 International Federation
of Red Cross and Red Crescent Societies

It's Mr. Radar!! He is the best teacher
when it comes to natural disasters!!

Be prepared for natural disasters
with Mr. Radar!!



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Prepared by	The Relief and Community Health Bureau, the Thai Red Cross Society 1871, Henry Dunant Road, Wang Mai Subdistrict, Pathumwan District, Bangkok 10330 Thailand Tel. (66) 2251-7853-6 Fax (66) 2252-7976 www.rtrc.in.th and www.redcross.or.th
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On the occasion of 90th Foundation Day Anniversary of the Relief and Community Health Bureau by the Thai Red Cross on December 23, 2010 the Relief and Community Health Bureau prepared a cartoon booklet titled **Be prepared for natural disasters with Mr. Radar!!**

Its aim is to publicize the mission of the Relief and Community Health Bureau for disaster preparedness and response. Particularly in terms of coping with disasters so that children and youth will gain knowledge and be aware of how disaster preparedness can help them and their loved ones.

More importantly, children and youth will learn how to cope in natural disasters that may occur suddenly. In time, it is hoped that the children will also educate their families indirectly.

The use of cartoons as a medium for telling stories is expected to motivate and encourage children and youth to read: This is to encourage and promote reading as a good habit as well. Cartoons do not intimidate and often invite curiosity and interest. The main story for this cartoon book highlights the situations people can be in the middle of natural disasters. Its narrator is Mr. Radar: The voice in charge of advising, providing information about causes, observations and coping with a variety of disasters, from winds, to storms, floods, earthquakes, landslides and droughts.

The Committee for Preparation at the Relief and Community Health Bureau hopes that this cartoon book will provide useful information for everyone who reads it.



Before disasters strike!

What do people do?

Jom's family and Ek's family have to face different strange happenings like winds, storms, floods, landslides, earthquakes and drought. They are just like you and me...

How would they cope?

Do you think they will survive?

Will they be rescued??

Join Jom, Ek, and their families in their adventures. Find out what unfolds. See the different problems they have to deal with, and how they learn to deal with natural disasters.

See what Mr. Radar has to say!! He has all the answers and if you listen to him... You could save the day... "One day".



Understanding disasters...



Really strong winds can cause storms

Storms are characterized by strong and sometimes violent winds. Sometimes strong winds can bring rain storms. So, you just need to be prepared.



Non-stop rains can cause floods

Too much water can cause floods and sickness. If it rains too much, even our homes will be affected.. Sometimes our pets are affected too. You just have to know what to do.



Just be aware... Once you know, you will never be afraid. Not even if it's an earthquake

Earthquakes are not so common in our countries. But we should learn what to do - IN CASE it happens one day... It is just about being prepared. That way, you can be safe.



Muddy water is a sign of danger

Muddy water can indicate some strange things... Like a landslide. Bet you didn't know that. Read on to find out more.



Trees are our friends. Without trees we will have drought and heavy rains

The major cause of drought and heavy rains is deforestation-this means when people remove a forest or a stand of trees. Without trees, we will be affected by natural disasters.

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The Adventurers

Jom

An ordinary boy who loves to play. He is also very curious about everything. He is often asking questions about things he does not understand.



Dad

Jom's father. Amicable, easy going with a great sense of humour. He has some knowledge on disaster preparedness as he has attended training sessions with his Red Cross and Red Crescent friends. He love Hugh, his favorite dog.

Mom

Jom's mother. A reasonable and responsible mother...A real genteel lady. It's her rules at home



Hugh

Dad's favorite dog. Sometimes even has the ability to alert Jom's family to strange and dangerous happenings.



Oh!! And there is Ek and Ek's family. They are Jom's neighbors!! Everyone is joining in this adventure. You come too!!!

We can all have fun together!



Hi!!! I am Mr. Radar

I will teach you how to be prepared.... Together we will learn how to act in a strange situation during a natural disaster!!

Really strong winds can cause storms





Jom! It's going to start raining soon.
Let's go inside!
You too, Ek! Go home! Stay out of the rain,
otherwise you might get sick!
You could catch a cold!



Okay! I was going
to help you bring
those clothes inside.



Ek!!! I also need your
help with these clothes too!
Come home now! I don't
want you to get wet.



Got to go! Bye, Jom!

Hey,
thanks for offering
to help my mom.
See you later!!



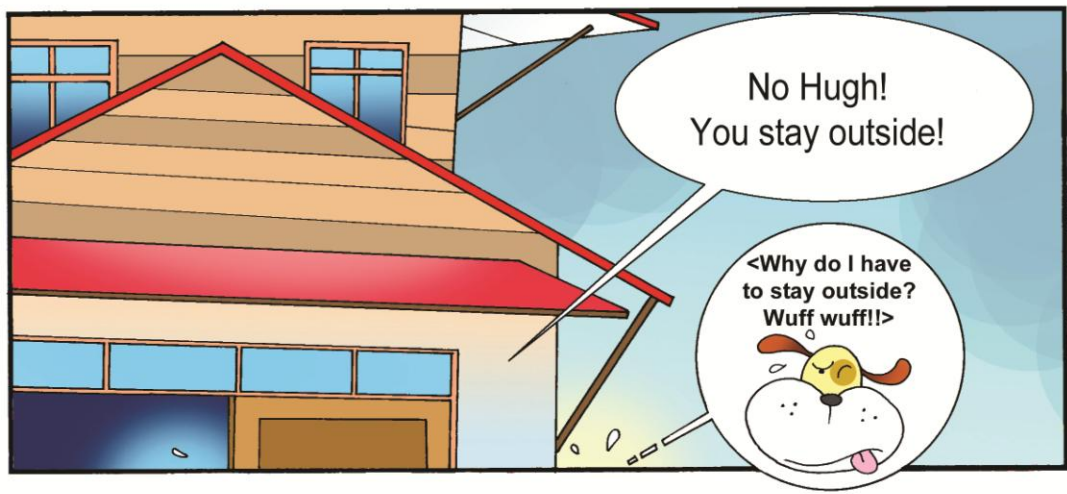
It rains every time
I wash the car!

Every time!

Grr...



Dad! Stop worrying
about the car!
Please close
the windows.



No Hugh!
You stay outside!

<Why do I have
to stay outside?
Wuff wuff!!>



rumble
roaring thunder

lighting flash



Hey, kids!!! A **windstorm** is when you feel strong winds blowing violently around you. It can destroy building and trees. There is usually no rain, **BUT** it may rain after the windstorm. When that happens, the rain will be **HEAVY!!**

You should be ready for windstorms and heavy rains in March, April and May.

Make sure you can last about seven days at home without electricity or water!!

I have some safety tips for you too...

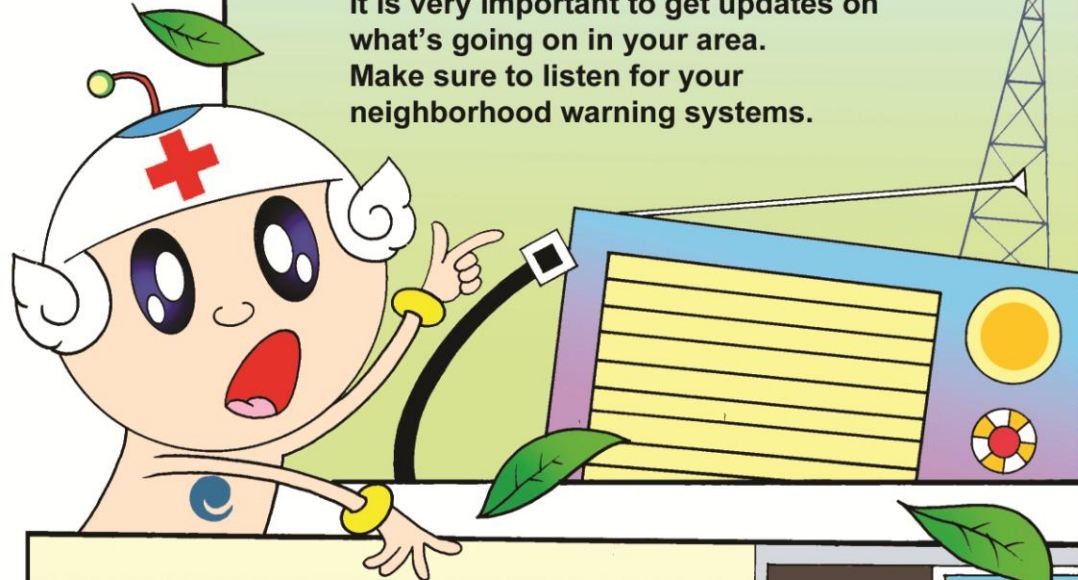


- ☆ Even when there is no electricity, you should still listen to the local news channels from a battery-operated radio.

Make sure you have that kind of radio.

It is very important to get updates on what's going on in your area.

Make sure to listen for your neighborhood warning systems.



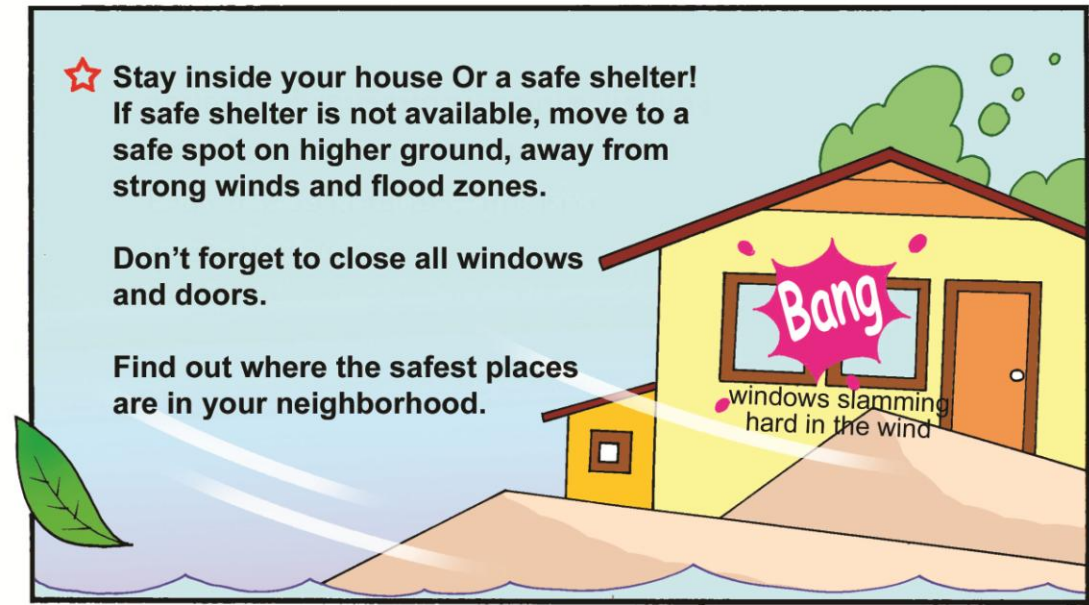
- ☆ Make sure your home has a first aid kit, extra clothes, dried food, canned foods, mosquito coils, candles, flashlights, batteries and drinking water that can last for 5-7 days.



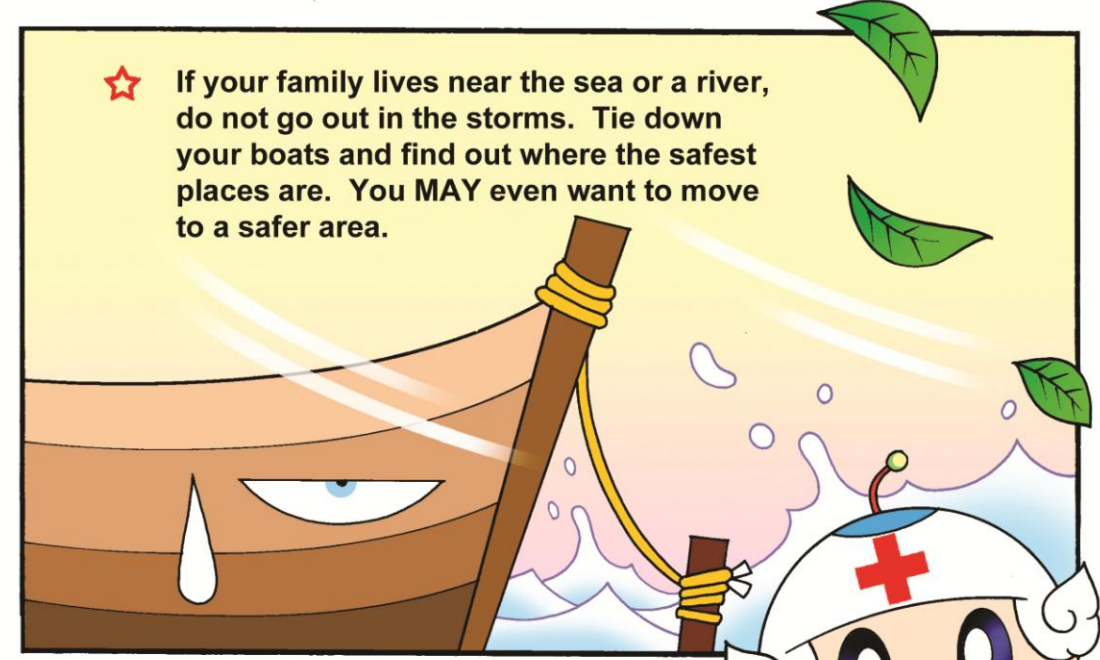
- ☆ Stay inside your house Or a safe shelter! If safe shelter is not available, move to a safe spot on higher ground, away from strong winds and flood zones.

Don't forget to close all windows and doors.

Find out where the safest places are in your neighborhood.



- ☆ If your family lives near the sea or a river, do not go out in the storms. Tie down your boats and find out where the safest places are. You MAY even want to move to a safer area.



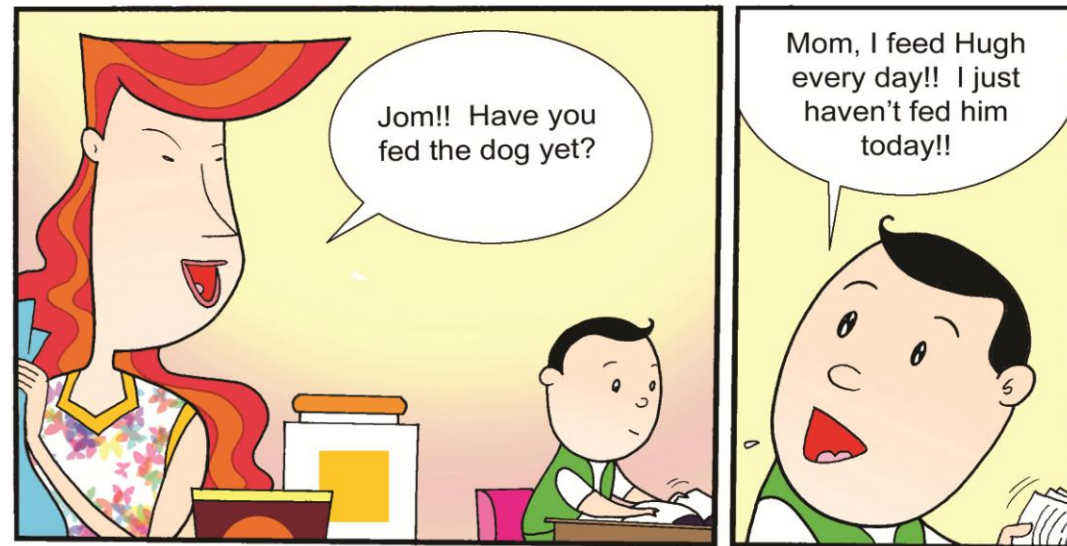
So!! Don't forget. Have a safety kit that will last for up to 7 days at home! Pull out all electric plugs! and know all your safe shelters!!

Non-stop rains can cause floods

It has been raining for five days now

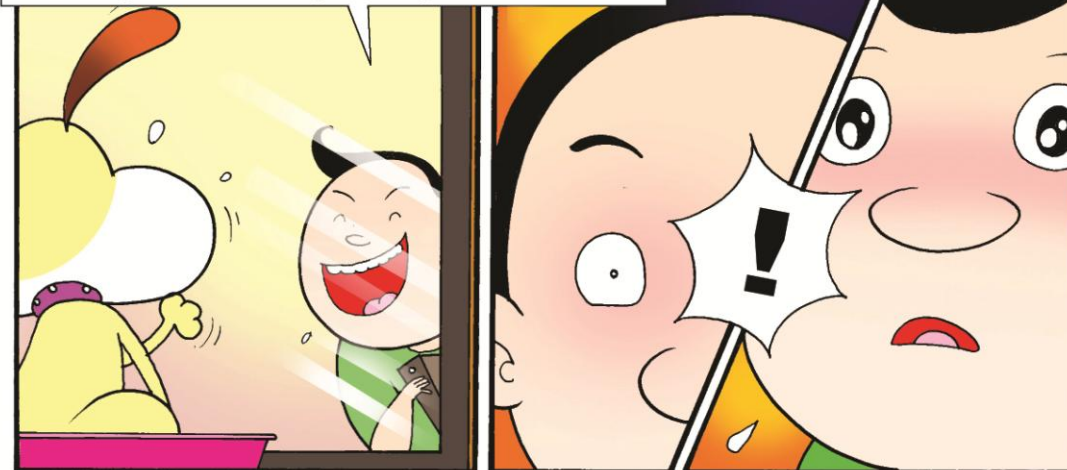
Splish splash
pouring rain

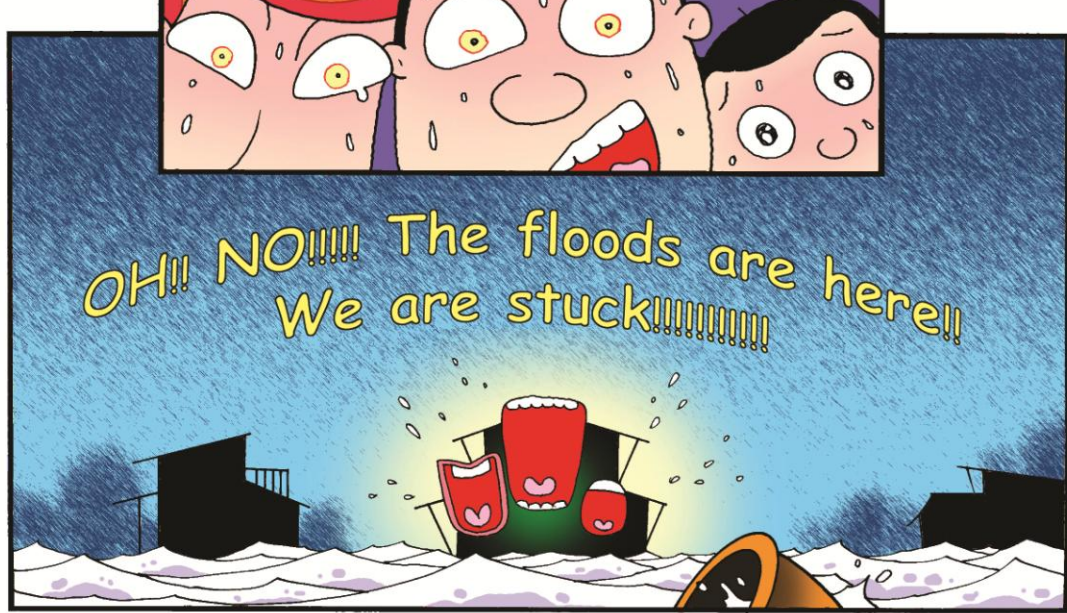
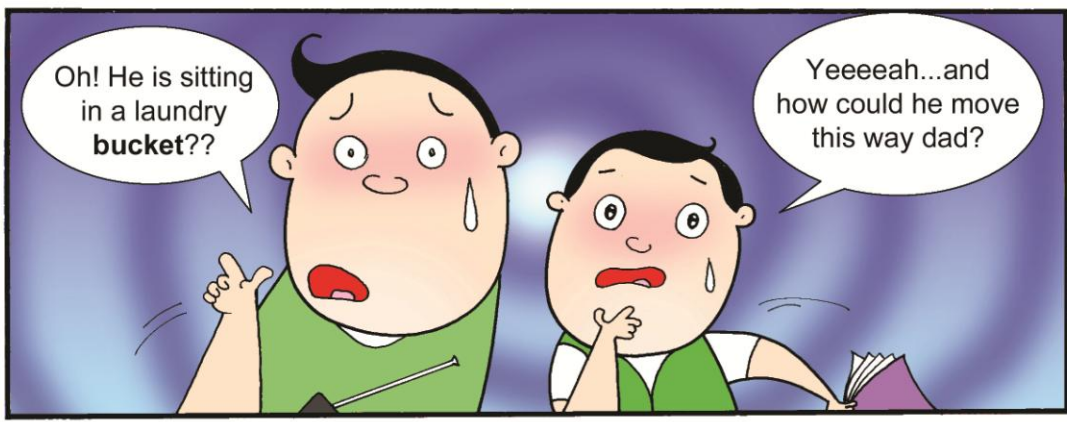
It has been five days!!
Five days!! And it's still
raining cats and dogs.



Yeah! He MUST be hungry. That's why he is pawing at our window... AND he is sitting in a laundry bucket floating this way!!! Ha! Ha! Ha!

Don't worry, Dad. I have food stored for several days. We can last for a week!



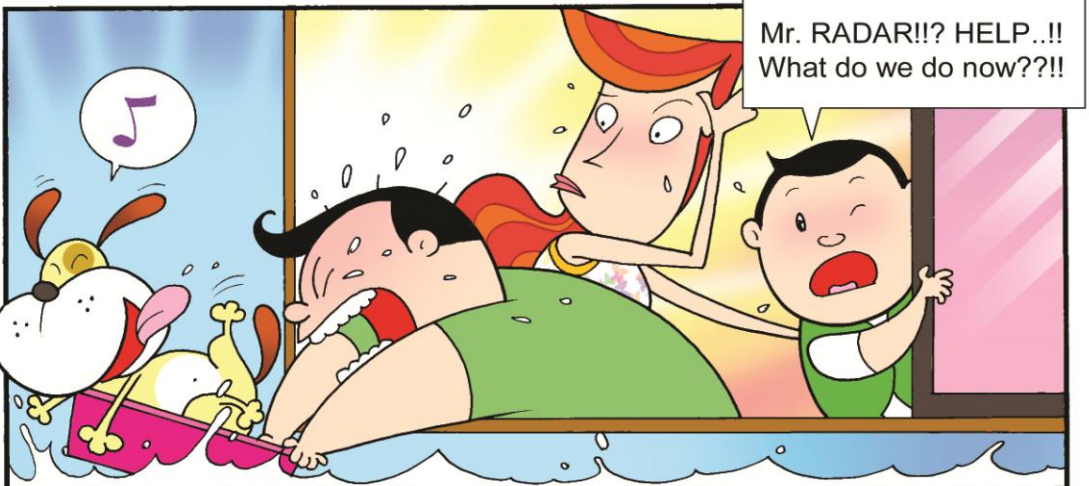


Disasters caused by **flood waters** are called inundation. Big word, huh? It just means a lot of water crept up on us. Usually there is so much water that we can't go anywhere.

How do floods happen?? Floods can happen in many ways. The water in ponds and rivers could overflow. Dams could have broken. And there could have been non-stop heavy rain over a long period of time or a short period of time. These are called flash floods.

If we do not take care of the world we live in, we will face large natural disasters more frequently. One of these disasters are "floods". Floods are caused when people clear our forests. When that happens, we do not have any more shade or moisture. It becomes hot and dry. Littering in rivers, canals or drains can also cause floods. Litter clogs waterways and causes floods in many areas. Flood waters or standing waters are also dangerous. They can bring diseases like: Conjunctivitis, Diarrhea, Leptospirosis, Athlete's foot, and Wound Infections. To avoid being sick, we should eat properly cooked food, and drink clean water. Oh, and we need to wash our hands before eating too! Kids, if you have a cut don't play in flood waters. It could hurt you! AND!! Don't play with toys in flood water too. You could get seriously sick from it. I know it sounds strange. But it's true!!!





Mr. RADAR!!? HELP..!!
What do we do now??!!



Jom!! Relax.. It's not that bad. Here's what you should do! We should all be safe if we follow these tips.

★ First, move everyone to higher ground or a safe building.

People, including pets and appliances - MOVE.

Then, secure your home!!
Make your house safe from water!!



★ Listen to the radio for updated news and information. Listen out for neighborhood warnings!

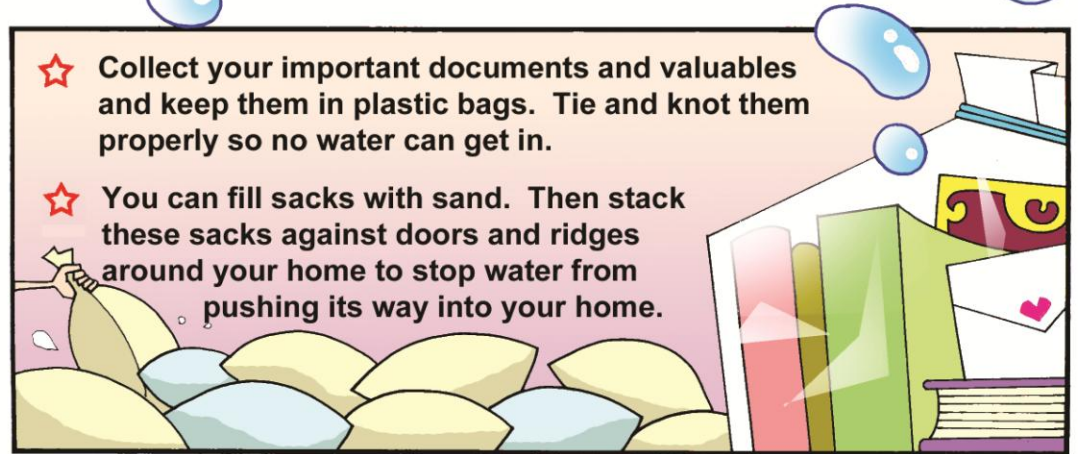
★ Remember that kit I was talking about? Well, you need it now!!

You should have rice, dried foods, instant noodles and clean drinking water to last for a week.

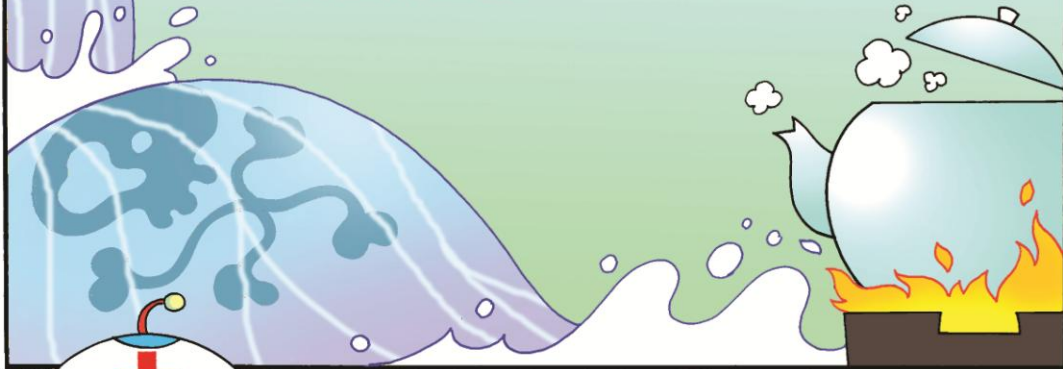
You also need to prepare medicines, a first aid kit, extra clothes, blankets, candles, matches, dry firewood, a radio with batteries, a flashlight. Don't forget extra batteries too!!

★ Collect your important documents and valuables and keep them in plastic bags. Tie and knot them properly so no water can get in.

★ You can fill sacks with sand. Then stack these sacks against doors and ridges around your home to stop water from pushing its way into your home.

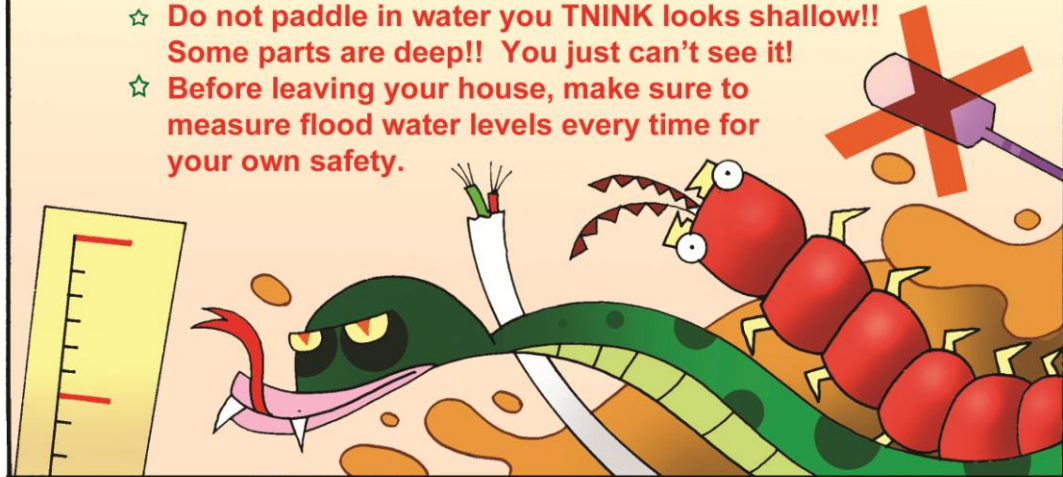


☆ Do not play in the flood water. The water could be toxic. Or may contain a live wire that could electrocute, and possibly kill you.. It is that serious..



KIDS!!! Pay attention to these tips!!

- ☆ Stay away from live wires-or exposed wires, electricity is still flowing through them and they can kill!!!
- ☆ Avoid poisonous snakes and centipedes during floods.
- ☆ Watch out for landslides or mudslides. Heavy rain and floods can cause landslides and mudslides!!
- ☆ Do not swim! Do not play on boats!
- ☆ Do not paddle in water you THINK looks shallow!! Some parts are deep!! You just can't see it!
- ☆ Before leaving your house, make sure to measure flood water levels every time for your own safety.





HEEELLOOOOO!!
Are you coming with us??
We have plenty
of room!!

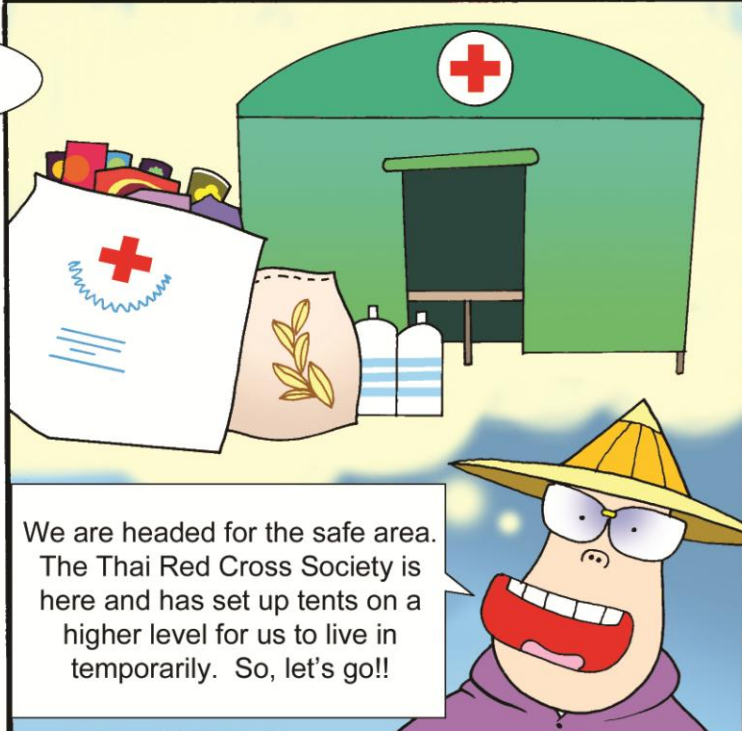
Haven't you guys
left your house yet? Jom,
come!! Bring the dog too!!



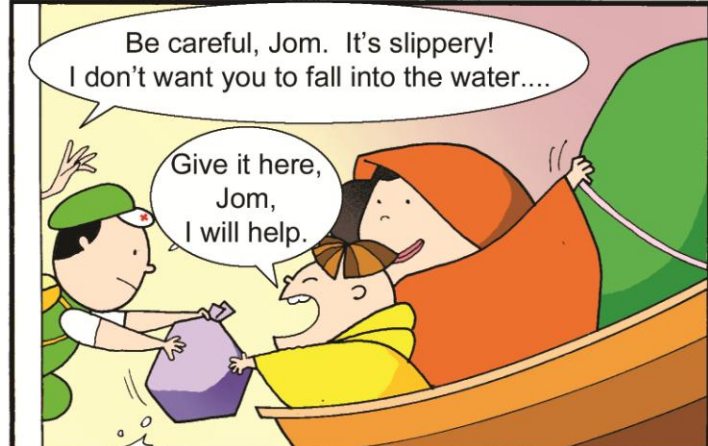
Let's hurry. The villagers
have moved up to higher
ground already.



Where are you
going, Boon??!!



We are headed for the safe area.
The Thai Red Cross Society
is here and has set up tents on a
higher level for us to live in
temporarily. So, let's go!!



Be careful, Jom. It's slippery!
I don't want you to fall into the water....

Give it here,
Jom,
I will help.



Wait for me!!!



What are you doing,
Dad?



It's the dog. It's the DOG!!
It won't stay still!! I can't
PACK him properly!!

**Just be aware! Once you know,
you will never be afraid.
Not even if it's an earthquake**



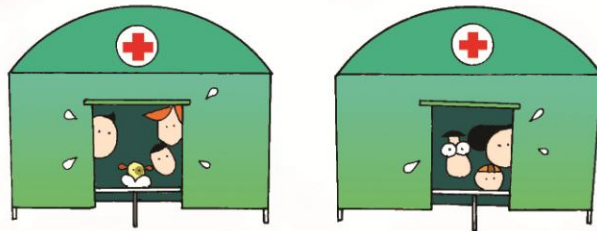
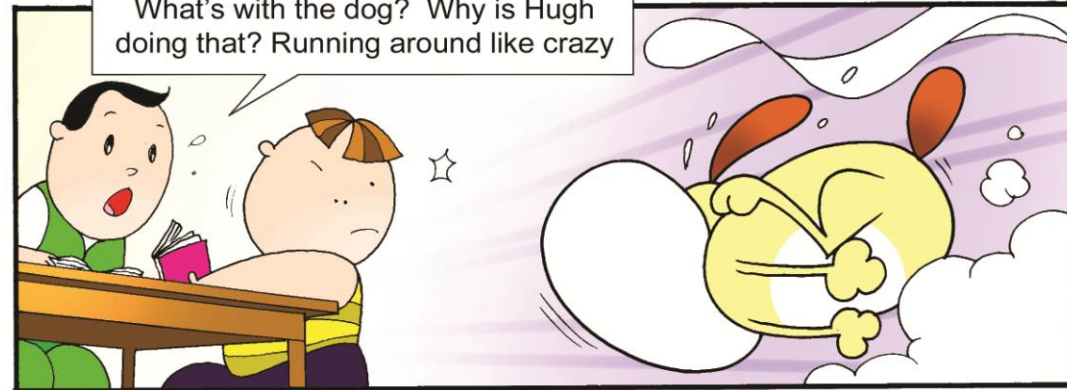
Aww...Well, some people say that if you help the Red Cross and the Red Crescent Societies, you are helping humanity... That's us too!



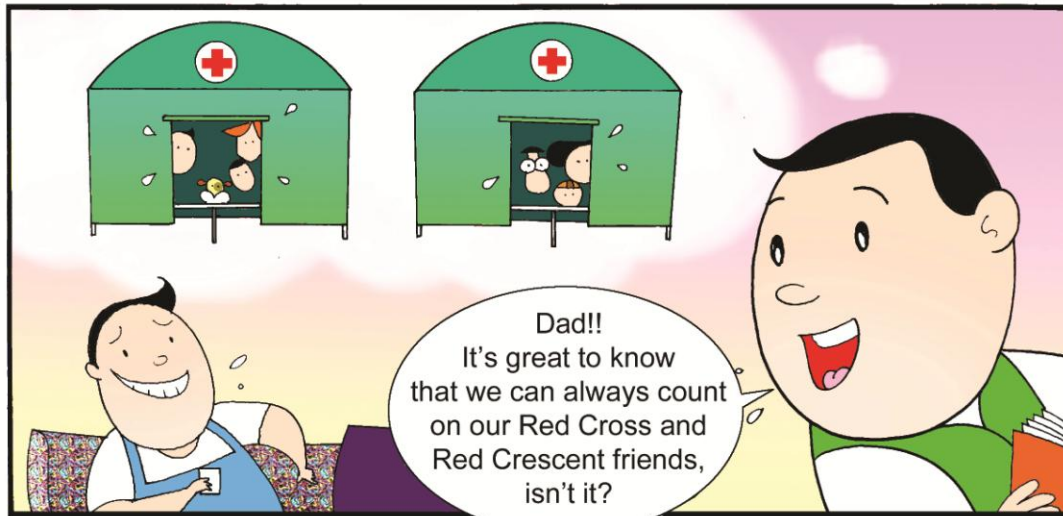
Do you help the Red Cross or Red Crescent regularly, Dad??

I donated blood... Err...Once

What's with the dog? Why is Hugh doing that? Running around like crazy



Dad!! It's great to know that we can always count on our Red Cross and Red Crescent friends, isn't it?



L-L-L-Look at that page... It's m-m-moving--an-an-and what is that t-t-t-thing!!!



GHOST





Ghosts??
What are you talking about??
What are you reading?



Rumble swinging lights
shaking house Rumble



Rumble



I guess that's what the dog was trying to run away from...



The dog was running away from the ghosts?

Ek, you can't be serious!!
Hugh was acting funny because he sensed that there was an earthquake coming!!

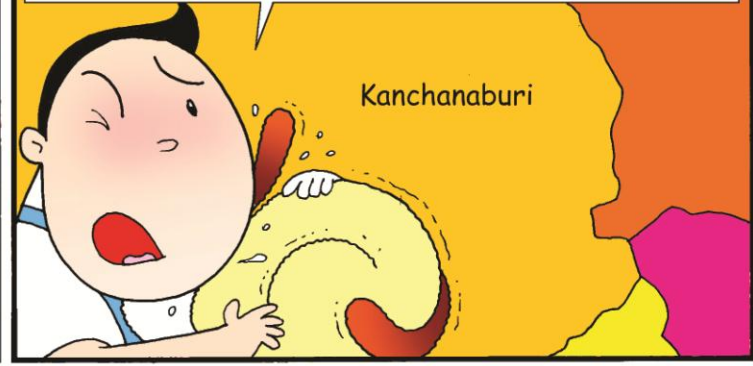


Rumble
Oh, NOOOO!!!
Earthquake!!!



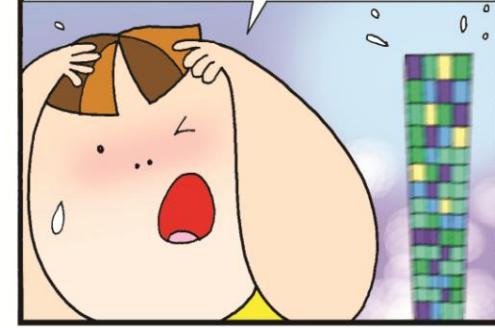
Dad! What causes an earthquake?

Earthquakes are caused by the movement of "plates" on the surface of the earth. They grind and scrape against each other with great force causing an earthquake. We have many plates in Thailand, and around the Southeast Asian region as well.
That's what you just felt...



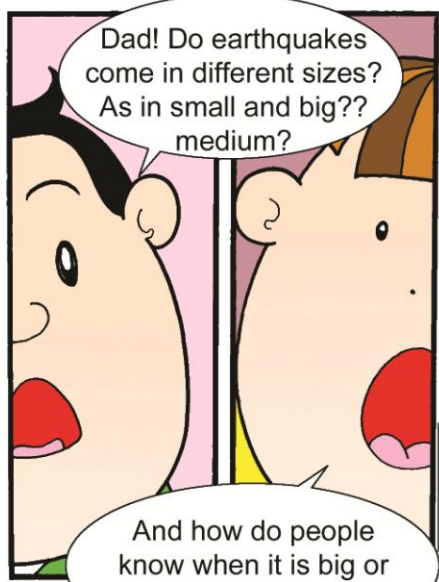
Kanchanaburi

Gosh!! Our low rise houses are shaking like crazy. Can you imagine what it's like for people who live or work in high rise buildings??! Ugh, scary!!



I don't think it's that bad, Ek. New buildings are built following building laws and regulations. Small quakes should not affect our homes. or us!!!
Besides earthquakes here in Thailand and in our region are usually small quakes.





Earthquakes are measured on the Richter scale. Usually, they call the measurement a "magnitude"

If it's between a magnitude of **1 - 2.9**, you feel a little vibration and may feel a little dizzy.

If the magnitude is **3 - 3.9** on the Richter scale, you could feel like you are swaying. Kind of like a train passing by....



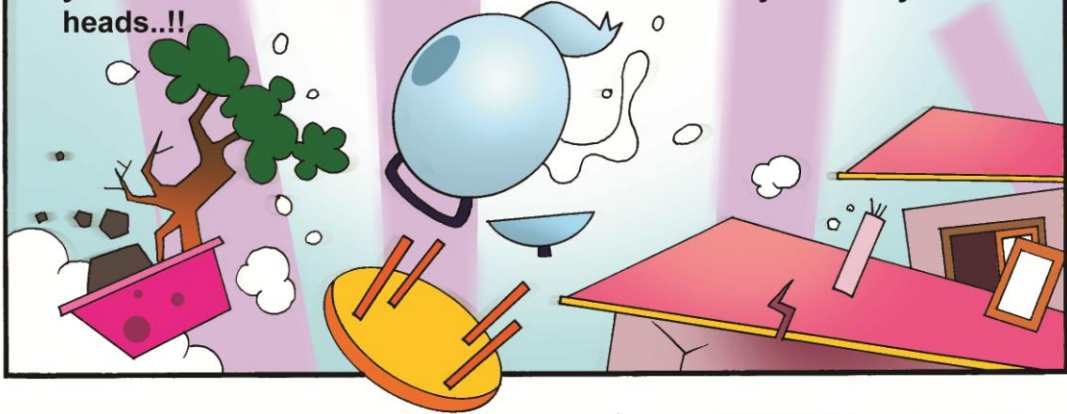
A magnitude of 4 - 4.9 on the Richter scale and you will feel a little vibration. Your lights may shake a little.

A magnitude of 5 - 5.9 on the Richter scale and your furniture will move... Yup!! Chairs and tables will move. Your television may even fall over!!

Once your building starts to sway hard and things start bouncing in your home... That's measured on the Richter scale between **6 - 6.9**

An earthquake at **7.0** Richter and over, you **WILL** feel the ground move violently. Hanging objects will swing like crazy. Buildings will be badly damaged, almost all structures will fall!!

When this happens, make sure you're under a mattress to protect yourself!! OR under a secure desk!! Or a doorway!! Cover your heads...!!



I guess we are still okay... Our building isn't moving around and nothing is bouncing around!! So, definitely not earthquakes at a Richter scale of 7!!




Dad, Hugh your dog - IT is safe... Have you ever wondered how I was feeling?? Or if I was safe??!



So, what should we do during an earthquake dad!!






Okay! Earthquake Safety Tips.
If there is an earthquake, remember these things...

- ★ If you're inside, stay away from windows, get under a sturdy table or a desk to protect your head! You can also place a mattress over yourself to stop things from falling on you! Protect your eyes by pressing your face into your arm. Make sure nothing can hit you!
- ★ Do not use matches. Do not use the gas stove!! Don't even turn on the lights. Stay away from anything that can be a fire hazard.
- ★ If your mum or dad is driving, tell them to slow down and drive to a safe place. Then stay in the car until the shaking stops.

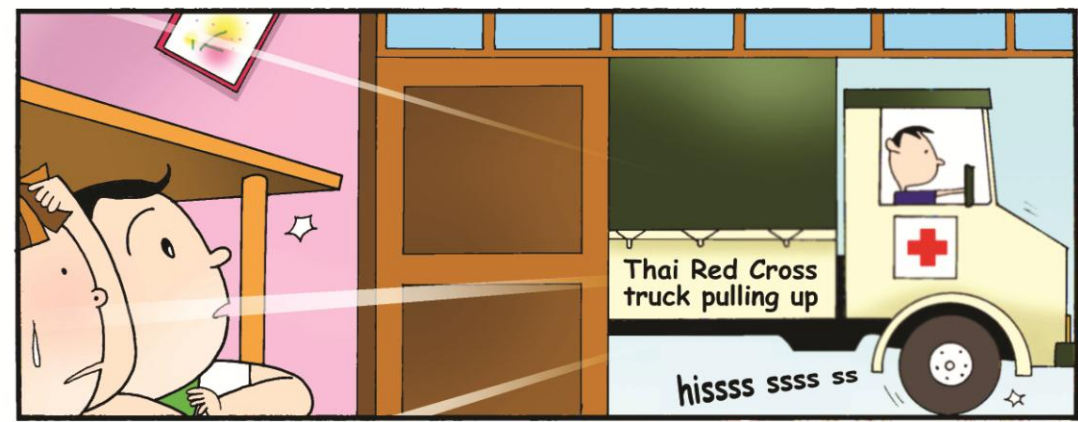
★ If you are staying in a tall apartment or building.. Get out as soon as you can.. Once you are outside, watch out for falling glass... Make sure nothing can fall on you!

BE CAREFUL!!

★ If you live by the sea, leave!! Tell your mum and dad you all need to leave immediately! If your family stays on, you may all be hit by a big ocean wave a tsunami!!

If someone around you is hurt, let an adult to take them to the hospital or to call the doctor. And keep listening to your battery-operated radio for neighborhood messages!



Is everyone okay? Get inside the truck, we have to go now! The earthquake may cause landslides in this area.

What AGAIN?? We just dealt with a windstorm, a rain storm, floods and heavy rains and an earthquake.. Now, there's a landslide??

Let's get in the car. We don't know when landslides will occur.

Just stop worrying. I am here... we all are going to be okay!!! Hugh will be here too!!

Murky or cloudy water is a sign of danger

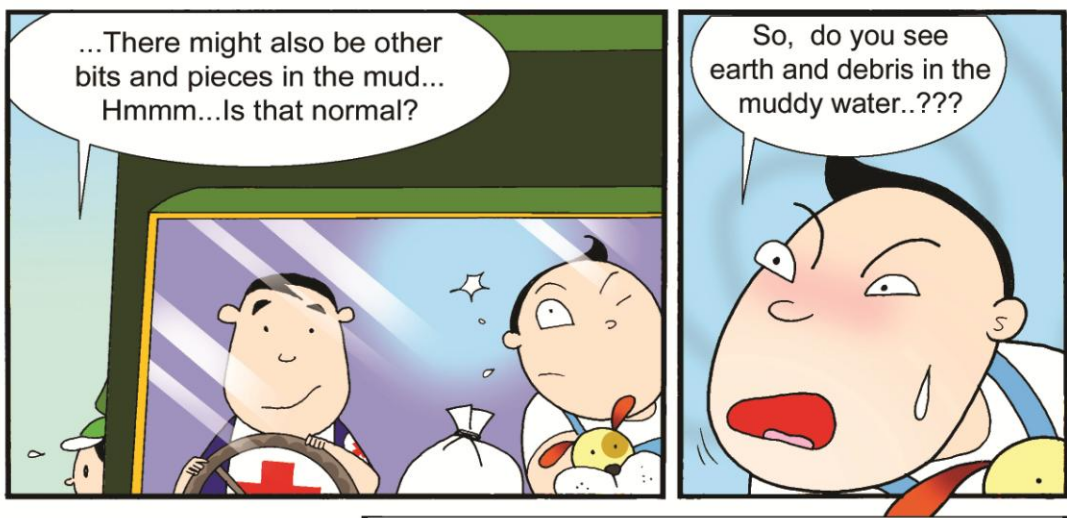
Dad!! Why is the water flowing down the river so murky? It looks really dirty....

That is normal, Jom. Water passes through the earth, rocks, stones and grass. It's not like the tap water and drinking water at home.



...There might also be other bits and pieces in the mud... Hmmm...Is that normal?

So, do you see earth and debris in the muddy water..???



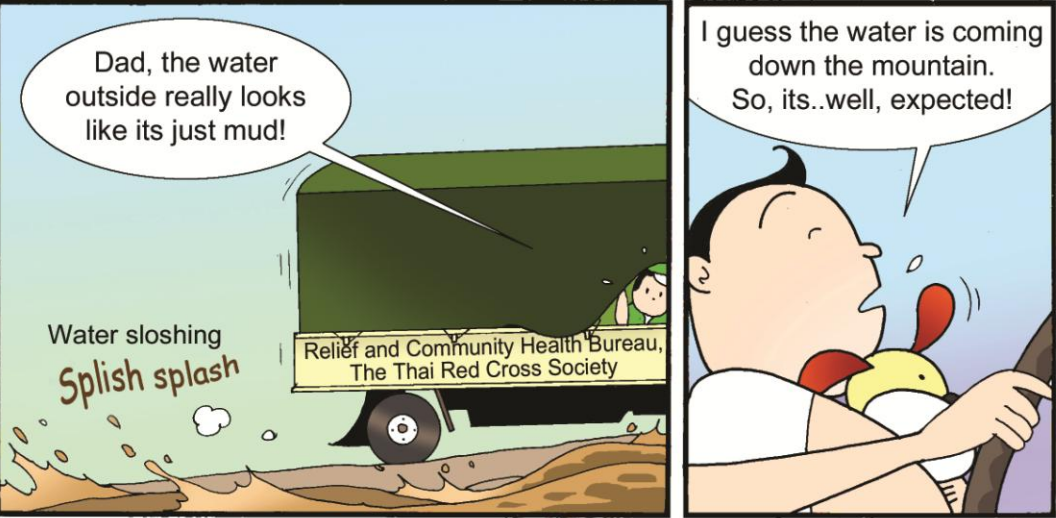
Uh-huh. Yeah, Dad... AND there is a loud crashing sound from the mountains too...

Muddy water that is carrying dirt, earth and rocks... And you hear a crashing sound?? This is dangerous! Dangerous!! Be very very careful!! Those are signs for a landslide...



Dad, the water outside really looks like its just mud!

I guess the water is coming down the mountain. So, its..well, expected!



Heelp!!!! LANDSLIDE!!

Aaaargh!! NO, NOOOOO...!!!!

Rumble





Alright, people. We will need to walk. The landslide just blocked the road....



How far is it? How long does it take to walk from here??

Not too far. Our evacuation centre is just over this hill. Come on!! Let's go.



Oh, my. Oh, my.. We have to WALK????!!!



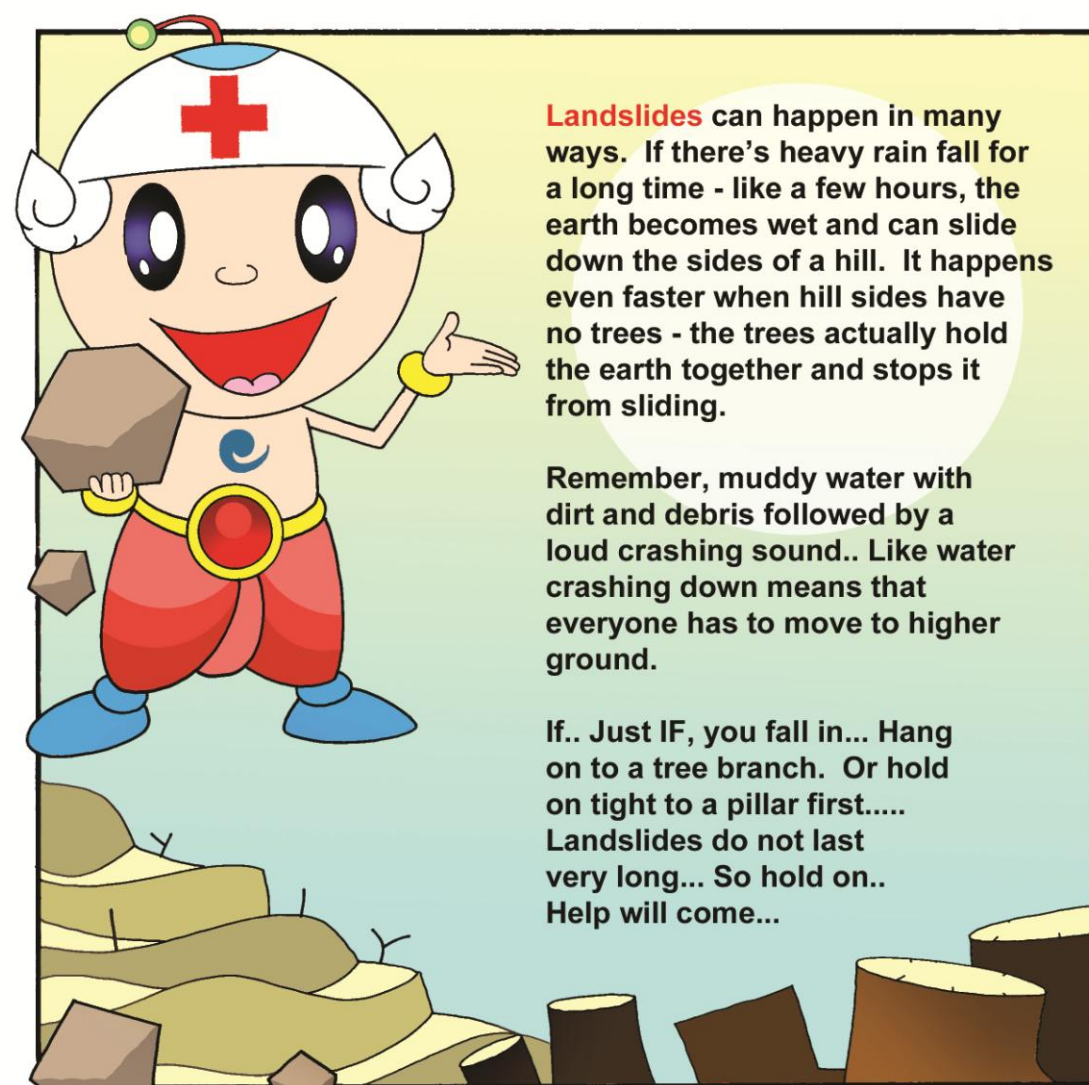
C'mon, mum,... You can do it!! It's just a bit of exercise!! Think of it as your usual Saturday shopping spree sprint! Imagine you are rushing from the meat shop to the ice cream shop.



We were so lucky!! We have a great driver!! Mr. Driver, if you had driven too fast, we would have been hit by the landslide!!



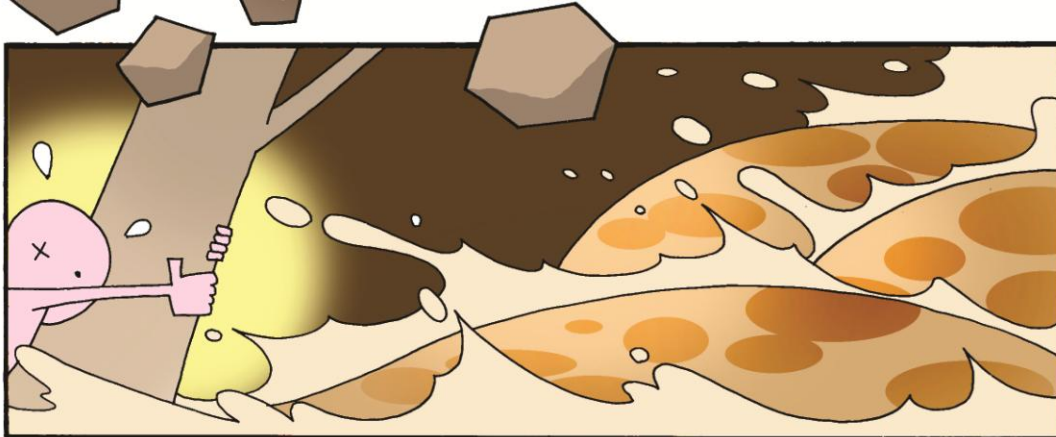
Oh, think nothing of it...But how did the landslide happen so suddenly..



Landslides can happen in many ways. If there's heavy rain fall for a long time - like a few hours, the earth becomes wet and can slide down the sides of a hill. It happens even faster when hill sides have no trees - the trees actually hold the earth together and stops it from sliding.

Remember, muddy water with dirt and debris followed by a loud crashing sound.. Like water crashing down means that everyone has to move to higher ground.

If.. Just IF, you fall in... Hang on to a tree branch. Or hold on tight to a pillar first..... Landslides do not last very long... So hold on.. Help will come...



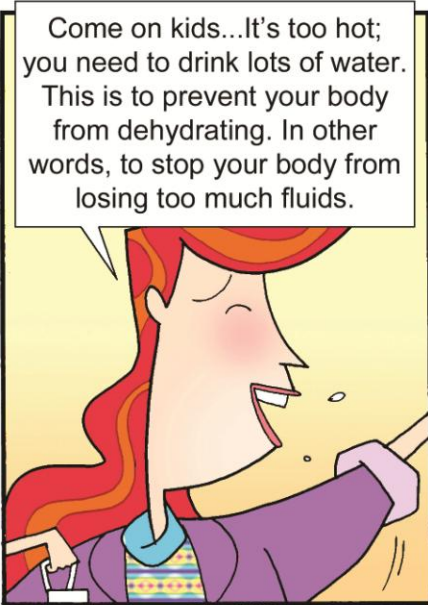
Trees are our friends. Without trees, we will have drought and heavy rains



Gosh!! Why is it so so so hot!! I feel like I'm being fried. And our water is almost all gone!!



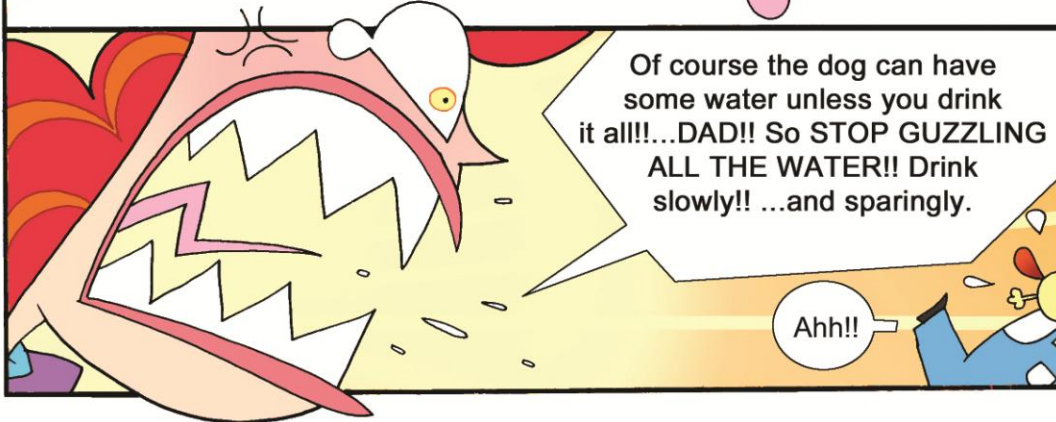
Yeah, Mom!! I'm really hot too.. AND thirsty...Can I have some water please?? Do we have ice??



Come on kids...It's too hot; you need to drink lots of water. This is to prevent your body from dehydrating. In other words, to stop your body from losing too much fluids.



Can Hugh have some water???



Of course the dog can have some water unless you drink it all!!!...DAD!! So STOP GUZZLING ALL THE WATER!! Drink slowly!! ...and sparingly.

Ahh!!



People! People... Calm down... I have good news and bad news!!



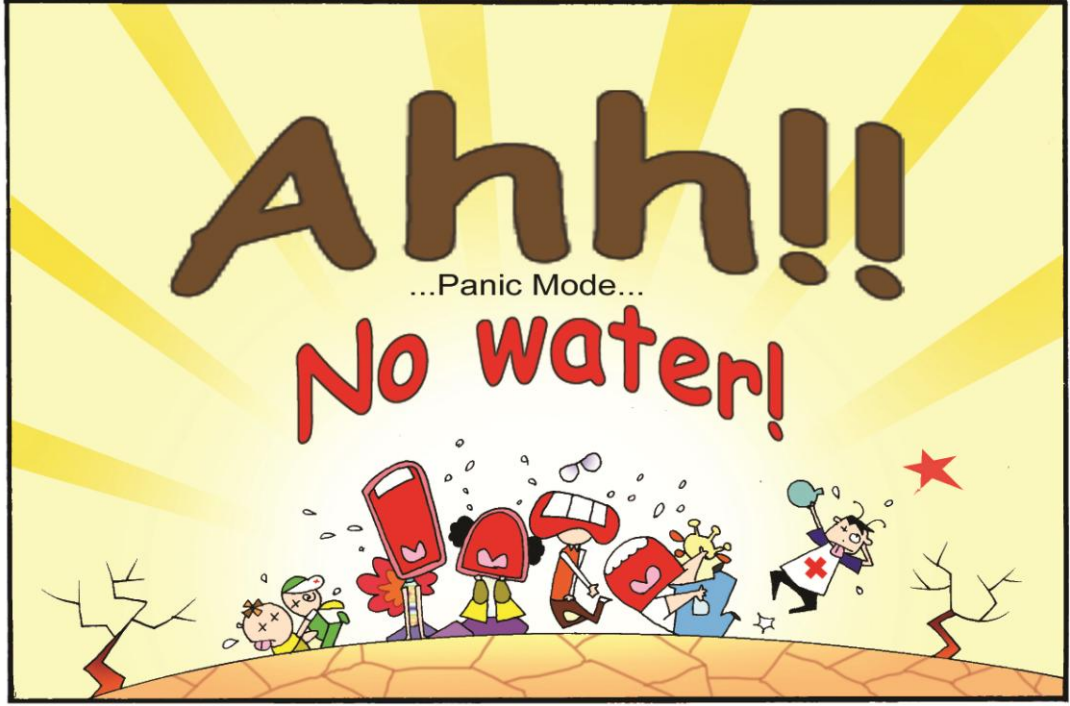
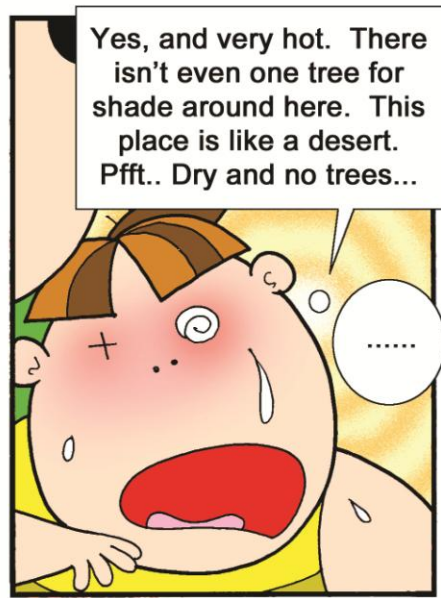
Grabbing a tree trunk!



Okay! Tell us the bad news first!! Is there going to be anything worse than this?



Bad news is... Well it's not bad news really - just inconvenient.... We have been walking in the wrong direction. There is nothing ahead. We need to walk back to where we started!



Drought is caused by little or no “precipitation”, it’s a big word for rain. If a place is not receiving enough moisture or water or if it’s not raining when it’s meant to - like during the rainy season.

Then you should expect a drought. This is often caused by deforestation-when people cut trees up... You can even guess when a drought is very nearby... All the baby plants you see will become all dry and shriveled up.

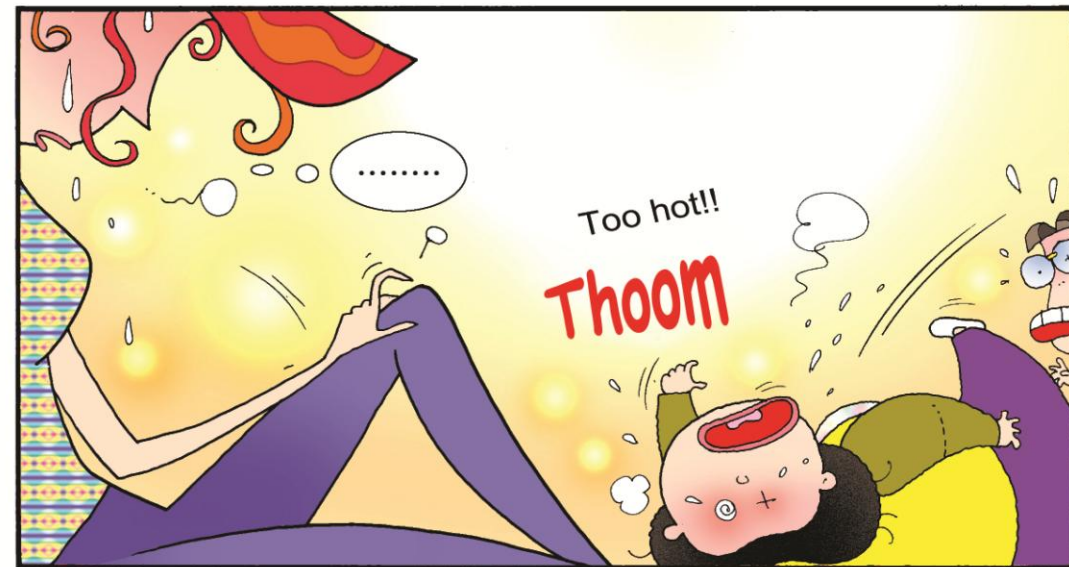
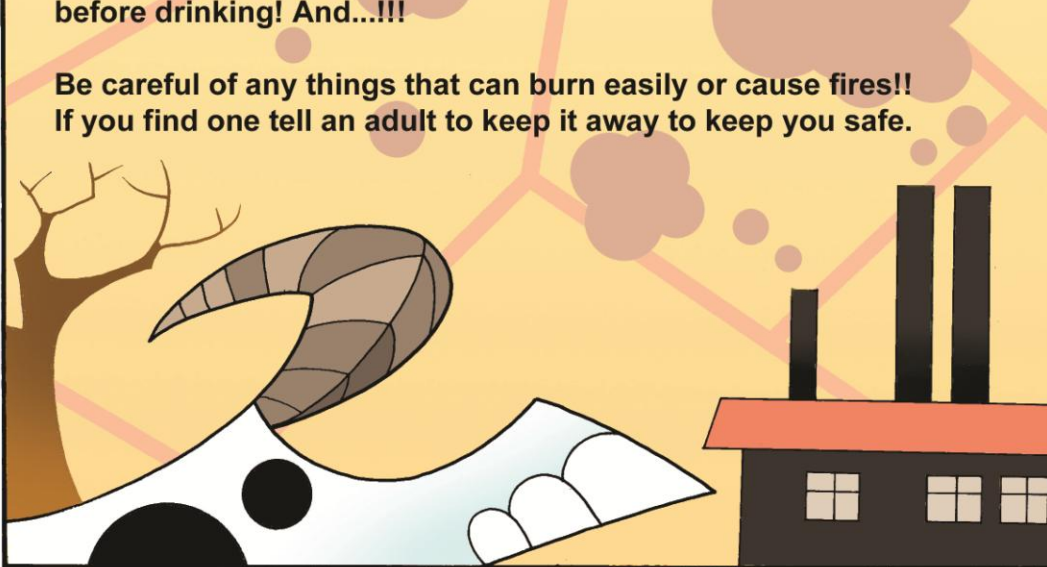
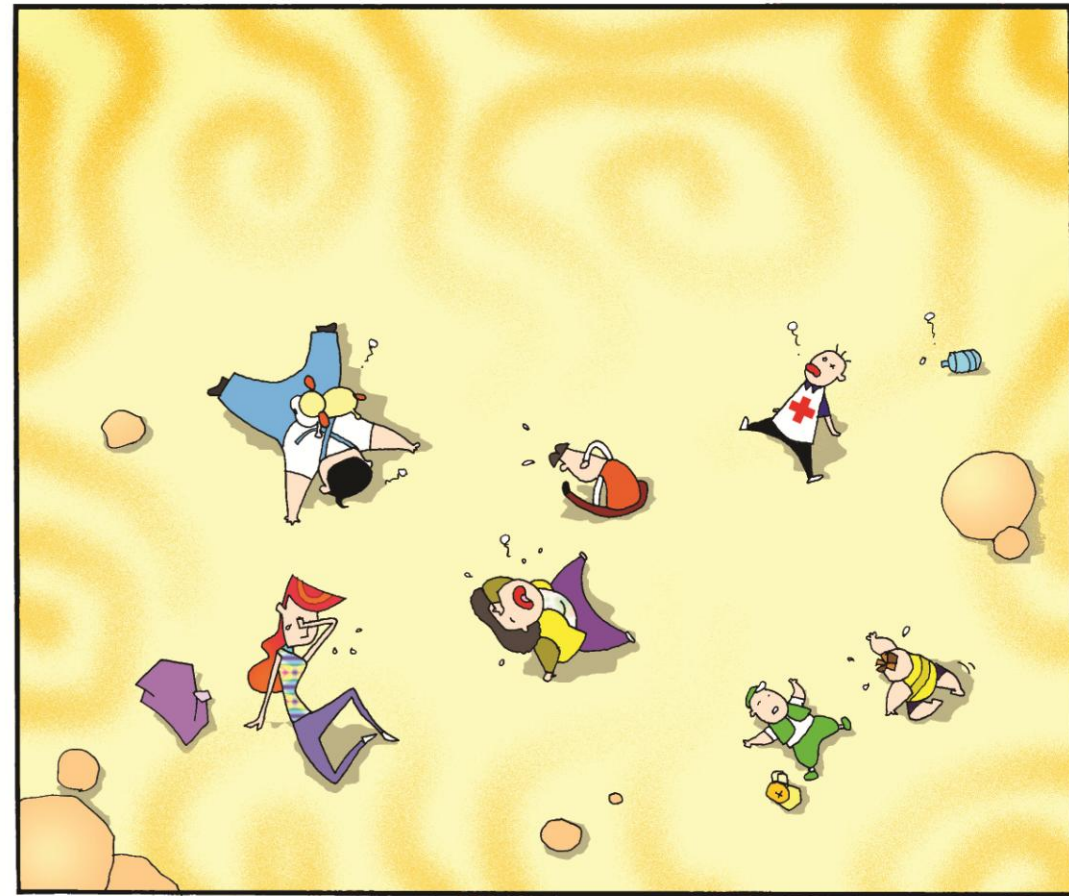
So, in drought conditions...

Store lots of drinking water ahead of time.

Have a plan for how much water to drink in each day.

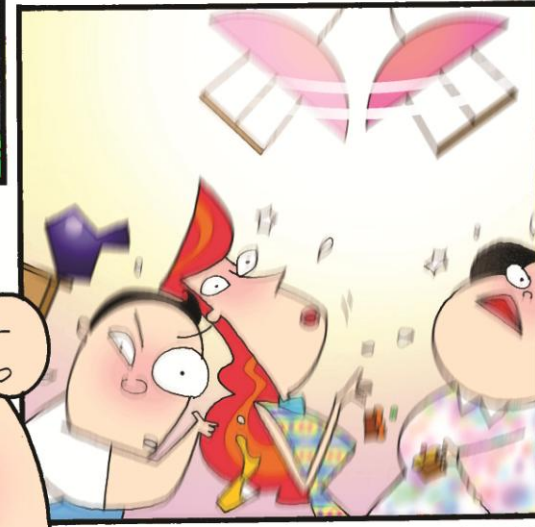
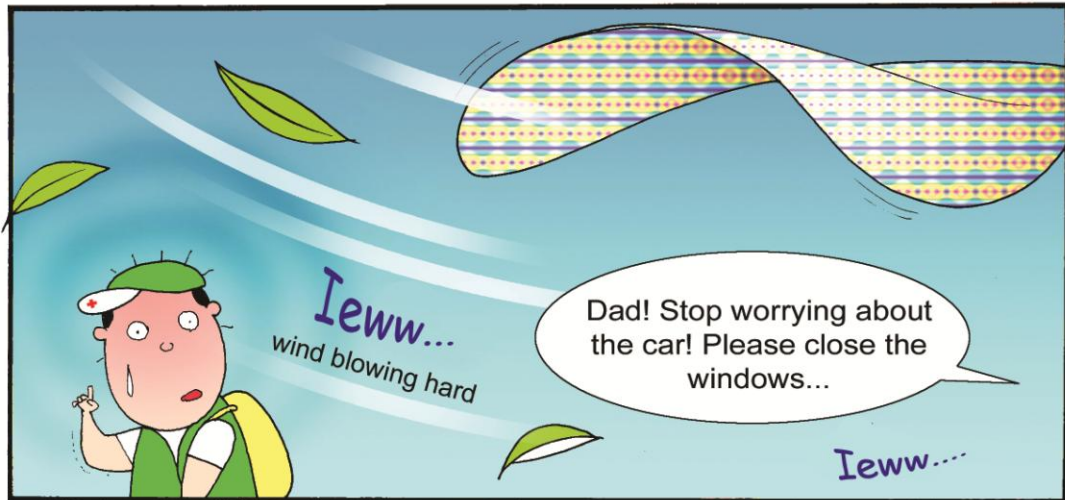
If you are wondering if your water is clean - boil it before drinking! And...!!!

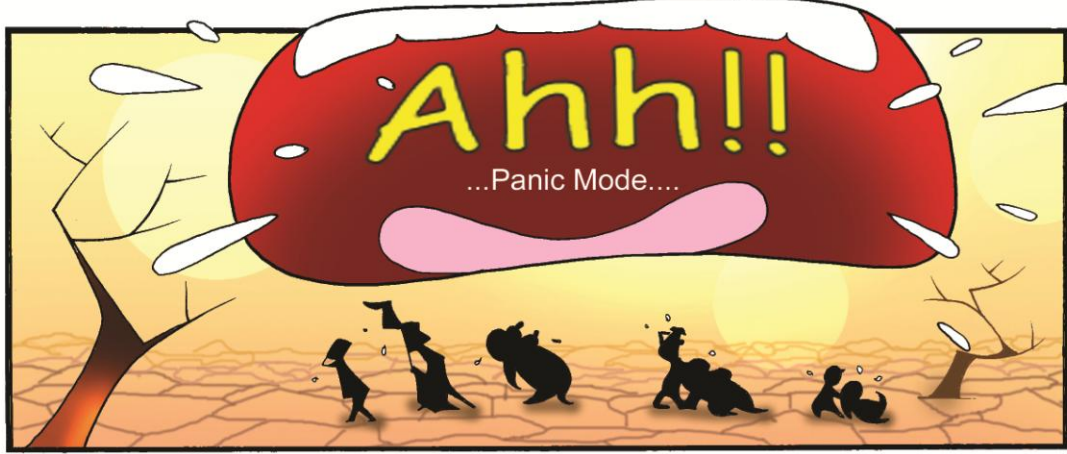
Be careful of any things that can burn easily or cause fires!! If you find one tell an adult to keep it away to keep you safe.











Okay, everyone. Don't forget these important tips!!

What should you do if there is a heavy rainstorm??

Pull everything out of the electric sockets!! Listen to a battery-operated radio for news updates on what to do. Move your things upstairs. And if you live by the sea - do not leave your home!! If you step out of your home, leave the area for a "safe area".

What should you do if there is a flood??

Move to a higher place. Listen for the news on a battery-operated radio. Prepare enough drinking water and food for 7 days. Pack your clothes and important documents into big plastic bags, garbage bags or freezer bags, to keep them safe. Fill sacks with sand, if you can!! And keep a basic first aid kit!

If you feel the tremors of an "Earthquake"..what should you do??

Be aware!! Do not panic! Hide under the table. Do not turn on the electricity. And if you live by the sea, leave the area and move to higher ground as soon as you can.

How do you know when there is going to be a landslide??

Remember, water becomes muddy. You will hear a loud crashing sound. And, Don't forget to get to higher ground!

If there has been no rain for a long time... and there might be a drought. What should you do??

Store plenty of water and be prepared for fires.



The Committee of Preparation for this cartoon book, titled "Be prepared for natural disasters with Mr. Radar!!"

Advisors

- Lt.Gen. Amnat Barlee M.D.(Rtd.) Director of Relief and Community Health Bureau, The Thai Red Cross Society
- Mr. Pichit Siriwan, M.D. Deputy Director of Relief and Community Health Bureau, The Thai Red Cross Society
- Ms. Wilaiwan Petchkum, RPh Former Assistant Director of Relief and Community Health Bureau, Administrative Office
- Mr. Phanon Supprasert Head of Administration Section

The Committee Members

- Ms. Somsiri Anongkanatrakool
- Ms. Pavinee Yuprasert
- Mrs. Sunisthida Phetduang
- Mrs. Yaowaluk Yodsopha
- Mr. Phaithoon Noiviset
- Ms. Angsumalee Atthachadee
- Ms. Wanpen Thanisson
- Mrs. Sirimol Khumpheephant
- Ms. Sukan Youkong
- Mrs. Nattavadee Poolamphai
- Mrs. Urai Chaiyanatr

Be prepared for winds, storms, heavy rains!
Floods, earthquakes, landslides and drought!

Hi! I'm Mr. Radar!
I can teach you about disasters!!
And I have some safety tips
for you too!!

