

How to act when a Fire Breaks Out

1. Safety measures to take when a fire breaks out

When a fire breaks out, the first person **who** discover the fire should inform the others by yelling out **loudly**. After **warning** the others, **that** person should try to put out the fire by using a fire extinguisher, sand, or a fire hydrant. **While putting** out the fire, it is important not to suffocate from the smoke or get trapped inside the fire. The most important thing **is calling 119 immediately for help and evacuating if you think it's impossible to put out the fire in an early stage**. When you evacuate, In order to slow down the rate of combustion, you must close the door before you evacuate **when you evacuate**.

2. Calling 119 (reporting to the fire station)

- ◆ If you find it impossible to put out the fire with water or a fire extinguisher, you must call 119 (fire station) immediately for help.
- ◆ When a fire breaks out the first person **who** find the fire should yell "fire" in a loud voice or ring the fire alarm in order to inform the others about the fire.
- ◆ **When you report** fire to the fire station you need to calm down and explain the place where the fire occurred, the exact address, the object that is on fire, and **the cause** of the fire to the fire station.



※How to use a fire extinguisher.



Pull out the Safety pin



Pull out the hose



Squeeze the handle



Aim the hose and discharge

3. Leading to Safety and Evacuation

A. Leading people to a safe place



- ◆ In the case of fire, **most people** are not aware of the structure of the building so they are likely **to be in the state of panic** or be frightened. **There fore** person who is well aware of the building's structure should lead the people the way out.
- ◆ People should follow the directions of the guide or follow the leading light in the **hallway** in a calm and orderly fashion to escape.

B. How to evacuate

- ◆ In case of a fire occurs the most important thing is **being** careful not to suffocate from the toxic gas and smoke.
- ◆ **Stay** calm , act quickly, and try not **to be in the state of panic** or be frightened.
- ◆ **Check** the door knob with your hands (**to see**) if the door knob is hot or not. If it's hot do not open the door.
- ◆ When you have to go through thick smoke to evacuate, quickly crawl low and take a short breath with a water soaked towel covering your mouth and nose.



C. What to do when caught in a building on fire



- ◆ When evacuating is difficult due to **the** existence of fire or smoke inside the building, take safety measures. **Such as**, blocking the door creaks with wet towels and **notifying people** outside rather than trying to force an exit through corridors or stairs.
- ◆ If smoke smears inside the building, crawl down low and take a short breath with a soaked blanket or towel covering your mouth and nose.

- ◆ If you are isolated inside a building try **to** yelling out **loudly** or throw things **away outside of** a window that isn't caught on fire or smoke to tell you are inside the building.



- ◆ If there is water inside, soak **things in that place as many as possible** with water to delay fire spreading.

- ◆ Parts **as** face and arm are easy to burn from fire. **In** order to prevent **this**, cover up your body with a towel or a thick cloth soaked with water.



- ◆ Even in the most **dangerous** situation, always have faith that you'll be rescued **also** do not jump off the window or open the door when there's a fire.

Main Reason of Electricity Fire and Preventive Countermeasures

▶ Causes of electrical accidents and measures

Leakage

Electric Leakage is

electric flowing through the metal part of the building or electric devices



Damage of Electric Leakage

burned part of the electric wire cover and the metal part heats up and ignites an inflammable material to cause fire



Preventive Methods

regions where 220V is supplied needs to install an electric leakage breaker and also regions where 110V is supplied also needs to install it in case of an electric leakage



Short-circuit

Short circuit is

the anode and the cathode of the outworn electric wire sticks closely to cause heat and flame



Damage of Short Circuit

the anode and cathode consisting the electric wire is short-circuited causing intense heat and ark igniting inflammable materials near to cause fire



Preventive Methods

-prohibit using large capacity electric devices at the same time
-most cases outworn electric wire causes short circuit so electric equipment management is important
use devices such as fuzes or electric breakers in order to shut the current overflow

Excess capacity

Damage from Excessive Use

Using electric devices ignoring the capacity of the electric wire will cause a current overflow which would make wires to heat up and inflame fire



Preventive Methods

-electric devices that causes heat should use only one plug per device
-use standard wire
-vinyl wires are vulnerable to excessive use so you should use standard wire

※ Observing 3 Safety Rule could prevent 90% of Electricity Fire

- Prohibiting use of illegal equipments and practicing safe construction
- Prohibiting the use of limited amount of currents (limiting simultaneous use of electrical devices)
- Periodical inspection of electric leakage breaker and exchange of outworn equipment

Safety Measures to take to Prevent Gas Fire

Guideline for Safe Gas Usage



1. Before Use / Ventilation

Before lighting the gas, check for any gas smell and open the window for ventilation.



2. During Use / Check the Flame

When you ignite the gas make sure you check it is lighted properly.

It is dangerous to leave the gas cock opened when it is not inflamed. This will make the gas to leak.



3. After Use / Close the Valve

Lock the ignition cock and the middle valve.

When you leave your house for a long time, lock the middle valve and the gasometer for safety.



4. In Normal times / Checking the Leak

For any gas leak, check the joint part of the hose and the gas burner with checking liquid or soap water occasionally.

The difference between LPG and LNG

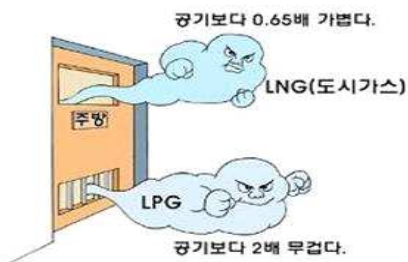
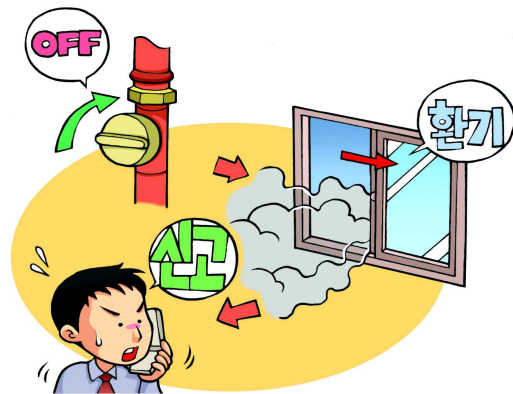
■ Properties of LPG

1. LPG (liquefied petroleum gas).
 - Liquefied gas which is compressed during mining and refining crude oil.
 - The main ingredient of propane and butane
2. Any Vaporized LPG gas that is heavier than air and sink to the bottom when it leaks. If you smell gas indoors, stop using of all electrical appliances and ventilate the room by opening windows and then call the gas supply businesses to take the action.



■ Properties of LNG

1. LNG (Liquefied Natural Gas)
 - Underground natural gas that was collected and liquefied to transport easily.
 - Commonly called as natural gas.
2. Vaporized natural gas is lighter than air flies into the air outdoors. But in case of leaking LPG indoors, should ventilate the room and call the city gas station to take a action.



- * LNG (liquefied natural gas) 0.65 times lighter than air.
- * LPG (liquid fossil oil Ltd) More than twice as heavy in the air.

* An awful buchwijereul could be added for the identification at the leak because the original gas is colorless and odorless.

A gas timer could be equipped in the middle of the valve.



1. The function of the gas timer is to set up the time for stopping gas in automatic.
2. by using it, we could lock the middle of the hose and prevent for leaks generated from the gas stove or joint of the hose.

Emergent Measures to take in case of a Gas Leak



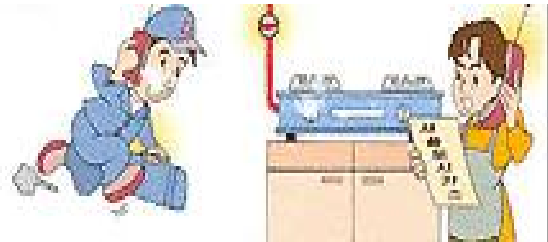
1. Lock the cock and the safety valve.



2. Open all doors and windows to ventilate.



3. Do not use inflammable or electrical devices



4. Contact the city gas company for further examination

Guideline for Self-inspection

- Every 4th day of the month is gas inspection day. Check your house's gas facilities for a secure use in your home.



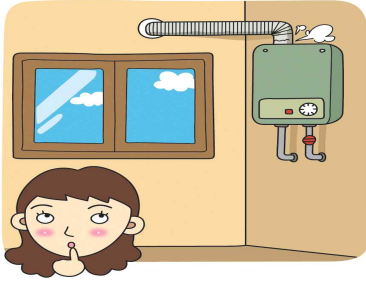
1. Checking leaks in Pipes / Hoses

- check for **bent** or corroded pipe
- check for burned hose
- check the joint part of the pipe, hose with soap water for gas leak



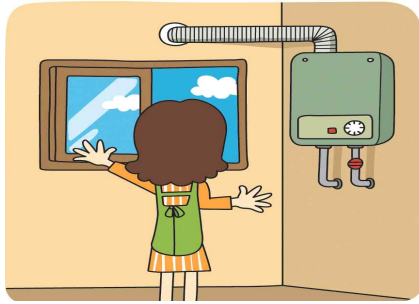
2. Checking the flame before use

- check **whether** the fire is ignited properly
- stop using and call the city gas department if the light of the flame is continuously red while in use



3. Checking the boiler / vent pipe

- check **whether** the pipe is out of position or bent
- if there is any unusual noise, vibration, overheating or strange smell **turn off** the gas and immediately call the city gas department



4. Checking the boiler room

- check **whether** the boiler room is separated with the residence and make sure the vent pipe is not blocked
- check for any inflammable **objects** placed near the boiler room

Seasonal Guideline for Safe Gas Usage

■ National Holiday

- when you leave your house for a long time, make sure the cock and the middle valve of the gas **are** locked properly
- always check for a blue flame while using the gas range
- after you get back home check if there is any gas smell and open the windows to ventilate before use

■ Vacation

- before you leave make sure the gas valve is turned off
- after you get back home check if there is any gas smell and open the windows to ventilate
- before using the gas **soak** soap water to see if there is any gas leaking

■ Thawing Season

- check the joint part of the gas valve with soap water to see if there is any gas leak
- request for an after service to the manufacturer of the gas boiler before use

■ Moving Season

- when you move it is safe to entrust the expert to remove and install the gas facilities

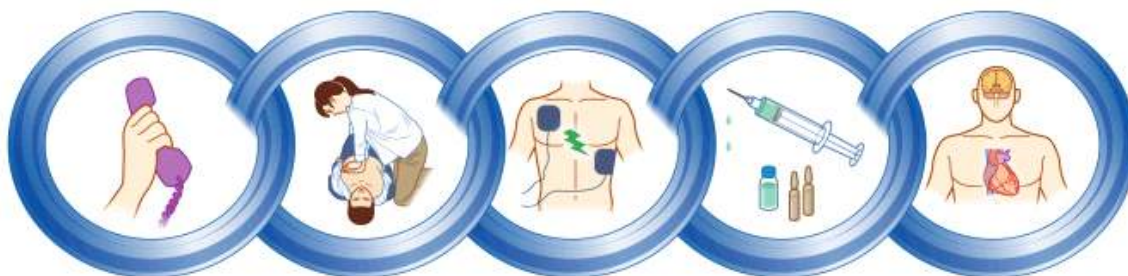
■ Rainy Season

- if there is any danger of flooding make sure the middle, main valve is locked before evacuating
- after **restoring** from the flood make sure the gas facilities are washed with clean water and dried . **Also** contact the city gas department to check for any repairs before use

■ Winter Season

- before running the boiler check if the pipe is crushed or out of position
- check the joint part with soap water to see if there is any gas leak and check if the ventilation pipe is blocked or not
- if there is any unusual vibration, noise or the color of the flame is red contact the manufacturer and request for an after service

CPR - CARDIOPULMONARY RESUSCITATION



Rapid identification
and arrest reported

Rapid resuscitation

Rapid defibrillation

Effective professional
resuscitation

Consolidation therapy
after cardiac arrest

CPR - CARDIOPULMONARY RESUSCITATION



▣ To check for cardio arrest

First, gently tap the patient's shoulders (both) and in a loud voice, shout "Hello? Are you okay? Try to open your eyes." Observe the patient's responses such as body movement, pupil movement, blinking, oral response, and breathing pattern. Although the patient doesn't verbally respond, they are not suffering from cardio arrest if they show any kind of physical movement.



▣ Help and emergency help

If there is no response from the patient, ask civilians surrounding you for help. If there is no one to help, call an ambulance (119). If there is an AED available, make sure to request one.



▣ Perform 30 chest compressions

If the patient is not breathing, place the heel of your hand in the middle of his chest. Put your other hand on top of the first with your fingers interlaced. Bring your shoulders directly over the patient's sternum. Press downward, keeping your arms straight. Push hard and fast. Compress the chest at least 2 inches (5~6 cm). Allow the chest to completely recoil before the next compression. Compress the chest at a rate of at least 100 pushes per minute. Perform with counting one by one and push hard and fast.



❑ Resuscitation performed twice.

Open the air passage by tilting the patient's head back so his/her chin points up. Pinch the patient's mouth with your mouth and seal the patient's nose with your fingers. Blow air into the mouth for 1 second. Always look to see if the chest is rising and falling, to ensure your breaths are getting through. When the patient's chest is fully expanded, you should remove your mouth and fingers from patient's mouth and nose. If you are not trained mouth-to-mouth Resuscitations, perform only chest compressions.



❑ cycles of 30 chest compressions and two rescue breaths

Afterward, Continue with cycles of 30 chest compressions and two rescue breaths until they begin to recover or emergency help arrives. If there are two people to help, one perform chest compression and the other perform rescue breaths. After perform five cycles of compressions and breaths, switch roles.



❑ Recovery Position

Continue performing CPR on the patient until they make a movement or sound. If the respiratory system is back to normal, lay the patient on their side to prevent blocking in their breathing system. Afterwards, observe to if the patient makes steady movements on their own if the patient's progress shows a decline in movement, perform CPR all over again.