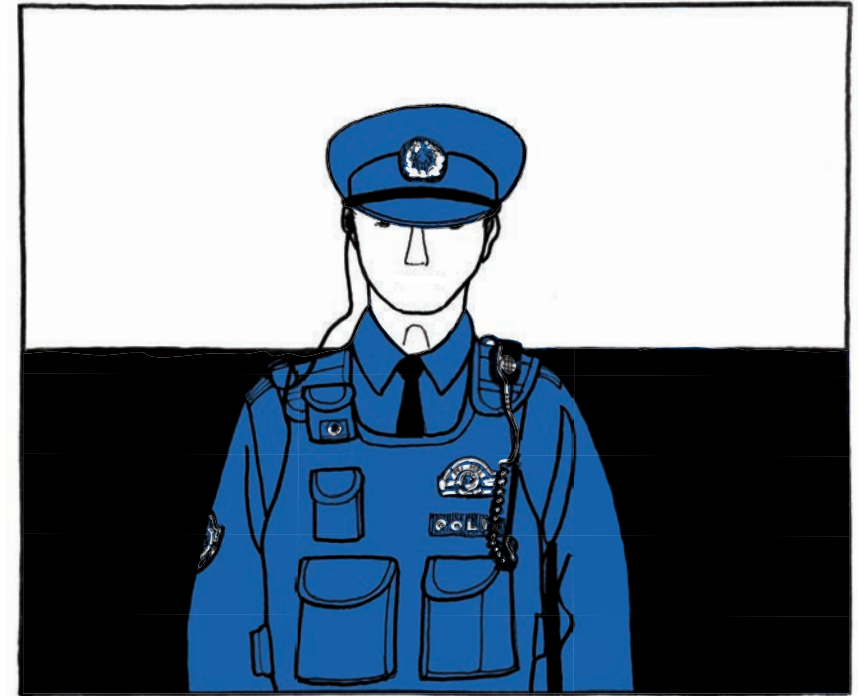
If you feel scared that you may have been exposed to radiation, do not hesitate to get the internal exposure of your body measured. Methods for measuring internal exposure include measurement with a whole-body counter and measurement of cesium in urine.

Many people came to our facility to have their internal radiation levels measured. Some of them left strong impressions on us. This father was a firefighter. At the time of the disasters, he entered a highly contaminated area to do search and rescue operations for the people affected by the earthquake and tsunami. Because of this, he came with his family who were worried that he might have been exposed to high levels of radiation. The measurement results showed that no radiation stemming from the meltdown was detected in his body. The whole family felt relieved. The father said, "Even though it was my duty, going into the highly contaminated areas was so terrifying that I felt like I was going crazy. I wish a place like TARACHINE had existed then. I would have felt so much better if I could have had a place to talk about my feelings. At the time I couldn't talk to anyone about my worries and fears."



On another occasion, two male police officers came to us to have internal radiation levels measured. No radiation related to the meltdown was detected in their bodies. They felt relieved and said, "We want to share these results with the younger officers at our workplace. At the time, we didn't know the extent of the contamination and spent many days going into dangerous areas to rescue people after the earthquake and tsunami. Some younger officers have said, "I must have been contaminated with high levels of radiation. I may have to give up having a child in the future." They said, "We want to tell them that they have nothing to worry about."

We learned that even frontline workers, such as firefighters and police officers, who have to remain sturdy for the citizens they work to protect, were having worries that they could not talk about with anyone while working in life-threatening situations. After the nuclear meltdown, civilians who worked to restore the infrastructure, such as people from the water department, were able to receive internal exposure screening in the public sector. However, the firefighters and police officers in general did not receive such care.



How to Face the Fear of Radiation Exposure II

Is a temporary respite for children and families effective? People who were exposed to radiation in the disaster areas are sometimes told by people from other regions that they have been "contaminated." If you have any doubts about the levels of exposure in your body, please have yourself screened for accurate measurement.

At the end of 2011, a woman came to TARACHINE for an internal exposure screening. At the time of the nuclear meltdown, she had been living in Futaba Town where Fukushima Daiichi NPP is located. She was planning to go to Tokyo to help her daughter to give birth, but her daughter's in-laws said, "Your mother has been exposed to radiation. We're afraid radiation may transfer to the baby. Please tell your mother not to come this time." The woman said, "That may be true. I understand I can't go to help my daughter with the baby. But I want to know what's really happened to my body. I want to know if I've really become someone who shouldn't help others." She then took internal exposure screening.

The results showed that no radiation stemming from the nuclear meltdown was detected. Radiation cannot be transferred to the people around you.

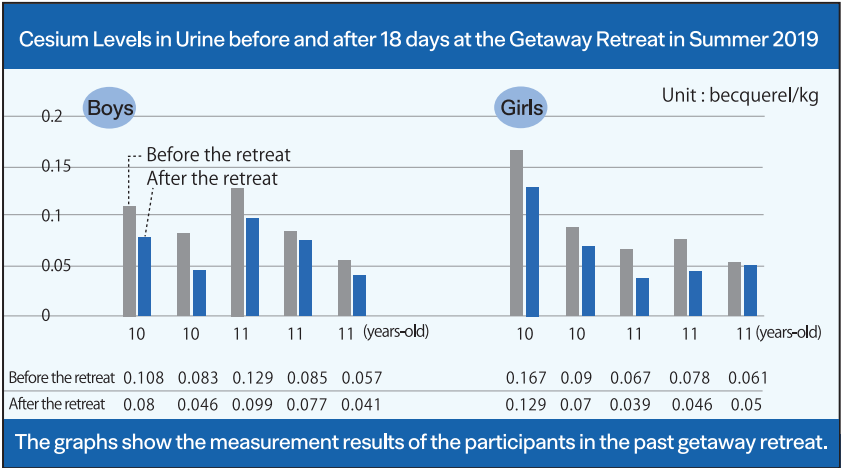
Since we cannot see the radiation emitted from the radioactive materials, people fear, believe, and say all sorts of things. By properly measuring the radiation levels and discerning the accuracy of any given information, we can protect our hearts from unnecessary pain.



Temporary Respite for Children and Families

Is a temporary respite for children and families effective? The effectiveness of the respite can be evaluated by looking at the measurement results of the cesium levels in urine taken before and after the retreat.

After the nuclear meltdown, children in Fukushima were restricted from playing outside to prevent radiation exposure. So, children were sent to respite locations far away from Fukushima for a while in order to experience nature in a safe environment. However, a painful reality hit many parents; "Sending my children to a temporary respite means admitting that the land we're living in is contaminated." Some fathers found the possible stigma too painful to live with and did not want to send their children to the respite. This led to conflicts between fathers and mothers, where one of the fathers even said, "If you send our children to the respite, I want a divorce." Some mothers were also worried, "My husband is fine with it, but my in-laws frown when I tell them about going to the respite." That's why they asked us about the effectiveness of the respite.



At TARACHINE's measurement facility, we measured the cesium levels in the urine of each respite participant to assess its effectiveness scientifically. We found changes in the levels of cesium in urine taken before and after the respite. Things invisible to the eye are perceived differently by people, depending on each person's sensitivities. This can lead to disputes and disconnection within families. It's a distressing thing for children and the family.

Breastfeeding Your Baby

If you think that you have been exposed to radiation, and worry about breastfeeding your baby, what would you do?

After the nuclear meltdown, some mothers felt anxious about breastfeeding their babies, wondering if they have been exposed to radiation. They thought if they breastfed their babies with their own milk, which may have been contaminated with radiation, their babies would also be contaminated.

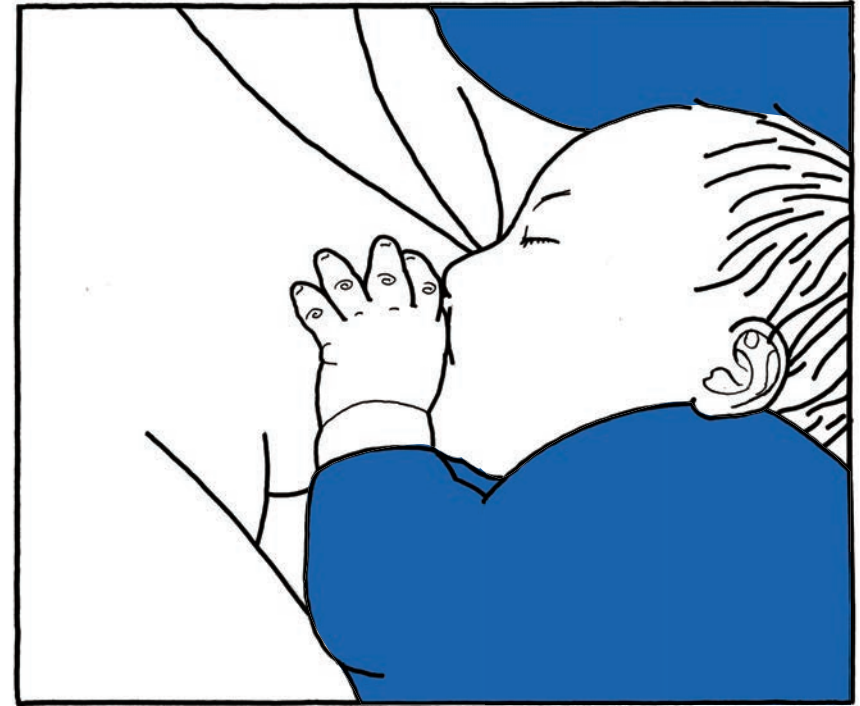
Without access to professional guidance on whether they should continue or stop breastfeeding their babies, many mothers made their own decisions to stop breastfeeding and fed them with baby formula. To avoid radiation exposure, they did not use tap water that might be contaminated; instead, they purchased and used bottled water to prepare milk and wash the baby bottles. Some mothers used tissues to clean the baby bottles each time after use, because bottled water had become scarce at the time.



As the fearful feeling of radiation loomed over them minute by minute, they had to decide and take action, weighing up the respective risks of breastfeeding and baby formula.

To avoid having any regrets later, it is important to make your own decisions about what to do to protect your babies. You should explain clearly to your baby in words, why you came to that decision. Your baby will perceive the sincerity in your voice.

To learn from the experiences of the mothers who suffered from the disaster, it is important to think in advance about the choices we would make if the same accident were to happen again. This will help minimize the negative psychological and bodily impact on mothers and children.



Mothers with Deep Emotional Scars from Protecting their Children

When a nuclear accident occurs, children can no longer play outside. After the nuclear meltdown, local mothers did not let their children go outside to play to protect them from radiation exposure. Children have boundless energy and became very upset with their mothers for not allowing them to play outside. Their pent-up emotions were expressed as big behaviors* and caused friction with their mothers.

At the time, some mothers scolded their children harshly or even hit them, later blaming themselves for their own actions, "Why did I scold them so harshly? Why did I hit them?" The mothers have been left with deep emotional scars despite their protective actions for their children. If the same situation happens again, please learn from our experience so that fewer mothers will be hurt or suffer.

*Actions by children that can be challenging for adults to understand. These often include crying, screaming, throwing objects, hitting, kicking, or running away. While they might seem like mere tantrums or mischief, these behaviors are often interpreted as a form of communication – a child's way of expressing something important when they lack the words.



Protecting Our Children

Children and Radiation Exposure

Children are more likely to inhale radioactive particles along with dust and dirt on the ground because they are physically closer to the ground than adults. When measuring internal exposure of siblings at our measuring facility, the younger children tended to show higher radiation levels than the older ones.

When radioactive substances get in the growing children's bodies, radiation is emitted internally, damaging cells in the body and causing serious health issues. Growing children are at higher risk of internal radiation exposure than adults because their cells divide rapidly, and they are more susceptible to the effects of radiation.

In the event of a nuclear accident requiring evacuation, keep children covered with blankets to protect them from exposure to the outside air, and pay attention to what they eat and drink. Immediately after a nuclear accident, high levels of contamination in the surrounding environment are expected. Please take measures to minimize the initial radiation exposure.

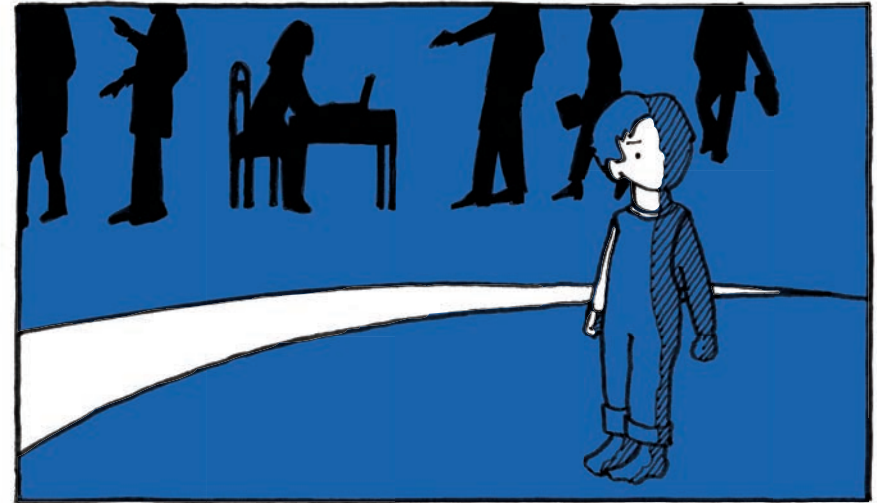


Effects of Psychological Stress Experienced During Infancy

Not only in nuclear disasters, but also during other major disasters, adults try to protect their families while feeling significant anxiety themselves. Their children also feel the same anxiety. This is a difficult condition, especially for infants and toddlers, whose brains are rapidly developing.

In infancy, the brain is continuously growing and developing, and infants themselves feel anxious about their own growth. Under normal circumstances, adults around them warmly watch over and care for infants with affection. However, when adults feel significant anxiety due to the disaster, they have little bandwidth to attune and respond sensitively to the infant's needs. Infants can intuitively sense this lack and adapt for survival. Some infants work to grow up fast mentally in a way that is uncharacteristic for their growth stage.

The emotional toll on children who experience disasters during infancy or early childhood is much greater than one might imagine.

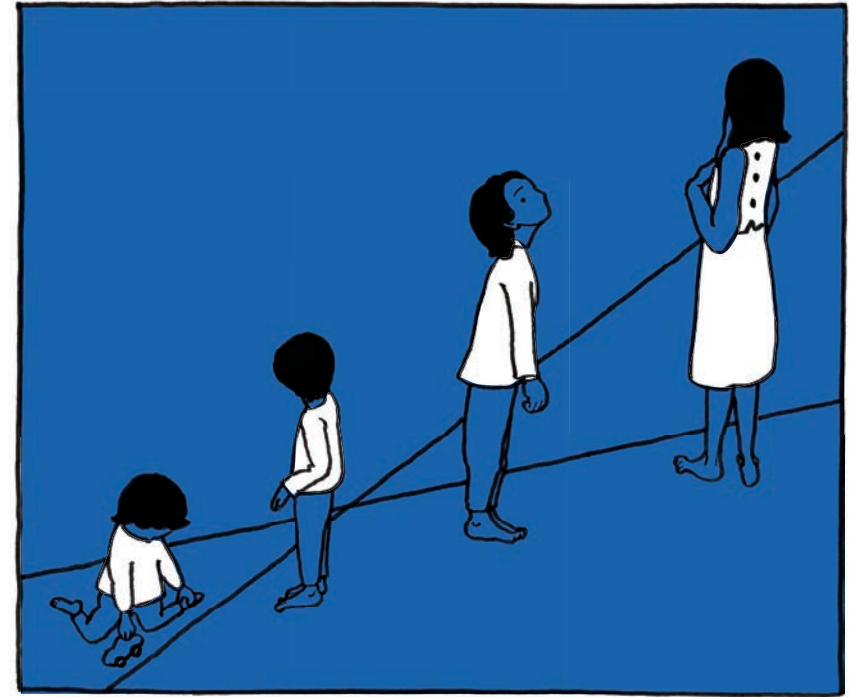


At the time of the 2011 nuclear disaster, many adults in Fukushima were unaware of the social-emotional and relational impacts on families. As a result, we were unable to provide enough care for our children. To learn from this painful experience, let us consider ways of reducing the disaster's impact on children's mental health.

Protecting Children's Mental Health

When a disaster strikes, parents will try to protect their families desperately. Their children also will try to survive alongside with their families, experiencing anxiety and fear first-hand. At such desperate times, the children may be enduring shocks and fears, unable to express their feelings to anyone, holding back their emotions alone. This is true even for infants under the age of three.

As time passes, five years, ten years after the disaster, those anxieties may manifest in various ways in the child's body and mind. If you are able to notice the child's anxiety early on and respond by calmly acknowledging it, the child may feel understood, and will become relaxed and be able to return to their normal and energetic self. With all your heart, please embrace your child in their anxious state and help them feel safe under your protection.



Hold Your Child

Children may show unexpected reactions when they feel anxious:

They may behave as if nothing had happened.

They may become overly energetic.

They may laugh a lot (a state of excitement caused by shock).

They may become absent-minded and stop talking.

They may become irritable and violent.

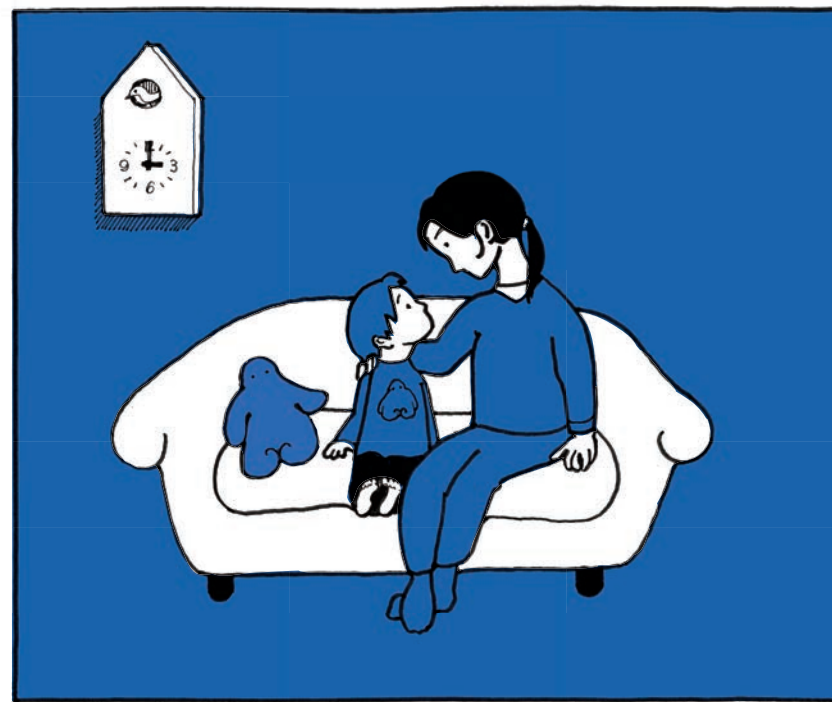
At times like these, hug them and tell them, "Everything's going to be all right," as many times as needed!



Attune to Your Child

When your child tries to talk to you, look them in the eye and listen carefully. If you cannot respond to the child immediately, explain the reason why and promise that you will definitely listen later. Be sure to follow up.

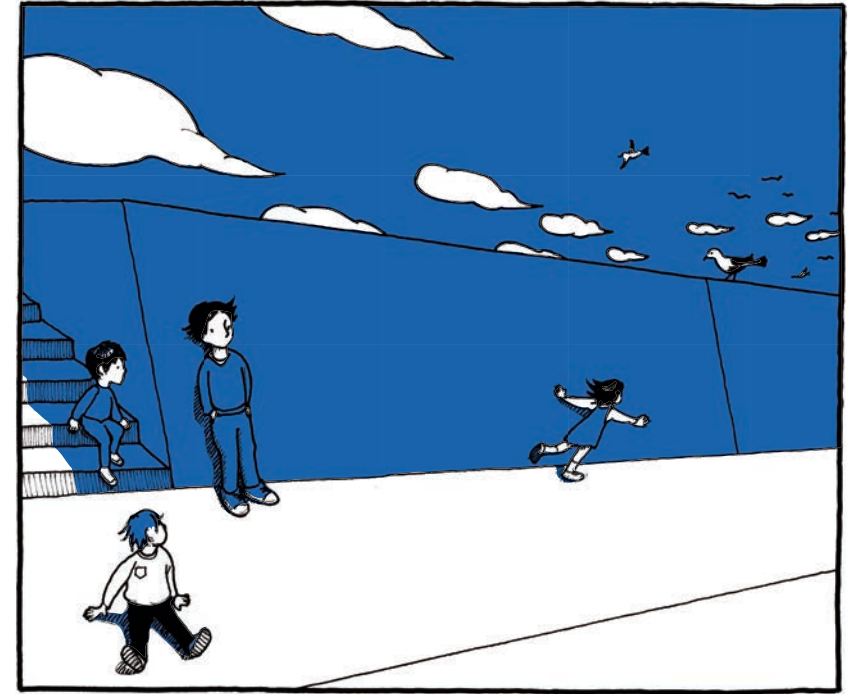
Tell the child, "You didn't do anything wrong." Your child may be secretly worried or say things like, "I couldn't do anything," or "Was it my fault that it happened?" In such times, hold the child tightly in your arms and tell the child, "You haven't done anything wrong at all."



Children and Symbolic Play

If children are engaging in a symbolic play immediately after a disaster, don't stop them, even if the play can be triggering for you, and do your best to watch over them. Do what you need to regulate your own feelings so that you can support these plays.

After major disasters such as an earthquake or tsunami, children may play pretending about being in the middle of an earthquake or tsunami. They use the symbolic play to process their emotional shocks and fears and try to overcome them. If you find your children playing such ways, don't stop or scold them but watch over them and occasionally tell them, "You're right, that's how we survived."



Sleep with Your Child at Night

Children may experience changes in their sleep patterns, such as difficulty falling asleep, shallow sleep, fear of sleeping, crying out in their sleep, waking up half asleep screaming, or having nightmares. This is because the brain becomes excited and tense when experiencing fear or shock.

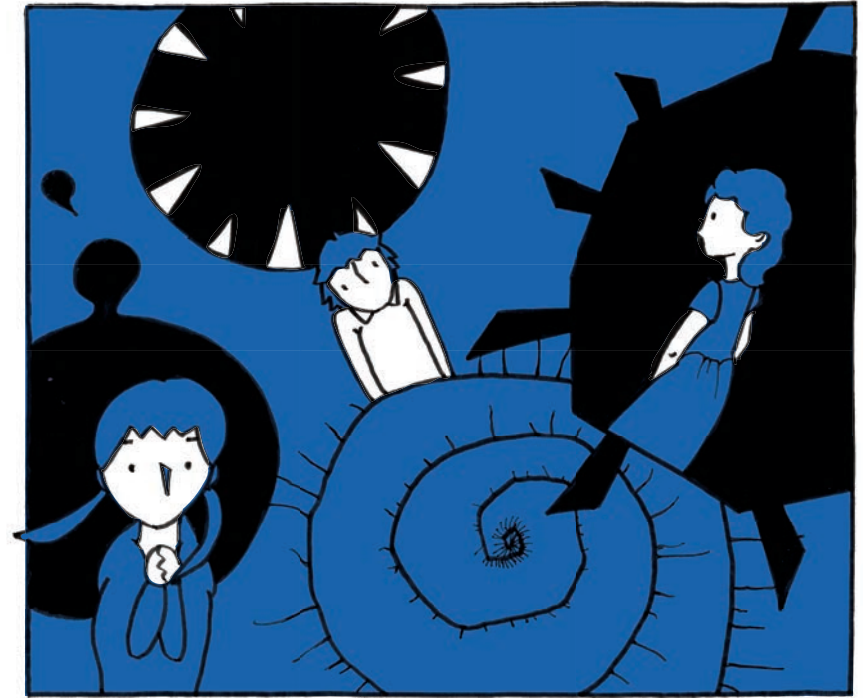
When children sleep feeling the warmth of their parents next to them, they relax and their minds calm down. Although there are individual differences, children enter puberty around the age of 10. After the age of 10, it is a good idea for a boy to sleep next to his father and a girl to sleep next to her mother if they have sleeping problems.



When Children Are Afraid

When children say that they are scared to do something, find a way that is not scary for them. They may be afraid of the night, of dark places, of being alone, or doing other minor things. If they ask you to accompany them to the bathroom, please go with them.

When they become scared of something they used to be fine with, ask them, "What would make you feel safe?" and help them find a way to overcome their fear together.



Warmly Accept Regressive Behaviors

Regressive behaviors in children are healthy psychological responses to overcoming anxieties and are commonly seen after disasters. You may see children lose the ability to use developmental skills that they had before.

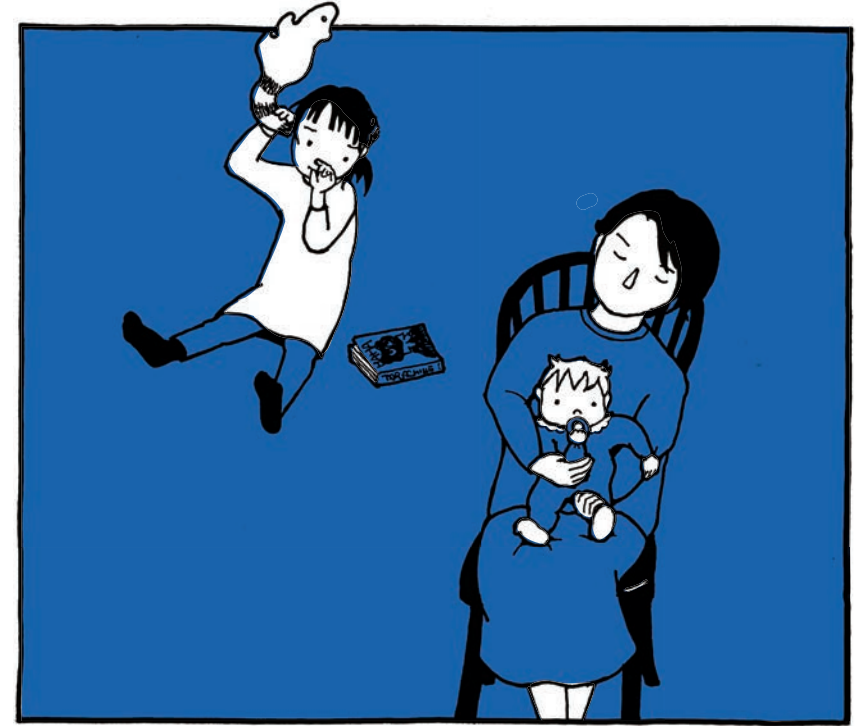
They may become clingy and want to be held.

They may want you to feed them.

They may want you to do what they can normally do by themselves.

They may revert to baby talk, etc.

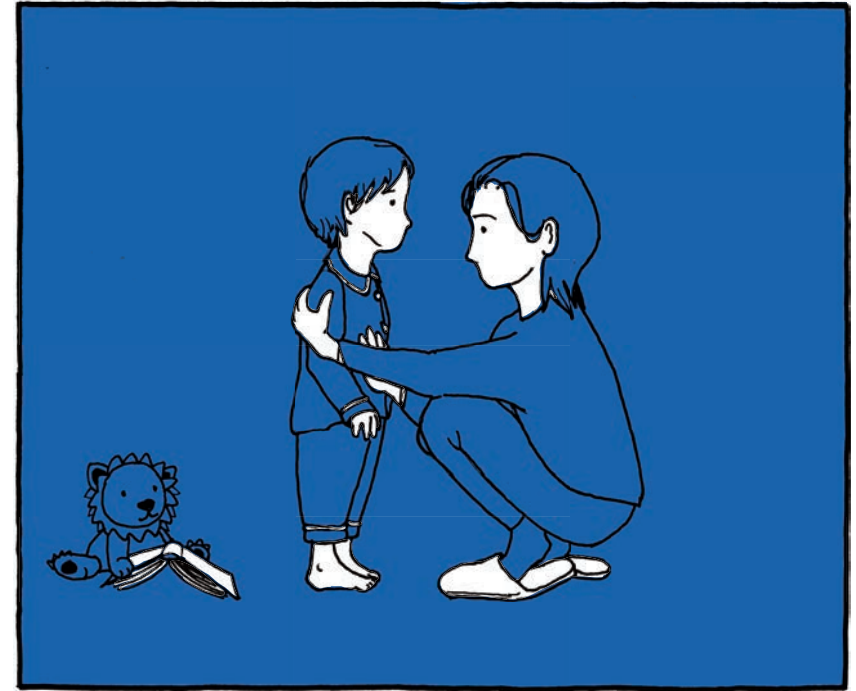
Please do not be alarmed or scold them; instead respond to them warmly. Accepting their behaviors until they say, "That's enough," is the quickest way for them to return to their normal emotional state.



Responding with a Gentle Touch

Children often express their anxiety through physical symptoms rather than words. Common examples are headaches, stomachaches, loss of appetite, feeling sluggish, etc., with complaints of feeling physically unwell.

Before taking them to the doctor, gently place your hand where it hurts and talk to them, "I know it's painful here" or "I know it's hurting", while stroking or rubbing them gently with your hand. Caring for their anxious hearts begins with a gentle touch. Any child will feel safe and relaxed.



Source “Responding to Children After the Earthquake” by Koriyama City Post-Earthquake
Children’s Mental Health Care Project

Reference “Radioactivity Measurement Results of the Tap Water in Iwaki City from March 16
to April 11, 2011” by the Local Nuclear Emergency Response Headquarters

“Environmental Radiation Measurements of Various Regions in Fukushima
Prefecture (Report No. 487)” by Fukushima Prefecture Disaster Management
Headquarters

“Database of Radiation Measurement” by NPO Mothers’ Radiation Lab Fukushima -
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Haha no Sho

Mothers’ Note from Fukushima: Protecting Mind and Body from Nuclear Disaster

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