



#### - For People with Chronic Respiratory Diseases -



University of Hyogo 21st Century COE Program Development of a Center of Excellence for Disaster Nursing in a Ubiquitous Society



We never know when disasters will strike. This booklet has been prepared based on the results of investigations into actual circumstances of disasters experienced in the past, to help you detect unusual physical and mental conditions and provide appropriate self-care as soon as possible in the event of disaster.

This booklet describes "Physical self-care," "Changes in mental health conditions," "Preventing the deterioration of chronic respiratory diseases", "Medication control," "Importance of having medical examinations," "Preparing for evacuations" and other information that will be helpful after a disaster occurs.

You should thoroughly read this booklet whenever possible, write down the necessary infomation and fill in the checklists, to prepare yourself for disasters. Please keep this booklet handy at all times.

When you visit a medical institution after a disaster occurs, please show this booklet to the doctor in charge and the nurses, after filling in the necessary items.



If you have any problems, please consult us.



Place a checkmark in all applicable boxes in the following checklist: one week after a disaster occurs, one month after the disaster, and whenever you are aware of changes in your physical condition.

General physical conditions

Date of entry	• •	• •	 
① Stomach ache			
② Stiff shoulders			
(3) Headache or heavy-headedness			
(4) No appetite			
(5) Tired easily and feel weary			
6 Thumping heart			
⑦ Diarrhea or constipation			
(8) Shortness of breath or trouble breathing			
(9) Often catch a cold			
1 Fever			
1 Nausea or vomiting			
12 Joint pain			
(3) Low back pain			
Trembling hands/feet or numbness in hands/legs			
(15) Dizziness			
(6) Hot flushes or ringing in ears			
🕦 Swollen hands and feet			
18 Canker sores			

Symptoms that may deteriorate your disease

<b>19</b> Yellow or brown phlegm		
20 Cough		
1 Dim consciousness		
② Hands and feet feel hot		

#### 2 What can be found by checking general health conditions

The items for general health conditions show physical problems that may more easily occur after you have experienced a disaster.

The more items you have marked, the more care is required. The following information will be useful in detecting illness at an early stage and preventing chronic respiratory diseases from worsening.

#### 1) Symptoms thought to be caused by stress

After experiencing a disaster, you are under great physical and psychological stress. Items 1) through 18) are all stress-related physical symptoms.

To maintain your physical and mental health, try to decrease your stress.

#### 2) Symptoms thought to be caused by excessive work

Overusing your muscles and joints that are not normally used very much will result in fatigue, which could cause you to have stiff shoulders, to get tired easily and feel weary, to have joint pain or low back pain, and other symptoms. At any rate, be sure to rest and not to overwork yourself.



# 3) Symptoms that may indicate some underlying diseases to be cared for

Any of the following symptoms could be a sign of some disease.

- \* If you marked items 1) Stomach ache, 4) No appetite, 11) Nausea or vomiting, and/or 18) Canker sores, you may be suffering from stomach inflammation or ulcer induced by stress.
- \* If you have the symptom of 15) Dizziness, you may be suffering from an autonomic disorder, brain injury, or ear and nose (otorhinolaryngological) disease.
- \* If you marked items 3) Headache or heavy-headedness,
   15) Dizziness, and/or 16) Hot flushes or ringing in the ears,
   you may have high blood pressure. Please measure your blood pressure.
- For those who checked item 7) Diarrhea or constipation: if you suffer from constipation, you should drink adequate fluids and get proper exercise. If you suffer from diarrhea, it could be caused by bacterial infection, which requires that you visit a doctor promptly.
- \* If you often catch a cold (item 9), it could be an indication of a decline in your immune strength.



# 3 Symptoms thought to be related to the deterioration of chronic respiratory diseases

For people with a chronic respiratory disease, catching a cold, lack of oxygen, carbon dioxide buildup, and/or strain on the heart will lead to the deterioration of their disease.

- \* If you marked items 4) No appetite, 5) Tired easily and feel weary, 8) Shortness of breath or trouble breathing, 10) Fever, 19) Yellow or brown phlegm, and/or 20) Cough, you may be suffering from a respiratory infection. During the first two weeks after a disaster occurs, you are more susceptible to pneumonia and bronchitis, and therefore early countermeasures are necessary. If you experience the above symptoms, you should consult a doctor as soon as possible. We also recommend that you get enough nutrition and sleep, and keep warm, to protect yourself from further infections.
  - \*If you have symptoms of items 8) Shortness of breath or trouble breathing, 3) Headache or heavy-headedness, 21) Dim consciousness, and/or 22) Hands and feet feel hot, it may be a sign of the lack of oxygen or carbon dioxide buildup. If you have the above symptoms, you should consult a doctor urgently.
  - \* If you have symptoms of items 6) Thumping heart, 8) Shortness of breath or trouble breathing, and/or 17) Swollen hands and feet, your heart may have been strained. Please consult a doctor urgently. Working too much can put strain on your heart. Take care not to overwork yourself.

### Changes in mental health conditions

Place a checkmark in all applicable boxes in the following checklist: one month after a disaster occurs, three months after the disaster, and whenever you are aware of changes in your mental condition.

Date of entry 🕨	 	 
1. Can't go to sleep		
2. Have repeated nightmares of disaster		
3. Tend to be depressed		
4. Tend to be oversensitive to minor sounds or vibrations		
${f 5.}$ Don't feel like talking with other people		
6. Easily become irritated		
7. Easily get upset		
8. Avoid places and persons that remind me of the disaster		
9. My body gets easily tensed up		
10. Always blame myself		

(Source: PTSS-10)

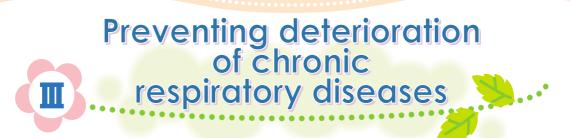
After experiencing a great earthquake or other shocking event, you may experience insomnia, become oversensitive, remember the disaster experience involuntarily, and have nightmares.

If these symptoms become serious enough to cause great difficulties in your daily life, such a condition is psychiatrically called "PTSD" (post-traumatic stress disorder). If you suffer

from strong PTSD symptoms, you should consult an expert.

Of the ten items above, if you marked six or more items, you may be more at risk of developing PTSD. Before consulting a doctor, mark the above checklist and show it to the doctor and nurse in charge.





In the unusual state following a disaster, environmental conditions as well as your physical and mental conditions can easily change, which may result in the deterioration of your diseases. Take care of yourself to prevent your disease from getting worse.



#### 1) Take greater care to cope with the cold and heat

Exposure to intense heat and cold can cause you to tire easily and catch a cold, worsening your disease.

- \*When you are cold, wear socks, put on many layers of clothing, or add another blanket, so you don't let yourself get cold.
- \* When it 's a hot day, refrain from going out during the day, and put on a hat to avoid direct sunlight.

#### 2) Protect yourself from catching a cold

A cold can easily spread among people when living in a group. After a disaster , due to overwork and deterioration of your nutritional state, your immune strength may be weakened, therefore making you more susceptible to colds.

- \*Wear a mask, gargle, and wash your hands.
- **\***Take your temperature as needed.

 During the winter season, we recommend that you get a vaccination against influenza, if possible.



#### 3) Take care to prevent dust, molds, and mites

Dust, molds and mites will affect the respiratory organs.

- \* Use a mask and/or handkerchief so as not to inhale dust and dirt.
- \* If you cannot air out your futons, the bedclothes will get damp, producing favorable conditions for molds and mites to grow. To prevent this, you should be careful to keep your bedding clean and sanitary.

#### 4) Keep a regular rhythm in your daily life

Maintaining a regular rhythm in our daily life will encourage your inherent restorative capacity to work appropriately.

After a disaster occurs, your daily rhythm can be easily disturbed because of a lack of sleep and/or overwork due to changes in your living environment and busyness.

\* Try to take moderate exercise and get proper rest.

## 5) Make use of the consultation services provided by the local government.

After a disaster occurs, you will experience some inconveniences because of changes in your daily living.

Are there any problems with steps or the toilet in the housing? Is the shopping place located far away?

Do you overwork yourself without realizing it?

\* You should make use of the consultation services available in your local community, in addition to the support of your family.



Do not overwork yourself but ask someone who can help you with it.

### 2 Pay attention to your nutritional balance

After a disaster occurs, it will be difficult to maintain a well-balanced diet. However, to prevent your disease from getting worse, you should pay attention to nutritional balance.
\* After a disaster, it's common to take in too many carbohydrates from rice, etc., but try to eat some meat or other protein-rich foods. Protein will improve the functions of muscles necessary for breathing.

\*To avoid dehydration, be sure to drink adequate fluids as needed.

#### 3 Don't let stress build up

Stress is caused by changes in your living environment due to damage to your housing, injury, illness, or change of address. To prevent stress, we often say "keep a tranquil mind," "relaxation is important," "take it easy," and so on. People with chronic respiratory diseases may suffer far greater stress than those



without, because of anxiety about daily life and concern over whether or not they will receive proper treatment. To reduce stress, it is important to take the following countermeasures.

- **\*** Talk about your stress with your family, neighbors or other people you can trust.
- \*Consult your physician, nurse, public health nurse, or other healthcare professionals.
- \* Participate in community center activities and regional events.
- \* Enjoy reading books and other hobbies for relaxation during leisure times.

However, you should not become engrossed in gambling nor indulge in drinking to reduce your stress. As well, we don't recommend thrill-seeking activities or avoiding contact with other people as ways to relieve stress. These behaviors could adversely affect your physical condition, leading to aggravation of your disease.



The unusual state following a disaster may pose a risk that your disease could worsen because of the unavailability of medications or failure to take your medications. You should take your medications as regularly as possible. In addition, it is recommended that you prepare about 2-weeks' worth of spare medications for emergencies. If you are using supplemental oxygen, you should keep a portable oxygen cylinder handy at all times. After experiencing a disaster, you should consult your doctor as soon as possible. To prepare for an emergency, record the names of your medications and instructions for taking them. If you have any questions about your medications, immediately ask the physician, nurse, or pharmacist in charge.



Name of medication		Instructions for taking medication	
			_
			_
			_
			_
Allergic reactions	Name o	of medications	
to medication	(		)
(I have had a rash or itch after taking medication.)	(		)
Medications to be	Name o	of medications	、
stored with care	(		) )
Amount of oxygen		t ( ) liters	
Thirdent of oxygen	In mot	tion ( ) liters	
Duration of oxygen cylinder	( ) h	ours	



To prevent your disease from deteriorating, it is important to consult a doctor on a routine basis. If you have questions about medical examinations, do not hesitate to ask doctors, nurses and public health nurses.

\* Write down the contact addresses and telephone numbers of your physicians and the nearest hospital, to ensure that you can immediately contact them in case of emergency. In addition, write down the number of your patient ID card so you can receive prompt treatment at the hospital.

Your physician's address & telephone number ①	Name of hospital           The second
Your physician's address & telephone number 2	Name of hospital           The second
Nearest hospital's address & telephone number	Name of hospital
Address & telephone number of the oxygen therapy equipment company	Company name
Emergency contact address and telephone number ①	Name 🔁
(Cell phone number) ②	Name 🔁

\* Write down your emergency contact address and telephone number.

\* Keep items required when going to the hospital (patient ID card, patient handbook, and health insurance card) easily accessible at any time.

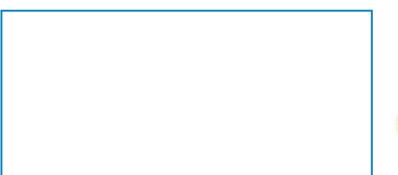


We recommend that you prepare the following evacuation items in case of emergency.

\* These evacuation items should always be kept handy.

Treatment-related items	Check	Everyday items	Check
Medications		Emergency provisions	
Portable oxygen cylinder		Drinking water	
Gargle		Cash and valuables .(bankbooks, etc.)	
Mask		Cell phone	
Clinical thermometer		Flashlight and batteries	
Saturation monitor		Portable radio	
Health insurance card, Patient ID card, and patient handbook		Changes of clothes/towels	
Cannula, mask		Notepad and writing utensils	
Pocket warmer or other items that help keep you warm		Tissue paper	
(Other)		Wet tissue paper	
		Sanitary products	
		Dentures, glasses, cane, etc.	
		Shoes or slippers	
		Plastic wrap	
		Large-size waste bags	
		Work gloves	

\* Write down the location of the evacuation center.







We recommend that you prepare the following evacuation time.

If you wish to obtain another copy of this booklet, please contact us at the following address. We will then send it to you.

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You can rest assured by writing down information to be required in times of emergency.



Illustrations by Setsuko Kakumoto