



SINGAPORE CIVIL DEFENCE FORCE
FIRE, AMBULANCE AND ENFORCEMENT STATISTICS
Issued on Friday 28 January 2011

TOPIC 1

FIRE INCIDENT STATISTICS
(JAN – DEC 2010)

ENCOURAGING DROP IN NUMBER OF FIRES

SCDF responded to a total of 4,600 fires in 2010, a decrease of 12% from the 5,236 fires in 2009. This is the lowest number of incidents in the last 10 years, except for 2003 which registered 4,540 cases.

2. The overall downward slide in the number of fires over the years can be attributed to greater public awareness on fire safety and the concerted public education efforts by SCDF and its community partners. This includes the National Fire and Civil Emergency Preparedness Council (NFEC), Community Emergency and Engagement Committees (C2E), grassroots leaders, and the community at large. Nationwide programmes such as Community Emergency Preparedness Programmes (CEPP), Emergency Preparedness (EP) Days, outreach programmes in schools, commercial and industrial sectors have been useful in forging a more fire safety conscious community.

LESS FIRE OUTBREAKS IN RESIDENTIAL PREMISES

3. Fire outbreaks in residential premises decreased by 8% from 3,549 in 2009 to 3,267 in 2010. Please see **Table 1** for the three main types of residential fires.

Types of Residential Fires	Jan-Dec 2009	Jan-Dec 2010	Absolute Change	% Change
Rubbish Chute Fires	1285	1241	-44	-3%
Discarded Items Fires	644	801	157	24%
Unattended Cooking Fires	517	474	-43	-8%

Table 1: Fires In Residential Premises (top three types)

RUBBISH CHUTE FIRES REMAINS LARGEST COMPONENT OF RESIDENTIAL FIRES

4. As shown in **Table 1**, the number of rubbish chute fires in HDB residential estates fell by 3% from 1,285 to 1,241. Although rubbish chute fires have come down, it continues to form the main bulk of residential fires, constituting 38% of the total number of residential fires.

5. Rubbish chute fires are usually caused by the poor social habits of some residents who indiscriminately dispose lighted materials such as embers from charcoal, cigarette butts and lighted incense materials into rubbish chutes. The public is urged to be more fire safety conscious when throwing rubbish into chutes. For instance, lighted cigarettes must be extinguished before disposal, charcoal embers must be doused with water before disposal and flammable substances like paint, oil and kerosene must not be thrown down the chute.

6. Although rubbish chute fires do not pose a serious threat to the life of residents or cause significant damage to property, the resultant smoke emitted can be a source of irritation to other residents. The high percentage of such fires also places unnecessary strain on emergency resources.

REFUSE CHUTE WATER SPRAY SYSTEM TO BETTER MANAGE RUBBISH CHUTE FIRES (A PILOT PROJECT)

7. Presently, all rubbish chutes in HDB high-rise blocks are equipped with a flushing system for cleaning purposes. The flushing system generally consists of valves and a control panel to control the water supply to the chutes. There is a push button at the 1st storey that can only be accessed by the refuse collector.

8. To better manage rubbish chute fires in residential premises, SCDF, the Tanjong Pagar Town Council, HDB and NFEC carried out a joint project to explore how the existing flushing system in rubbish chutes can be used to extinguish incipient fires.

9. The results of the study showed that with a push button installed at the common area accompanied with clear instructions, residents will be able to activate the flushing system in case of fire in one of the chutes. Pressing the button will activate the flushing system and cause water to flow down the chute and put out the fire. Since rubbish fire is often the smouldering type, large amount of smoke will be generated before the fire is fully developed. With this system, residents can activate the system once they spot the smoke and the fire may be easily put out at an early stage, hence reducing any damages and saving emergency resources from SCDF and Police. Information about the pilot project will be released in due course.

INCREASE IN FIRES INVOLVING DISCARDED ITEMS

10. Another area of concern is fires involving discarded items at common spaces in public housing estates such as corridors, lift lobbies, staircases and void decks. As shown in **Table 1**, the number of fires for this category increased from 644 to 801. Fires involving discarded items form the second biggest component of residential

fires, accounting for 25% of the total number of residential fires. Such fires have the potential to be more serious in nature due to the high fire load present. Besides, such fires can hinder the smooth evacuation of occupants.

11. Residents are advised not to discard items outside their homes or at the common areas such as corridors and lift lobbies as these can fuel fires when lighted materials are indiscriminately thrown onto them. Residents should make arrangements with the Town Councils for removal of bulky items.

UNATTENDED COOKING FIRES PLUNGED TO 10-YEAR LOW

12. The number of unattended cooking fires declined by 8% from 517 in 2009 to 474 in 2010. In fact, the number of unattended cooking fires in 2010 plunged to a 10-year low as shown in **Table 2** below.

Description	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Unattended Cooking Fires	606	585	568	529	549	509	546	533	517	474

Table 2: Unattended Cooking Fires In Residential Premises

13. The drop in the number of unattended cooking fires is encouraging and indicates that households are increasingly more cautious when preparing meals. They are now more aware of the dangers and that leaving cooking unattended even for a short while could result in fire outbreaks that cause significant damages to the house or even compromise the safety of the occupants.

SPREADING THE FIRE SAFETY MESSAGE THROUGH BANNERS

14. From Feb 2011, fire safety banners highlighting the number of fires for Jan to Dec 2010 for the three main categories of fires in residential premises (rubbish chute fires, fires involving discarded items and unattended cooking fires), will be displayed at prominent locations within the housing estates.

15. The display of the fire safety banners at the residential heartlands which was implemented since 2009, is a joint effort by SCDF, NFEC and the Town Councils to help residents identify potential fire hazards in their homes.

LOWER NUMBER OF FIRE INCIDENTS AT COMMERCIAL PREMISES

16. The number of fires at commercial premises (including offices, hotels, shopping complexes, places of public recreation/entertainment) fell by 7% from 331 to 309 cases, as shown in **Table 3**. The decrease could be attributed to the untiring efforts of building owners and fire safety managers in ensuring a high level of fire safety standards to keep their buildings safe from the threats of fires. Companies are now taking a greater interest and attention in the areas of fire safety and emergency preparedness, which is very encouraging. For example, three additional Fire Safety Manager (FSM) briefing sessions were organised last year due to the overwhelming demand by FSMs.

17. In September last year, 32 commercial premises in Singapore worked closely with NFEC and SCDF in conducting mass evacuation drills and engaging the public on fire safety awareness. About 1,200 tenants and 3,500 people participated in the mass evacuation drills.

Description	Jan-Dec 2009	Jan-Dec 2010	Absolute Change	% Change
Commercial Premises Fires	331	309	-22	-7%

Table 3: Fires In Commercial Premises

SIGNIFICANT DROP IN VEGETATION FIRES

18. The number of non-building fires plunged by 28% from 1036 cases in 2009 to 743 cases in 2010. The marked decrease can be attributed to the significant drop in vegetation fires from 518 cases to 314 cases, as shown in **Table 4**.

19. SCDF which chairs the Wildfire Task Force Committee¹ has been working closely with the related agencies to adopt preventive measures at the respective lands under their jurisdiction. Other measures include increasing the frequencies in trimming the vegetation; keeping the land moist as well as to create sufficient fire break buffers and barriers to prevent fire spread. SCDF crews also patrolled fire hot spot areas during the dry spell between Jan to Mar 2010.

Description	Jan-Dec 2009	Jan-Dec 2010	Absolute Change	% Change
Vegetation Fires	518	314	-204	-39%

Table 4: Vegetation Fires

INDISCRIMINATE DISPOSAL OF LIGHTED MATERIALS REMAINS MAIN CAUSE OF FIRES

20. "Dropped Light" remains the highest contributing cause of fires at 55%. "Dropped Light" includes un-extinguished cigarette butts, embers from charcoal, lit incense sticks and lighted matchsticks. The next highest contributing cause of fire is the overheating of food at 12%. However, it is encouraging to note that the figures for both these categories for 2010 decreased when compared to 2009. Please see **Table 5** for the breakdown.

¹ The Wildfire Task Force Committee comprises representatives from SCDF, MINDEF/DSTA, HDB, SLA, PUB, NEA and NParks.

DESCRIPTION	Jan-Dec 2009	Jan-Dec 2010	Absolute Change	% Change
Dropped Light	3395	2550	-845	-25%
Overheating of food	632	543	-89	-14%

Table 5: Causes of Fires (top 2 causes)

NO FIRE FATALITIES FOR LAST THREE YEARS

21. Similar to last year, there were no fatalities due to fire incidents in 2010. In fact, there have been no fire fatalities for the last three years since 2008. However, the number of fire injuries for 2010 increased from 127 to 143 persons. See **Table 6**.

DESCRIPTION	Jan-Dec 2009	Jan-Dec 2010	Absolute Change	% Change
Number of fire injuries	127	143	16	13%
Fatalities	0	0	0	-

Table 6: Number of Fire Casualties

FESTIVE SEASON – FIRE SAFETY ALERT

22. With the Chinese New Year around the corner, SCDF would like to remind the public to exercise greater caution to minimise fire hazards and prevent outbreaks of fire. Whether hosting family gatherings or heading abroad for vacations, bearing in mind simple fire safety tips can prevent injuries and damage to properties caused by fires. Some useful fire safety tips are listed in **Annex A**. Fire safety is a collective community responsibility and together we can help to reduce fire occurrences in Singapore.

GENERAL FIRE SAFETY TIPS DURING THE FESTIVE SEASON

FIRE SAFETY TIPS – HOMES

Cooking

1. Never leave cooking unattended as it can result in fires. Turn off the gas supply and cooking appliances whenever they are not in use.
2. Petrol or kerosene should not be used to start a barbeque (BBQ) fire – they can flare up unexpectedly. Use fire-starters instead.
3. During a BBQ, keep a bucket of water or a garden hose nearby in case of emergencies. Never leave the BBQ fire unattended.
4. Charcoal should be doused with water when cooking is done. Smouldering charcoal and embers should not be thrown into rubbish chutes/bins which may lead to rubbish fires.


Electrical Appliances

1. Never overload electrical outlets with electrical appliances. Always unplug the appliances when they are not in use.
2. Do not run wires under carpets or mats – run them behind furniture instead. Keep wires away from hot surfaces.
3. Check the condition of wires regularly. Frayed or cracked cords should be replaced or repaired by licensed electricians.

Housekeeping

1. Keep cooking appliances including the stove-top, cooker hoods and ovens clean and free of grease. Never store combustibles near heat sources.
2. After parties or gatherings, check for smouldering cigarette butts around and under the sofa, chair cushions and carpets.
3. Ensure that cigarettes and cigars are fully put out in ashtrays before they are discarded.
4. Ensure that all unwanted furniture and items which are combustible in nature, are discarded properly. Contact your local Town Councils or Management Office if you require assistance in the disposal of unwanted bulky items.

Decorations and Lightings

1. Check decorative lighting fixtures before use and regularly afterwards. If there are wear and tear problems, such as blown bulbs and frayed wires, replace them with new ones immediately, using the service of licensed electricians for repairs if necessary.
2. Do not leave decorative lighting fixtures, including the lit Christmas tree, switched-on when leaving home or when going to bed. Indoor lighting fixtures should only be used indoors to avoid electric shocks and short circuits.
3. Use decorative lighting fixtures which carry the SAFETY Mark. Like other electrical appliances and accessories such as fans and adaptors, decorative lighting fixture is also a Controlled Goods under the Consumer Protection (Safety Requirements) Registration Scheme, which is administered by SPRING Singapore.

4. Decorations made of light tissue paper or cardboard burn easily. Do not attach them to lights or other heat source, and always keep them away from candles.
5. Lit candles should be placed in stable holders on heat-resistant surface, so that they will not fall over. Lit candles should also be kept away from Christmas trees, paper or cardboard decorations, foliage, curtains and furnishings. It is also not advisable to leave candles burning in a room unattended.

Preventing Children from Starting Fires

1. Keep matches, lighters and candles out of children's reach.
2. Educate children on the dangers and hazards of fires.
3. Children playing with sparklers must be supervised by parents/adults.

Handling Sparklers

1. Sparklers should be kept in a closed box and away from flames.
2. When being used, it should be lit at arms length and only one at a time.
3. Lighted sparklers should never be thrown at combustible materials.
4. When a sparkler goes out, do not immediately touch the hot end for it could still burn. Ideally, put the hot end in a bucket of water to fully cool it down before disposing it safely.
5. Follow the safety instructions as stated by the manufacturer.

FIRE SAFETY TIPS – COMMERCIAL BUILDINGS

1. Escape passageways should be free of obstruction and fire exit doors should be kept unlocked for use during emergencies.
2. It is also important to observe other fire safety requirements, including the approved occupancy load for premises (to avoid overcrowding), so as to enhance fire safety standards in buildings.
3. If you are in any public premises, ensure that you look out for the nearest exit door or staircase, in the event that you need to evacuate during an emergency.

FIRE SAFETY TIPS - ON-LINE

1. The following websites provide fire safety tips:
 - a. <http://www.nfec.gov.sg>
 - b. <http://www.scdf.gov.sg>
2. Members of public can also download SCDF's i-phone app "SCDF Fire Safety", which teaches users important life-saving skills in fire prevention and safety.