

Rural Training Center – Thailand (RTC-TH)



**Community-based Environmental Education
for the Self-sufficiency and Sustainability of
Small Rural Family Farms**



Preparing for Emergencies



An Emergency Preparedness Training Series presentation



Rural Training Center-Thailand
Emergency Preparedness Community Service Program

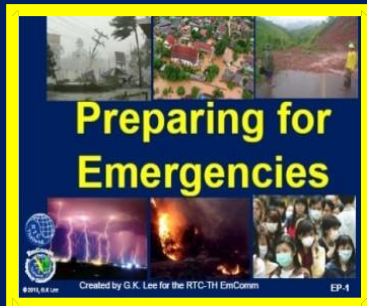
Ready to serve and sustain our community

For other lessons in the series e-mail rtc2k5@gmail.com

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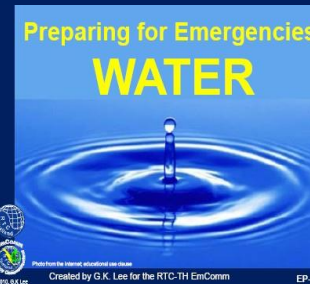
The EP Lesson Series



EP-1



EP-2



EP-3



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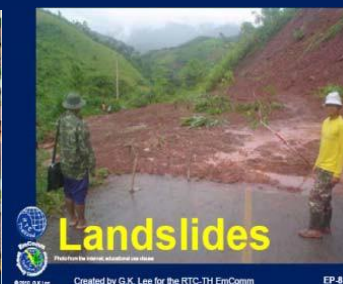
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A part of the RTC-TH EmComm Program

The Rural Training Center-
Thailand Emergency
Preparedness program is a
community service effort to
provide emergency

preparedness training for local
community self-sufficiency and
sustainability in times of need.



The Rural Training Center-Thailand (RTC-TH)

is an all volunteer
organization providing
community-based
environmental education
for self-sufficiency and
sustainability of small
rural family farms

www.neighborhoodlink.com/org/rtcth

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The lessons were adapted from existing RTC-TH REEEPP program lessons

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REEEPP

Rural Environmental Education Enhancement Pilot Program



An innovative, non-traditional community-based environmental education program integrating math, science, geography, English language, and technology lessons for environmental stewardship using interactive experiential learning in outdoor settings at Ban Na Fa Elementary School, Nan Province, Thailand.



E-mail: rtc2k5@gmail.com www.neighborhoodlink.com/org/rtcth



The Rural Training Center-Thailand was created to honor the life and memory of Mr. Tang Suttisan, a father, farmer and former custodian of Ban Na Fa Elementary School who appreciated and valued education.



What is an emergency?

An emergency is an event that drastically disrupts the normal situation. It often requires urgent attention to avert loss of life or repair extensive damage.



Photos from the Internet; educational fair use clause

What causes an emergency?

Accidents are a common cause for emergencies in daily life.



What causes an emergency?

Natural disasters are another cause.

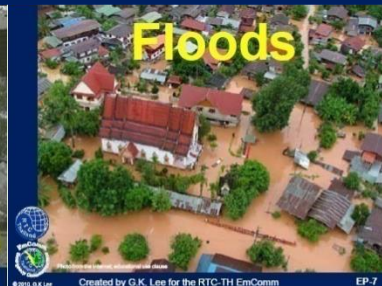


The Forces of Nature

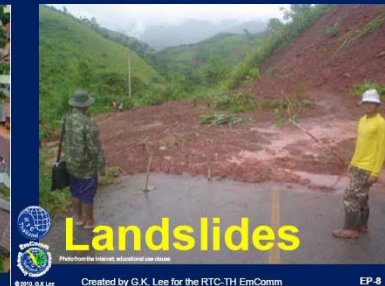
The RTC-TH Emergency Preparedness lessons deal with “natural disasters” commonly occurring in Nan Province.



EP-6



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Basic Survival Guidelines

Depending on your situation, in general, you can expect to live for:

- 1-3 minutes without air
- 15 minutes to a few hours if you cannot maintain your core body temperature
- 1-7 days without water
- 1-2 weeks without food
- 1-2 months without shelter.



Psychological Effects

The awesome power of nature makes survivors of natural disasters feel powerless.



Your attitude is very important to keeping you alive and able to survive.



Lessons from Past Disasters

Survivors need:

- medical aid
- shelter
- water
- food
- proper sanitation

- This follows the survival Rule of 3's
- 3 minutes without air
 - 3 hours without regulated body heat
 - 3 days without water
 - 3 weeks without food

This tells you what you need to do to prepare.



Lesson #1 from Past Disasters

Many people need medical aid.

After a disaster, emergency services will be very busy. You can prepare by:

- Taking a first aid course
- Learning CPR
- Keeping well-stocked First Kits with references
- Having a supply of vital prescriptions and a copy of the prescriptions
- Getting medical warning tags (e.g. Medic Alert) for those with special conditions

Don't assume you will be able to get any special prescription medications easily.



Lesson #2 from Past Disasters

Many people lose their homes.

Home was a safe place.

After a disaster, creating a safe place is important to their psychological well-being.

Shelter is an important step to recovery.

Shelter is needed to keep you warm and protected from the elements. Think carefully so you don't have to move again; survivors need stability.

Learn more about shelter in lesson EP-2

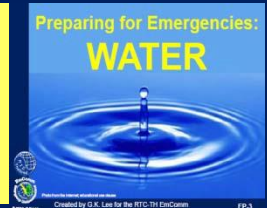


Lesson #3 from Past Disasters

Clean drinking water is absent or in very short supply.

- Taking action helps overcome helplessness.
- Work together to bring order to chaos; be an active survivor rather than a passive victim.
- Take positive steps to make progress rather than to dwell on the negative

You can learn more about water for emergencies in lesson EP-3.



Lesson #4 from Past Disasters

Poor sanitation or the lack of sanitation leads to threats of diseases and death.

- Prepare proper sanitation supplies and equipment to help prevent disease
- Set up shelter / camp with sanitation in mind
- Practice field sanitation methods BEFORE the emergency
- Have a first aid kit tailored to your needs and anticipated kinds of disasters

***Prepare now; once the disaster happens, you won't have time to prepare.
Learn more about this in Lesson EP-11.***



Lesson from Past Disasters

Survivors recover faster after a disaster if they are empowered to take action.

- Taking action helps overcome helplessness.
- Work together to bring order to chaos; be an active survivor rather than a passive victim.
- Take positive steps to make progress rather than to dwell on the negative

But you must be prepared and have certain basic tools on hand to take effective action.



Use the Geographic Systems Model to study the various natural forces and to see how they affect your surroundings.

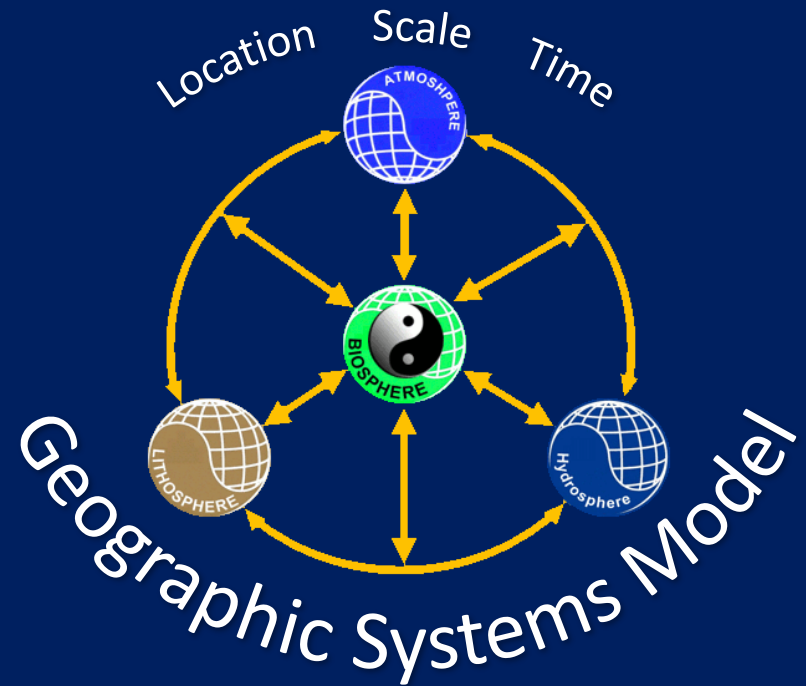


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The Geographic Systems Model

Use it to
systematically
study the various
natural forces and
to see how they
affect your
surroundings.



**You can learn about the Geographic Systems Model by
visiting our website www.neighborhoodlink.com/org/RTC-TH_TECH/pages on “Pages & Links” and click on the title
“2007 G6-Geographic Systems Model”**



How to handle an emergency?



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Emergencies tend to happen suddenly or quickly with little warning.

The best way to handle an emergency is to be prepared ahead of time.



Expect the Unexpected

- Make a plan, but be flexible
- Emergencies change many things quickly
- Think clearly and have an alternative plan



When will help arrive?

Maybe in 1-2 hours or 1-2 days.

In major disasters, could be 1-2 weeks or longer



Photos from the Internet; educational use clause



If you have enough supplies for 1-2 weeks or more, you will be better prepared for the worst case situation.





Personal Planning

Everyone should have an emergency plan.
All family members need to know and
practice it.

Emergencies can happen any hour, day or night.

Everyone should know:

- Who to call
- What to do
- When to stay; when to go
- Where to go
- How to best help yourself
to be able to help others



Photo from the Internet; educational
fair use clause





Personal Emergency Kit

Everyone should have an emergency kit they carry any time they leave the house. It can be small enough to fit in a belt bag.

Basic Kit contents:

- Whistle, small flash light with extra batteries
- Pocket first aid kit; 2 high energy bars
- Large plastic leaf / trash bag
- 2 pieces of heavy cord about 3 m long
- small pocket knife
- Small mirror, a magnifying glass, matches in waterproof container





Vehicle Emergency Kit

Keep an emergency kit enough for 2 days for 2 people in your car / truck.

Vehicle Kit (in addition to your belt bag):

- 8 liters of water
- Food for 2 people, for 2 days
- Basic tools and materials make a fire
- Basic equipment to prepare food
- Tent or tarp with rope and tools
- Sleeping bags or bedding
- Mosquito net
- First aid kit



Photo from the Internet; educational fair use clause



Home Emergency Kit

Enough food, water, and supplies to support your family for 1-2 weeks.

Home Kit (in addition to your belt bag and vehicle kit):

- Important documents
- Water and water treatment gear
- Food supplies and cooking tools
- Shelter equipment, portable radio
- Large first aid kit
- Additional clothing, bedding



Photo from the Internet; educational fair use clause



Keep these together in a waterproof and vermin proof container..





Personal Planning

Everyone should know who to call.
Keep the phone lists updated for:

- Local emergency offices
- Immediate family members
- A relative or trusted friend in a different area (if separated from your family, everyone should try to call this contact person)



During a disaster, local phone service may fail or be overly busy. Sometimes it is easier to call long distance outside the disaster area than it is to call inside the disaster area.



Personal Planning

Consider family members getting an amateur radio license for emergency communications.



During a disaster, local phone service and other “normal” communications may fail or be overly busy. History shows that amateur radio consistently enables communications after disasters.



Personal Planning

Everyone should know what to do.

- Secure the house and emergency supplies
- Locate and account for all family members
- Depending on the type of emergency, know when it's safe to stay at home or to leave and go elsewhere
- If leaving home, leave a message for anyone returning home to tell them where you went





Personal Planning

- ★ If leaving home, leave a message for anyone returning home to tell them where you went

Consider this point:

Disasters have a way of bring out the very best and sometimes the very worst in people.

Consider using “code words” for the location information you leave behind. Instead of saying “went to Canyon campground” make a common phrase like “went to fix the car” mean Canyon campground. Everyone in the family needs to know the “code phrases”. This may help you avoid having “unexpected” visitors.





Personal Planning

Everyone should know where to go.
This depends on the kind of emergency.

- Your emergency plan should have pre-selected safe places for each type of emergency
- Before an emergency, check with the head villager about existing emergency plans
- The safe place should not be in danger if the situation worsens.



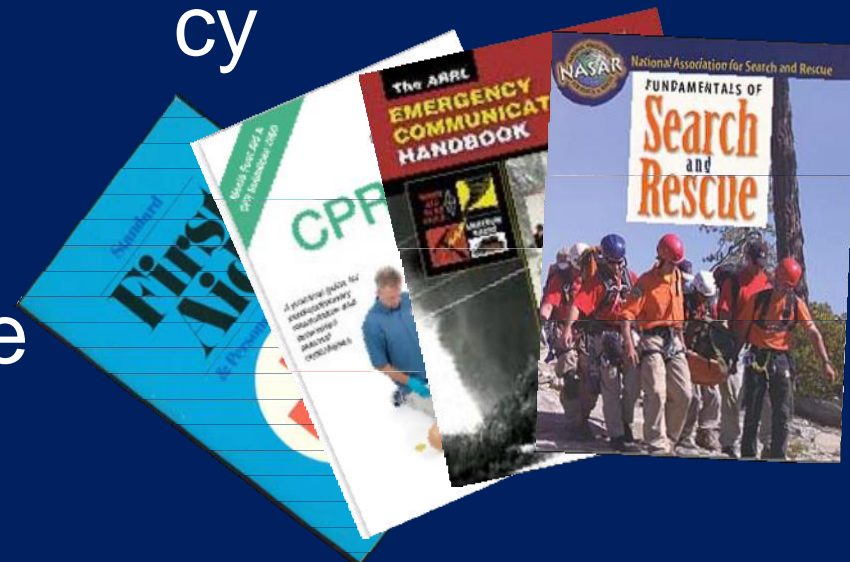
Learn more in Lessons EP-2 through EP-11.



Personal Planning

Everyone should know how to respond. This depends on your age, knowledge, experience, and training. Some things to consider learning:

- First Aid and CPR
- Camping and outdoor survival skills
- Amateur radio emergency communications
- Search and Rescue





Personal Documents

You should secure your important documents for safe keeping.

- Identification papers (e.g. birth certificates, marriage licenses, etc.)
- Ownership papers for land and vehicles, etc.
- Bank books and financial records
- Insurance documents
- Other legal papers and records



Put these in waterproof, fireproof containers for safe keeping.



Personal Planning

Once you know your family is safe; then consider helping:

- the very young, very old, or sick who cannot help themselves
- assisting local disaster response officials
- guiding others to safe places
- securing additional supplies for others
- using your local knowledge to help relief workers coming from outside your area



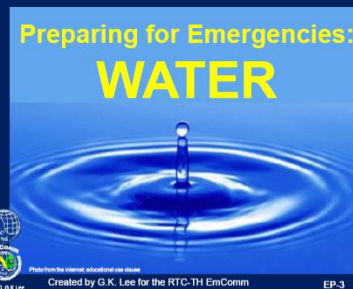
Preparing for Emergencies

Follow the Geographic Systems Model Habitat Checklist (SWFS)

- **S**helter: protection
- **W**ater: clean drinking water
- **F**ood: enough to eat
- **S**pace: a safe area to gather



EP-2



EP-3



EP-4



EP-5



Shelter

Shelter is about protection from the weather and climate elements. The main items to have are:

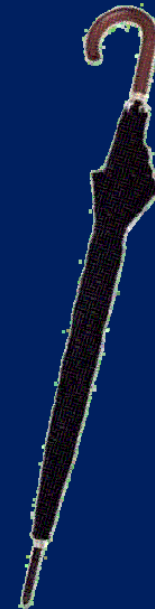
- Clothing / bedding
- Housing, tents, tarps, shade cloth
- Sanitation





Shelter: Clothing

Pick clothes that can be used in all seasons.
Lighter clothing in multiple layers can be as warmer than a heavier, bulkier jacket.



Large
Trash
Bag

Photos from the Internet; educational fair use clause



A large plastic trash bag can be an emergency raincoat and an effective wind breaker.
Just cut holes for your head and arms.





Shelter: Tents or Tarps

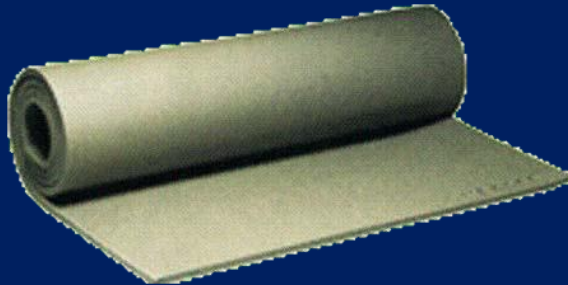
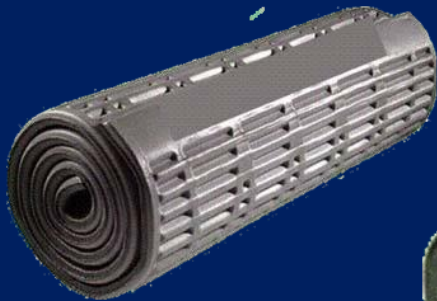
You may also need some tools and rope in order to set up your shelter.





Shelter: Bedding and Nets

Bedding can be sleeping bags/pads, blankets, a hammock. And don't forget mosquito nets!





Shelter: Sanitation



This includes basic toiletries and special needs for infants, elderly, and infirm.



Photos from the Internet; educational fair use clause



Learn more about sanitation in Lesson EP-11.





Shelter: First Aid / Medicines



Every family should have a basic first aid kit. Prescription medications may be critical for people undergoing treatment.



Photos from the Internet; educational fair use clause



Learn more about first aid kits in Lesson EP-11.





Shelter

You can learn more about shelter and related items for surviving a disaster in
Lesson EP-2



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EP-2



Water

Clean, safe drinking water is needed to survive a disaster.



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Each person needs 4 liters of water per day or 56 liters for 2 weeks.





Water

If you cannot store enough water, you need to prepare to get more water.

Some possible sources of water are:

- Catch rainwater
- Collect dew or fog
- Collect it from soil and plants



Photo from the Internet; educational fair use clause



You may need to treat the water you collect to make it safe to drink.

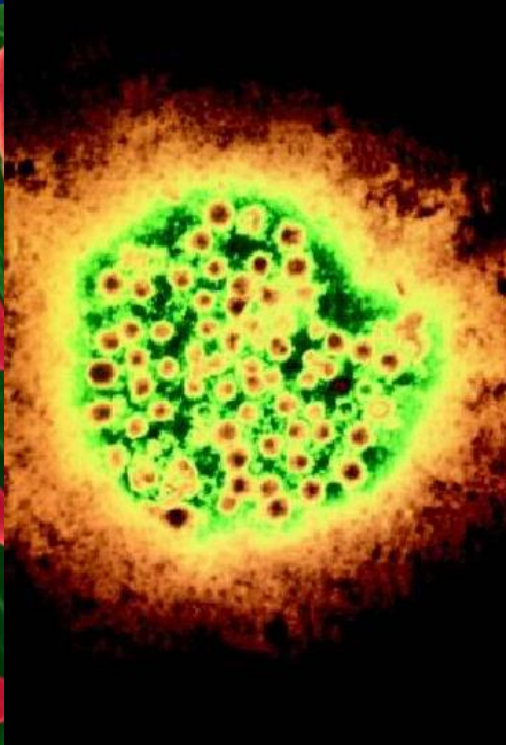


Water Treatment



During a disaster, water may be contaminated and unsafe to drink.

Bacteria, viruses, and chemicals are the main water contaminants.





Water

If you cannot store all the water you need, be prepared to treat contaminated water to meet your needs.



Solar distiller



Unscented
Liquid
Chlorine
Bleach



Keep all materials for water treatment in one place ready for use.





Water

You can learn more about collecting and treating water for surviving a disaster in
Lesson EP-3



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EP-3



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Water



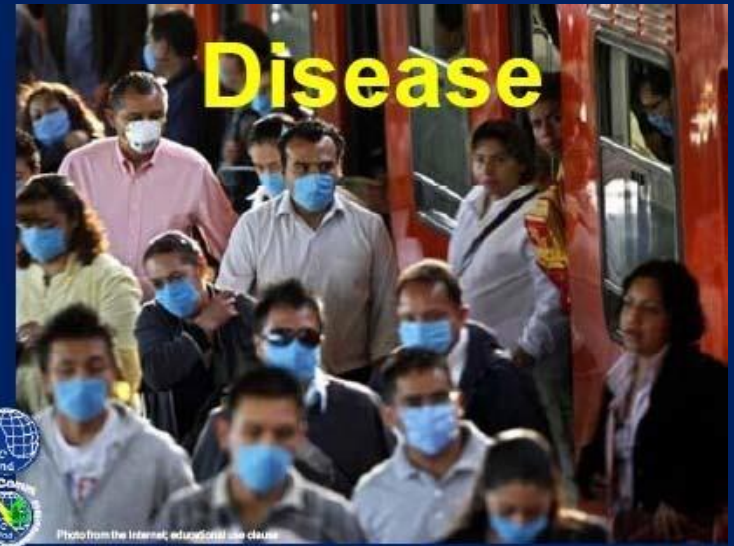
Other water related information can be found in Lessons EP-7 and EP-11



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EP-7



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EP-11





Food

Planning food for surviving a natural disaster is not like planning a picnic.

- **Emergencies are stressful:** so think about foods that provide high energy.
- **Water may be in short supply:** use foods needing little water to clean and cook
- **Cooking conditions may be limited:** so think about foods that are easy to make
- **Conditions will be harsh:** think about foods that have waterproof and vermin proof packing





Food

- Food stored for emergencies should have a long shelf life (perhaps 1 year or more)
- Clearly mark the expiration dates on the food. Use them and replace them before the expiration date.





Food Related Equipment

Make sure you have what you need to:

- Open and prepare the food
- Eat the food
- Store the food

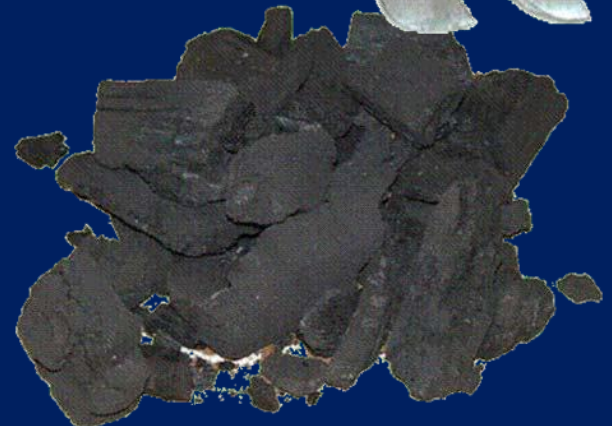
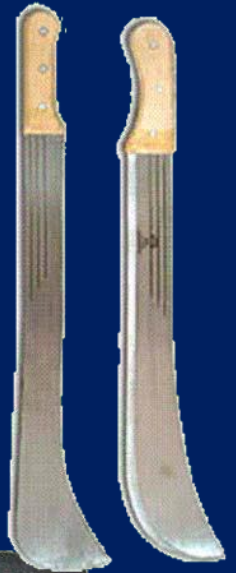




Fire Starting

Be sure you have what you need to build a fire or start your stove to cook your food.

- fuel
- matches or lighter
- tinder & kindling
- wood cutting tools





Food

You can learn more preparing food and related items for surviving a disaster in Lesson EP-4



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EP-4



Safe Space



Hazard	Good Space Trait
Severe Storms (EP-6)	Sheltered areas protected from strong winds; stay off ridges; avoid overhead hazards.
Flood (EP-7)	Higher ground away from rivers and lakes with rising water; avoid sites below dams.
Landslides (EP-8)	Away from areas below steep hills / cliffs or river banks that may collapse.
Lightning (EP-9)	Away from open areas, trees or exposed hill tops, overhead power lines.
Wildfire (EP-10)	Open areas with bare soil or few things to burn; avoid areas upslope from possible fire areas.
Disease	Away from crowds of people or the source of the infection (e.g. away from animals); lee side of hills



Plan for disasters that may be a combination of these.





Space

You need to understand the nature of the type of the disaster to find the “right” space. There is no perfect “space” for all situations.

The RTC-TH EP lesson series helps you to understand the natural Nan hazards common in Nan Province.



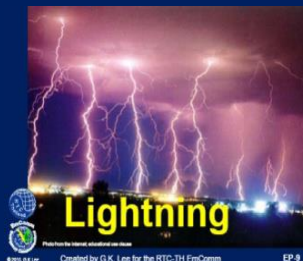
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Space

You can learn more about space for surviving a disaster in Lesson EP-5



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EP-5





Safe Drinking Water is Vital

Be sure to study Lesson EP-11 **BEFORE** setting up a camp, toilets, and cooking areas,



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Remember: You are responsible for your safety and survival in a disaster.



Take action today:

- Make an Emergency Plan
- Prepare your Emergency Kits
- Encourage others to prepare



Once a disaster strikes, it is too late to try to prepare!



The next lesson in the Emergency Preparedness Series is EP-2



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EP-2

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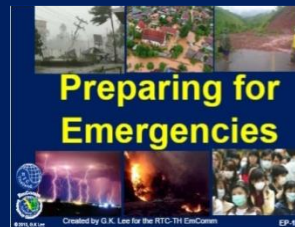


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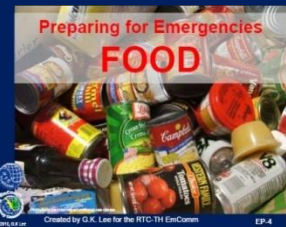
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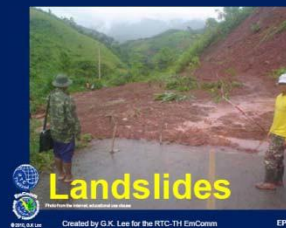
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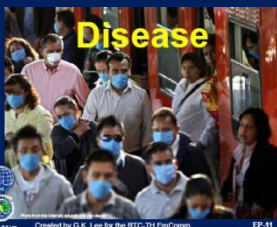
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Questions or Comments

We are
always trying
to improve
our lessons.
Your
comments
and
suggestions
are
welcomed.



EP-1



EP-2



EP-3



EP-4



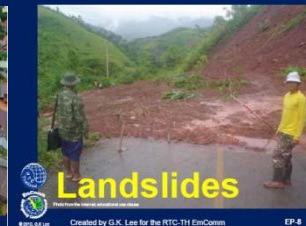
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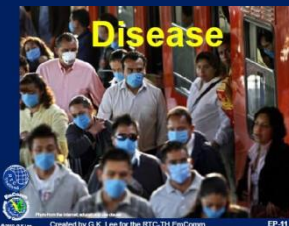
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www.neighborhoodlink.com/org/rtcth

Future RTC-TH Emergency Preparedness Lessons

- Identifying local Geo-Hazards
- Finding safe evacuation / shelter sites
- Identifying main supply routes and alternate routes
- Finding Helicopter Landing Zones
- Helicopter landing zone hand signals
- Ground to air communication without radios



Community-based Environmental Education for



The End

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