

## **PREVENT FIRE ACCIDENTS – PROMOTE NATIONS DEVELOPMENT**



*Ashok Menon, PFSM, CMGM  
PGDDM, A.D.F.E. (NFSC), G.I.Fire E (U.K.) & (I), A.M.Fire E(I)  
Director  
Directorate of Fire and Emergency Services,  
Government of Goa.*

**“Prevent Fire Accidents – Promote Nations Development”** is the theme for this year National Fire Service Day on 14<sup>th</sup> April and the Fire Prevention Week from 14<sup>th</sup> – 20<sup>th</sup> April. We pay homage to the Fireman Martyrs who sacrificed their life in the line of duty.

A fire can happen at any time at any place irrespective of its occupancy status. It can also occur at any structures, may be at a home or at a workplace or in a hospital or in public place like theatre, Mall etc. Fire in any occupancy has the potential to cause harm to its occupants and serious damage to property.

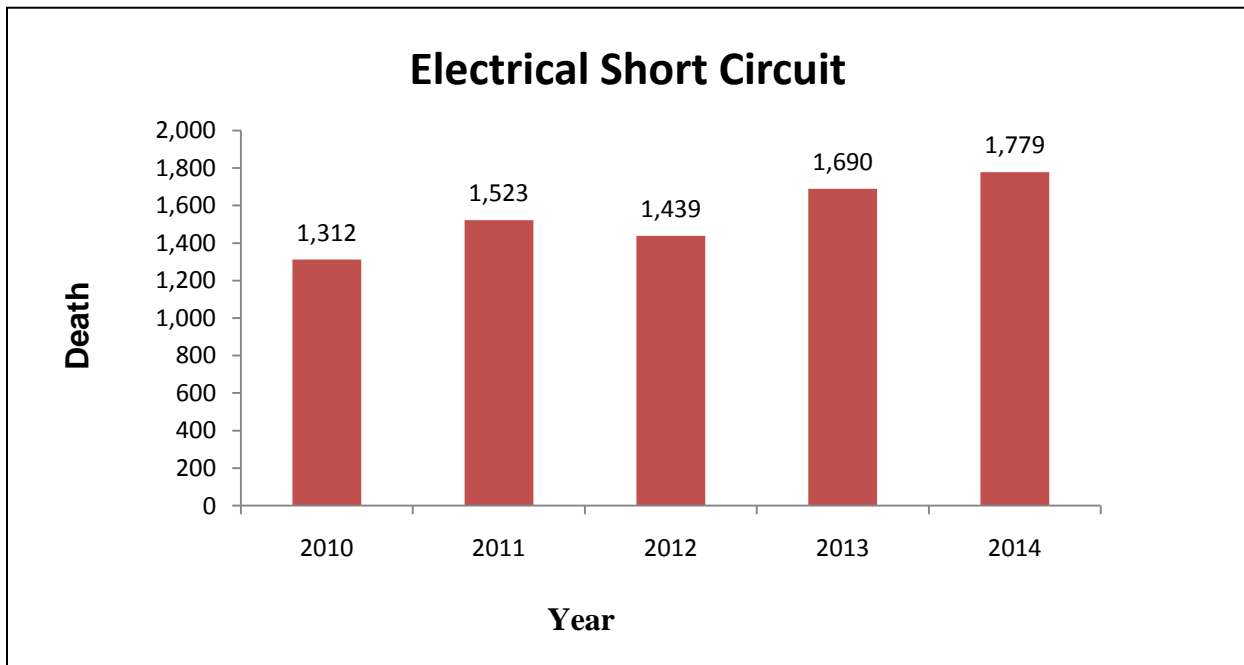
Fire Risk Survey (FRS) 2013, carried out by M/s Pinkerton in association with the Federation of Indian Chambers of Commerce and Industry(FICCI) found that Fire accounted for 8.45% of the causes of accidental deaths in India. Fire Risk Survey (FRS) also revealed that Fire has been rated as the 5<sup>th</sup> highest risk in Industry as of 2013.

The output of the Industries adds to the GDP which is the Index of development progress of the country. Thus it goes without saying that effective reduction in Fire accidents in Industries will add to the development of the Country.

The National Crime Record Bureau (NCRB) statistics publicly available show that the major causes of deaths from accidental fire are due to Electrical Fire, Cooking Gas and Fire Works.

## **ELECTRICAL FIRE**

Electricity has become an inevitable part of our life. From the moment we wake up to the time we go back to bed, all throughout the day it is put to use. Meanwhile, enjoying the perks of electricity we tend to forget how dangerous it can be. In the modern era, electrical connections are hidden behind the scenes, inside the walls of our houses giving us the comfort needed, it is important to know about the electrical system because of the potential harm it may cause. All electrical items degrade with age and use. They should therefore be tested at certain intervals to check if they are in a condition to be used further.



**Source: - National Crime Record Bureau (NCRB)**

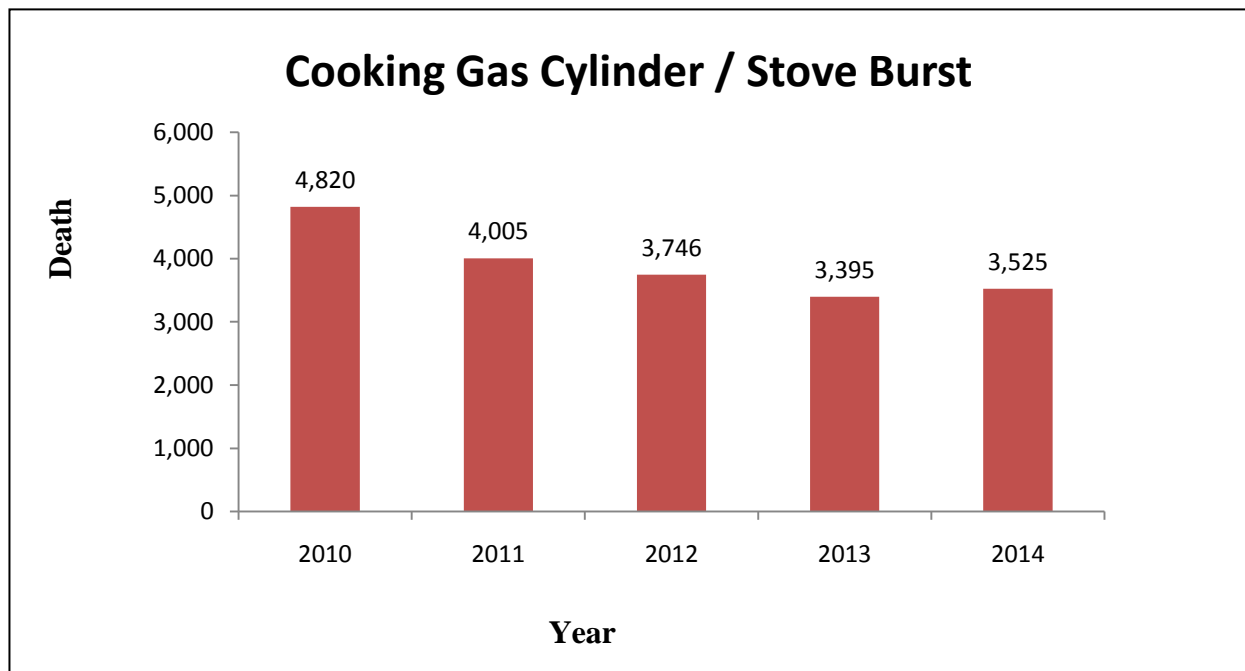
As may be seen from the data in the case Electrical Short Circuit, the number of death cases has been growing for the past 5 years. This has also coincided with the growth in the power supply availability in rural households. However, despite this trend instances of short circuit related fires are more prominent in make shift extension to the shops in market places. The regulatory authority has to play a proactive role to prevent such cases.

### **ELECTRICAL SAFETY PRECAUTIONS**

- Routinely check your electrical appliances and wiring.
- Replace all worn, old or damaged appliance cords immediately.
- Electrical extension cords should be used wisely and do not overload them.
- Keep electrical appliances away from wet floors and counters; pay special care to electrical appliances in the bathroom and kitchen.
- When buying electrical appliances look for products which meet the standard for safety.
- Do not allow children to play with or around electrical appliances.
- If an appliance has a 3-prong plug, use it only in a 3-slot outlet. Never force in to fit into a 2-slot outlet or extension cord.
- Never overload extension cords or wall sockets.
- Use safety closures to “child proof” electrical outlets.
- Ensure proper earthing for electrical appliances since unearthed plug can cause electric shock.

## **COOKING GAS**

In the case of Cooking Gas Cylinder (LPG), there is a declining trend in the death rate relating to LPG. There is however no room for complacency. In the past 2 years there has been a significant increase in the LPG Gas connection for the Rural and Urban poor.



**Source: - National Crime Record Bureau (NCRB)**

In a recent case in a residential flat in Panaji, LPG has leaked through a cut in the non-standard rubber pipe & non standard Pressure Regulator fitting connected to the cooking range which resulted in a major explosion involving many residential flats in the complex and reaching even across to opposite building which is about 80 mtrs. away. This incident should open our eyes to the serious implications of carelessness in safe use of LPG for cooking purpose.

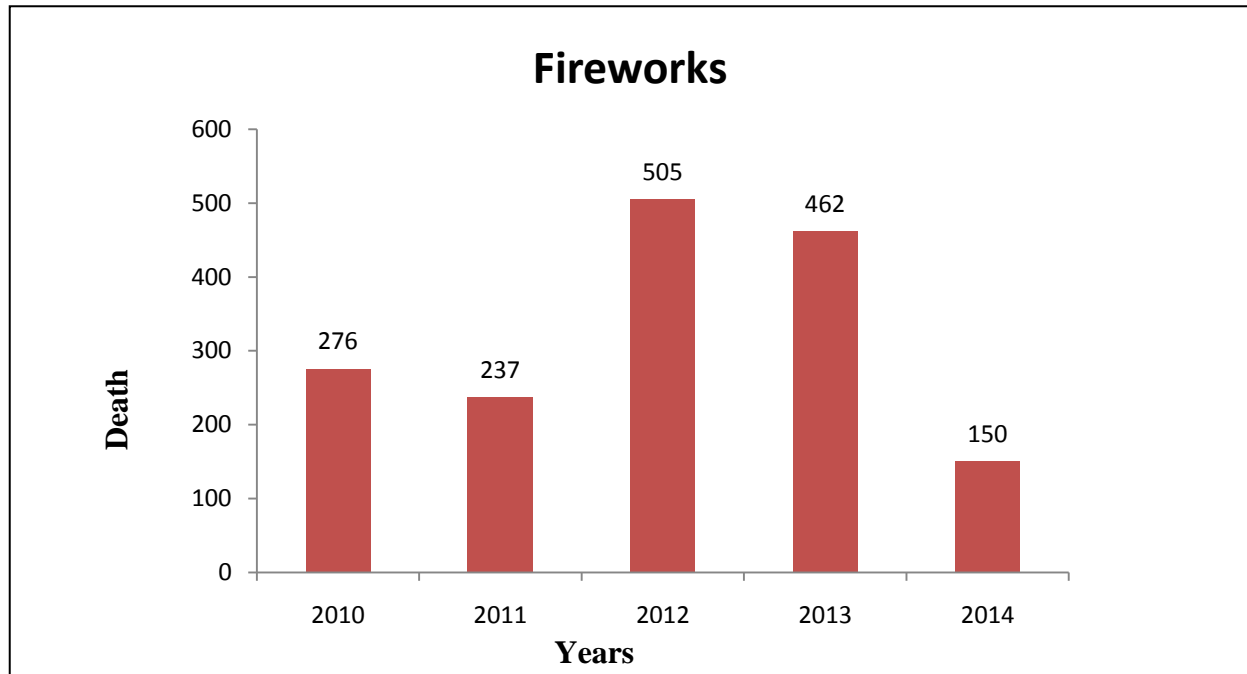
The norms of Safe use of LPG are normally provided by the Gas supplier, however primary responsibility of ensuring compliance with the instruction lies with the owner of the property whose life and property will be at risk if there is no compliance.

### **SAFE USE OF LPG**

- Always use BIS-approved LPG appliances.
- Obtain BIS-approved LPG regulators and Suraksha rubber tubes from authorised LPG distributors only.
- While receiving Cylinders check that the Cylinder has the company seal and safety cap intact.
- Before use of LPG Cylinder always keep the cylinder in upright position at ground level in a well ventilated place.
- Always keep the gas stove on a platform above the cylinder level.
- Shelves or storage cabinets should not be placed above the hot plate – reaching out to containers could cause accidents.
- Do not have curtains on the windows near the gas stove.
- Keep the cylinder away from other sources of heat.
- Retain safety cap with nylon thread attached to the cylinder. Fix the cap on to the valve to stop leak, if any.
- After use of LPG Cylinder, Turn “Off” the regulator knob and then the stove knob before retiring to bed.
- Always keep the regulator knob in “off” position when the cylinder is not in use.
- While in use, strike match first, then open burner knob.
- Never leave vessels unattended on burners in operation – **the contents may overflow, extinguishing the flame and causing gas leakage.**
- Do not keep electrical appliances like refrigerators inside the kitchen, power fluctuations in them can act as a source for fire in case of leakage.
- In case of leak, open all doors & windows for ventilation.
- Put the safety cap on the cylinder.
- Call your distributor or Fire and Emergency Service [**Dial 101**] for help.
- LPG being heavier than air tends to settle at the ground level on leakage. If LPG leakage is noticed, use all available ventilation to disperse the gas.
- Do not panic.
- Close regulator and burner knobs.
- Do not operate electrical switches or appliances in the room.
- Isolate the main electrical supply from the outside only.

## **FIRE WORKS**

Fire works on the occasion of celebrations and festivals are spontaneous activity of the community. However the fire work displays and handheld crackers are fraught with serious consequences if these are not done under effective supervision. There had been some decline in the Fireworks related accidental death as per the NCRB data. Unfortunately a massive disaster involving fireworks that occurred at Puttinval Temple in Paravur, Kollam, Kerala, killing over 100 people and injuring Three Hundred has focused attention once again on the need for Stricter Safety Measures and controls.



**Source: - National Crime Record Bureau (NCRB)**

The Explosives Rules 2008 lay down conditions for retail Sale and Storage of Fire Works in temporary shops during festivals. It has been the experience that enforcement/voluntary compliance with these rules is often lacking in actual practice. The guidelines are as below:-

- The temporary shed for sale of Fireworks should be made of non-flammable material.
- The shed shall have atleast 3 mtrs. of distance from each other.
- The shed shall not face to each other.
- No oil burning Lamps, Gas lamps and naked Lights shall be used in the shed.
- Electrical Lights shall be fixed on wall or ceiling and shall not be suspended by flexible wires.
- No Halogen lamp shall be used in the temporary shed.
- Display of Fire Works shall not be allowed within 50 Mtrs. of any shed.
- Not more than 50 sheds shall be allowed in one Cluster.

## **PREVENTION INCREASES SAFETY**

Over the past 3 decades and more the department of Fire and Emergency Services has been endeavouring to sensitize the community on the need for Fire Prevention, Fire Protection and Mitigation of losses due to fire. The extent of provision of Fire Protection measures at the initial stage has increased substantially. However, random audit of continued functional efficacy of these measures has shown significant neglect by various occupants/owners of Buildings prone to fire risk. This is one area where there is a serious concern and the department would like to see serious improvement. Efforts have been made to draw the attention of the owners to the lacuna in fire safety due to failure to ensure continued compliance of the functional efficiency of the installed Fire Protection Measures.

The goals of fire prevention programs are to prevent loss of life, property damage. Fires often cause disruption of business activities, loss of business documents, loss of employee work hours, and liability claims resulting from the spread of fire to adjacent properties. A successful fire prevention program is part of the day-to-day operations of every property. Fire prevention is the responsibility of the owner, the manager, and all occupants of a property.

### **Public Fire Safety Education:-**

Fire Safety Education has been a valuable area of public Fire Protection. This function has undergone rapid change and growth, focusing increasingly on the importance of Prevention in Public Fire Protection Management. The department undertakes 2 phases of Public Fire Safety Education;

- (i) Fire Prevention Education
- (ii) Fire Reaction Education.

These phases are important to change the way the general public views fire and encourage people to act in a **Fire Safe manner.**

There is strong misperception about the frequency of fire and hence there is a lethargy and tendency to avoid to maintain the functional efficiency of Fire Safety System. It is precisely when lethargy and neglect occurs that fire too occurs. Continuing with the endeavour for sensitising the community, educational programmes are taken up by the department at Village Panchayat level through lecture and demonstration on Basic Fire Safety and Safe use of Cooking Gas (LPG) as well as Disaster Preparedness.

Extending the activity further we have taken up Fire Safety Education of Secondary School Teachers under the Programme of “**Training of Trainers**” in the topic of Basic Fire Safety and Evacuation Drill Procedure thus enabling the teachers to provide training their student in the Secondary Schools.

Following the dictum “Catch them Young” the Directorate of Fire and Emergency Services in joint effort with the Directorate of Education (SCERT) in collaboration with M/s Underwriters Laboratories (UL) India has launched a training programme “**Safer School Safer India**” as a pilot programme with an intention to built a safer India to safe guard children and teach them how to “**Stay Safe**”. This training programme is for enhancing the awareness level of the Primary School Children and through them the families, on Safety Culture.

The training module is designed to create interest in children at primary level (Ist to IVth Std) and involve them in activities which will lead them to Fire Prevention and Fire Safety learning. In the 1<sup>st</sup> phase 27 schools of Tiswadi Taluka was involved in conducting the “**Safer School Safer India**” programme through their teachers.



A total of 3730 Children of Class I<sup>st</sup> to IV<sup>th</sup> Std. was imparted training in the Safer School Safer India training module which includes topics on “Good Fire and Bad Fire”, Fire Triangle and the 4 P’s i.e. **Prevent an Accident, Protect yourself from Fire, Plan to Escape and Practice** being safety smart. The second phase of this programme will include schools of Bardez and Quepem Taluka which will commence during the new academic year of 2016-17.

An effective fire prevention program does not only serve the citizens but also serves the safety of the Fire Fighting Personnel. Fire prevention and mitigation efforts equate to fire fighter safety.

The Fire Protection Systems has to be in place, in working condition. This facilitates prompt access and effective fire fighting operations. Such prompt operations help in saving life and property in a minimum possible time, which in turn reduces the risk to safety of fire fighter. We need to foster a culture which incorporates fire prevention as our first efforts.

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