

NEWS RELEASE



SCDF

The Life Saving Force

SINGAPORE CIVIL DEFENCE FORCE

FIRE, AMBULANCE AND ENFORCEMENT STATISTICS 2017

EXECUTIVE SUMMARY

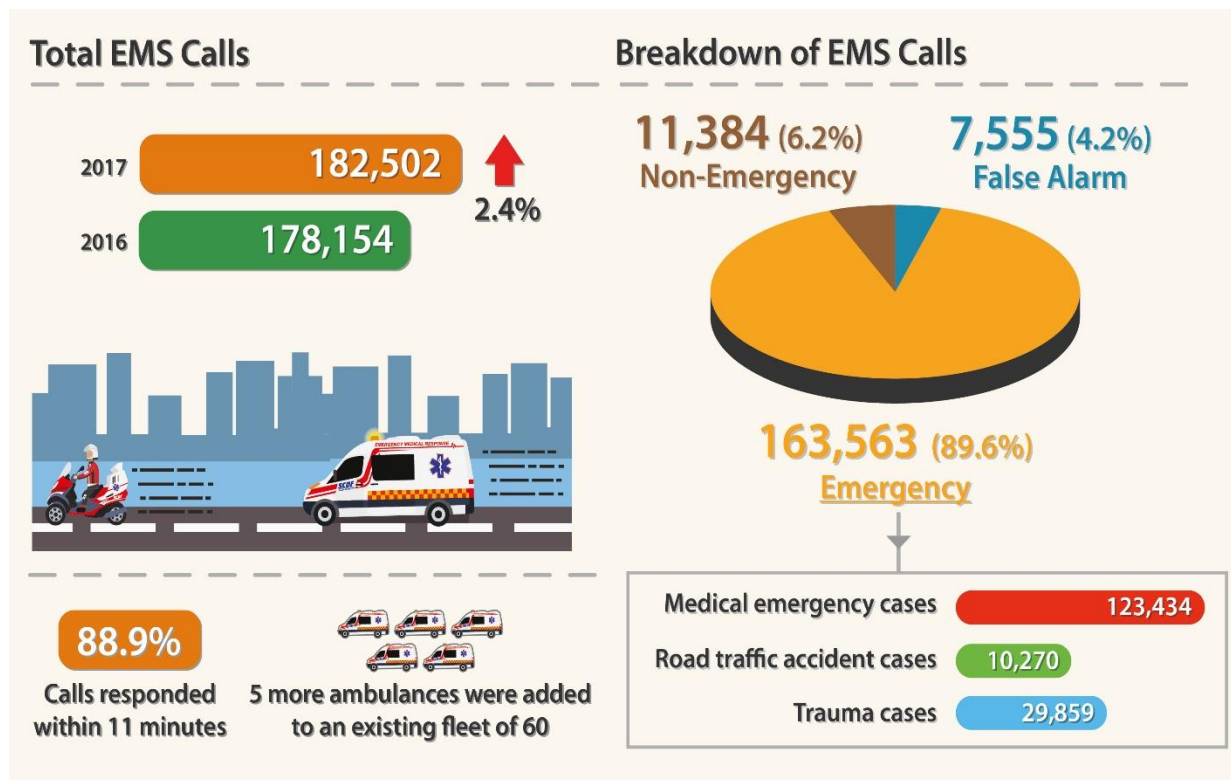
The number of Emergency Medical Service (EMS) calls continued to increase in 2017. The Singapore Civil Defence Force (SCDF) responded to 182,502 EMS calls last year, which translates to about 500 calls a day. This was an increase over 2016, and continued the relentless upward climb since 1998. It further affirms the need for SCDF's tiered response framework, so that scarce resources can be prioritised for the more urgent, severe cases. 88.9% of the EMS calls were attended to within 11 minutes.

2. **Fire calls in 2017 registered a 40-year low in 2017.** There was a 5.9% decrease to 3,871 calls in 2017, from 4,114 in 2016. Rubbish fires continued to form the bulk of fires occurring at residential premises. The increase in the number of fires involving electric scooters is an area of concern. SCDF is working closely with our partners and stakeholders to raise public awareness on preventing such fires.

3. **SCDF conducted 14,802 fire safety enforcement checks in 2017** and issued 2,845 Notices of Fire Safety Offences and 2,543 Fire Hazard Abatement Notices. The public plays an important role in reporting fire safety hazards to SCDF.

EMERGENCY MEDICAL SERVICE STATISTICS 2017

Overview



SCDF responded to 182,502 Emergency Medical Service (EMS) calls in 2017. This was 2.4% (4,348) more calls compared to 2016. 89.6% were emergency calls, 6.2% were non-emergency calls, and the remaining 4.2% were false alarms.

2. Of the 163,563 emergency calls¹ received in 2017, 75.5% were medical-related (e.g. chest pain, breathlessness, unconsciousness and cardiac arrest); 6.3% were related to road traffic accidents; and the remaining 18.2% were trauma cases (e.g. industrial accidents, falls and assaults). The number of calls involving the elderly (aged 65 and above) remained the highest among all age categories, at 41.9%.

3. SCDF responded to 88.9% EMS calls within 11 minutes in 2017. SCDF added five ambulances to its EMS fleet, bringing the total number of ambulances to 65.

Area of Concern: Non-emergency Calls

4. Non-emergency calls made up 6.2% (11,384 calls) of all EMS calls in 2017. This means that on average, SCDF responded to around 30 non-emergency calls a day. SCDF will continue to raise public awareness about the difference between non-emergency and emergency medical cases so as to ensure that its emergency resources are being utilised only for cases that really require them.

¹ 12.7% (20,733) of the emergency calls were life-threatening cases.

Update on SCDF's Emergency Medical Service Response Framework

5. On 1 April 2017, SCDF introduced a new tiered EMS response framework which aims to improve the overall health outcomes of EMS users. The new framework will allow SCDF's EMS resources to respond to life-threatening cases faster by matching the speed and type of EMS assistance to the assessed severity of a medical case.

6. Under this new framework, SCDF has implemented the following:

a. Telephone medical triaging

SCDF Operations Centre started triaging EMS calls to prioritise life-threatening cases and enhance the dispatch of resources through a new horizontal workflow². Where necessary, the operations centre officers would also provide callers with medical advice such as performing CPR procedures before the arrival of SCDF emergency responders. Experienced SCDF paramedics and Ministry of Health staff nurses are stationed at the SCDF Operations Centre to conduct this telephone medical triaging.

b. Firefighters trained as Emergency Medical Technicians to attend to EMS calls

Over 230 Fire and Rescue Specialists (FRS) have been trained as Emergency Medical Technicians (EMT) since 2013. These FRS-EMTs are able to respond to a variety of medical emergencies on SCDF's Fire Bikes and Fire Medical Vehicles (FMVs)³. From April to December 2017, FRS-EMTs on Fire Bikes responded to 12,033 life-threatening cases while SCDF's fleet of six FMVs responded to 122 incidents from May to December 2017.

c. Raising public awareness

In order to raise public awareness of the new framework, SCDF has produced various informative online videos, brochures, and print and radio advertisements since August 2017.

Among others, two animation videos were produced last year, which explained what non-emergency cases were such as skin rash or diarrhoea. These videos were posted on SCDF's Facebook and YouTube, which collectively attracted over 1.4 million views⁴ online within seven weeks. The videos were also shown on screens located at lift lobbies of commercial buildings and shopping malls.

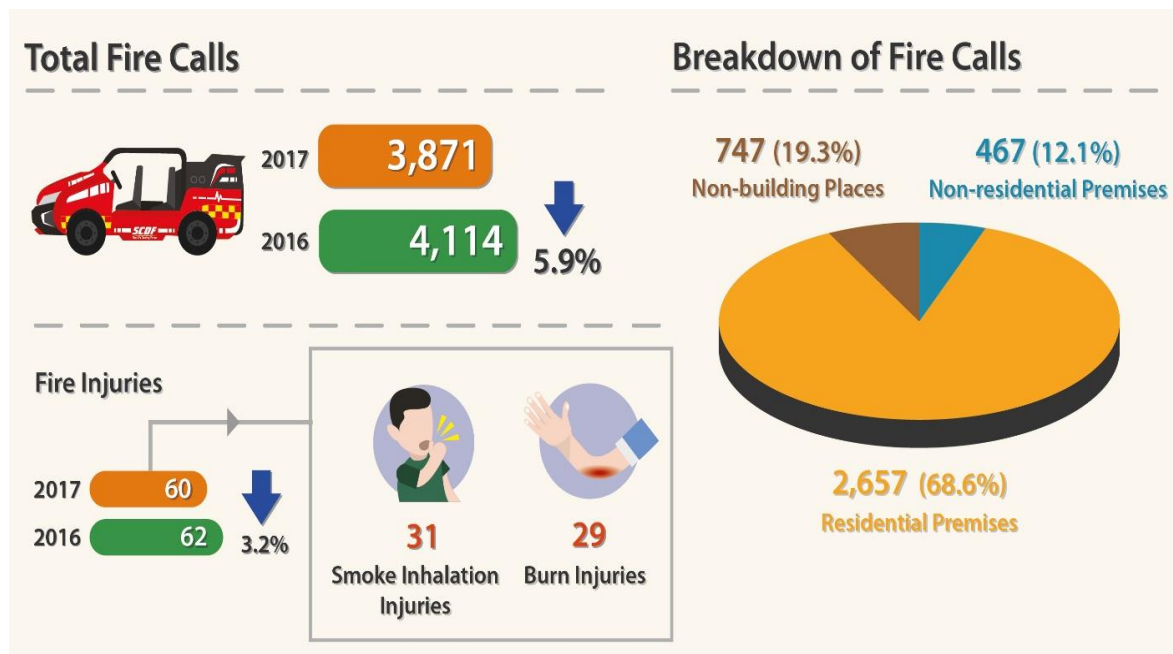
² The new horizontal workflow consists of conducting call-taking and dispatch functions concurrently instead of sequentially.

³ SCDF's Fire Medical Vehicles (FMVs) are a hybrid of a fire appliance and an ambulance, combining fire-fighting and medical intervention capabilities into one vehicle.

⁴ Figure of 1.4 million views as at 30 January 2018.

FIRE INCIDENT STATISTICS 2017

Overview



SCDF responded to 3,871 fire calls in 2017. This is the lowest number of fire calls recorded in 40 years (refer to [Annex A](#) for the number of fire calls from 1978 to 2017). The decrease of 5.9% from 2016 can be largely attributed to the fall in the number of rubbish, vehicle and vegetation fires.

2. 68.6% of the total number of fires happened in residential premises (private and public), 12.1% occurred in non-residential premises (commercial, industrial, social and communal) and 19.3% took place in non-building places (eg. vegetation, rubbish in open spaces, vehicles).

3. Dropped light⁵ cases remained the leading cause of fires, accounting for 2,008 cases (51.9%) of all fires in 2017, followed by fires caused by electrical origin at 640 cases (16.5%).

4. There were 60 fire injuries in 2017, a decrease of 3.2% from 62 in 2016. There were, however, three fire fatalities in 2017, compared to two in 2016.⁶ The three fire fatalities in 2017 were from the following fire incidents:

- a) A flash fire at Circuit Road on 24 April 2017;
- b) A fire at an industrial building at Toh Guan Road on 4 May 2017; and
- c) A residential fire at Ang Mo Kio Avenue 6 on 8 June 2017.

⁵ Dropped light refers to indiscriminate disposal of lighted materials such as lighted cigarette butts that were not completely extinguished, embers from charcoal and lighted incense sticks.

⁶ The 2016 Statistics Report indicated only one fire fatality as the other fire fatality was still being investigated at time of publication. The case was a fire that occurred at a residential unit at Rowell Road on 31 October 2016. The coroner's inquiry confirmed that the fire caused the fatality in April 2017.

Fires in Residential Premises

5. A total of 2,657 fire incidents occurred in residential premises in 2017. This was a decrease of 5.7% from 2,818 in 2016. The top three types of fire in residential premises are depicted in [Chart 1](#).

Chart 1: Top three types of fire in residential premises.



6. While rubbish fires decreased by 14.1% between 2016 and 2017, these fires continued to form the bulk of residential fires at 46.7%. In 2017, about 25% of the rubbish fires were put out by alert members of the public prior to SCDF's arrival at the scene.

7. Rubbish fires can be prevented by not throwing lighted materials like burning embers and cigarette butts into the rubbish chute or rubbish bin. Such fires are small and can be easily put out by dousing with water. We would like to remind members of the public to stay vigilant to occurrences of such fires in rubbish chutes or rubbish bins in their neighbourhoods. SCDF will continue to raise public awareness on the prevention and mitigation of such fires through public advisories.

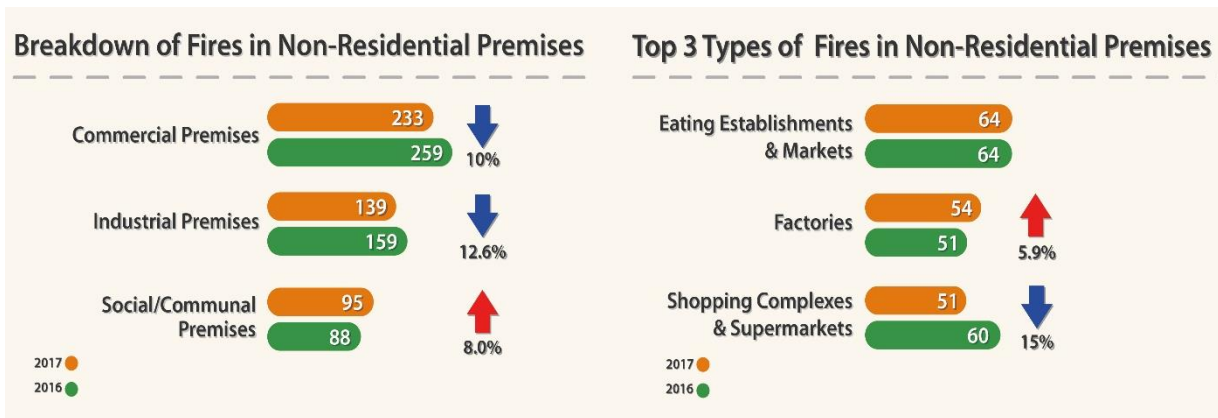
8. Discarded item fires increased by 16.2% between 2016 and 2017. Fires involving discarded items usually occur at common areas in residential estates such as lift lobbies, common corridors and staircase landings.

9. SCDF is working together with its community partners to step up public education efforts about the dangers of cluttered common areas and how to properly discard bulky items, especially with the upcoming Chinese New Year period.

Fires in Non-Residential Premises

10. SCDF responded to 467 fire incidents in non-residential premises in 2017, a decrease of 7.7% from 506 in 2016. The breakdown of fires in non-residential premises and the top three types of fire in non-residential premises are presented in [Chart 2](#).

Chart 2: Breakdown of fires at non-residential premises and top three types of fire at non-residential premises



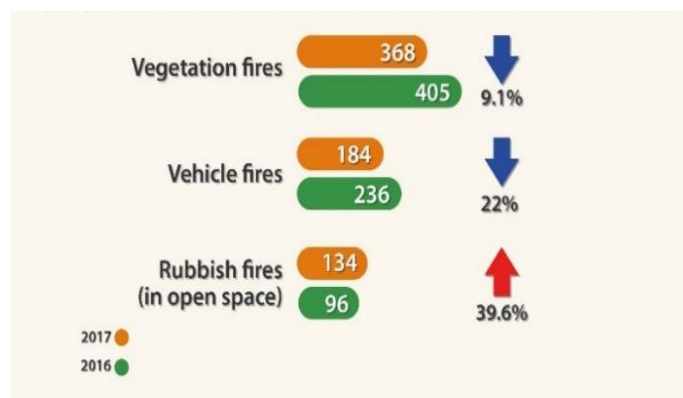
11. The number of fires in shopping complexes and supermarkets in 2017 decreased by 15% from 2016.

12. SCDF will continue to collaborate with the National Fire and Civil Emergency Preparedness Council (NFEC), building owners and fire safety managers to ensure that their premises remain fire-safe. SCDF will also enhance enforcement checks at shopping complexes to ensure that there are no fire safety infringements.

Fires in Non-Building Places

13. There was a total of 747 fire incidents in non-building premises in 2017. This was a decrease of 5.4% from 790 cases in 2016. The top three types of fire in non-building places are found in Chart 3.

Chart 3: Top three types of fire in non-building places

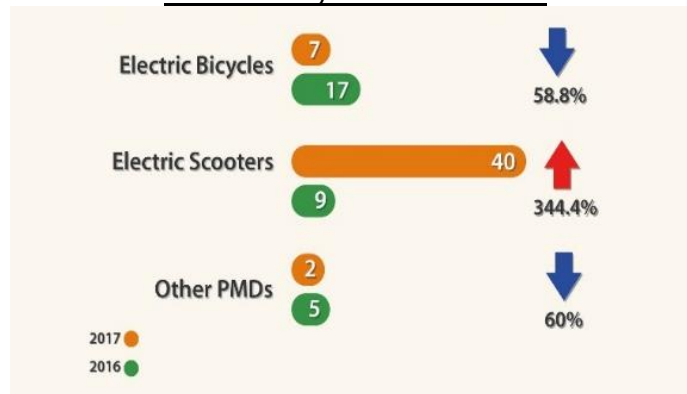


14. The number of vehicle fires decreased by 22% in 2017 to 184, from 236 cases in 2016. SCDF will be working with the Land Transport Authority (LTA) to raise public awareness of the causes of vehicle fires, how to prevent them and how to respond when encountering a vehicle fire. For example, brochures (Tips on Preventing and Handling a Vehicle Fire) will be distributed at LTA's service touchpoints, vehicle inspection centres as well as petrol kiosks. SCDF will continue to leverage its social media platforms to share such advisories.

Area of Concern: Fires Involving Electric Scooters

15. In 2017, the 40 cases involving electric scooters represented more than a three-fold or 344.4% increase in the number of such fires compared to 2016. A breakdown of fire incidents involving electric scooters, electric bicycles and other personal mobility devices (PMDs) is presented in Chart 4.

Chart 4: Breakdown of fire incidents involving electric scooters, electric bicycles and PMDs



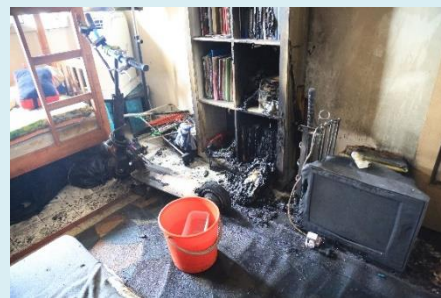
16. Most electric scooters, electric bicycles and PMDs use lithium ion batteries which have high energy density and flammable internal materials. Battery fires can be caused by faulty electrical circuitry that may lead to short-circuiting of the batteries. Rechargeable batteries that are left charging over a long period of time would lead to overcharging. This could cause permanent damage to the batteries and result in battery swelling. Such batteries could also fail from excessive impact. All these could trigger a fire which can spread very quickly and result in serious damage to property and loss of lives.

17. SCDF has issued several public advisories on the dangers of such fires and how to prevent them. For example, SCDF and SPRING Singapore produced a brochure on “Fire Safety Tips on Preventing Battery Fires” for distribution at community events and to residents.

On 7 November 2017, a fire started in a bedroom of a residential unit at Block 260 Yishun Street 22 where an electric scooter was charging. As a result of the fire, four residents were injured. Investigations revealed that the cause of fire was of electrical origin.

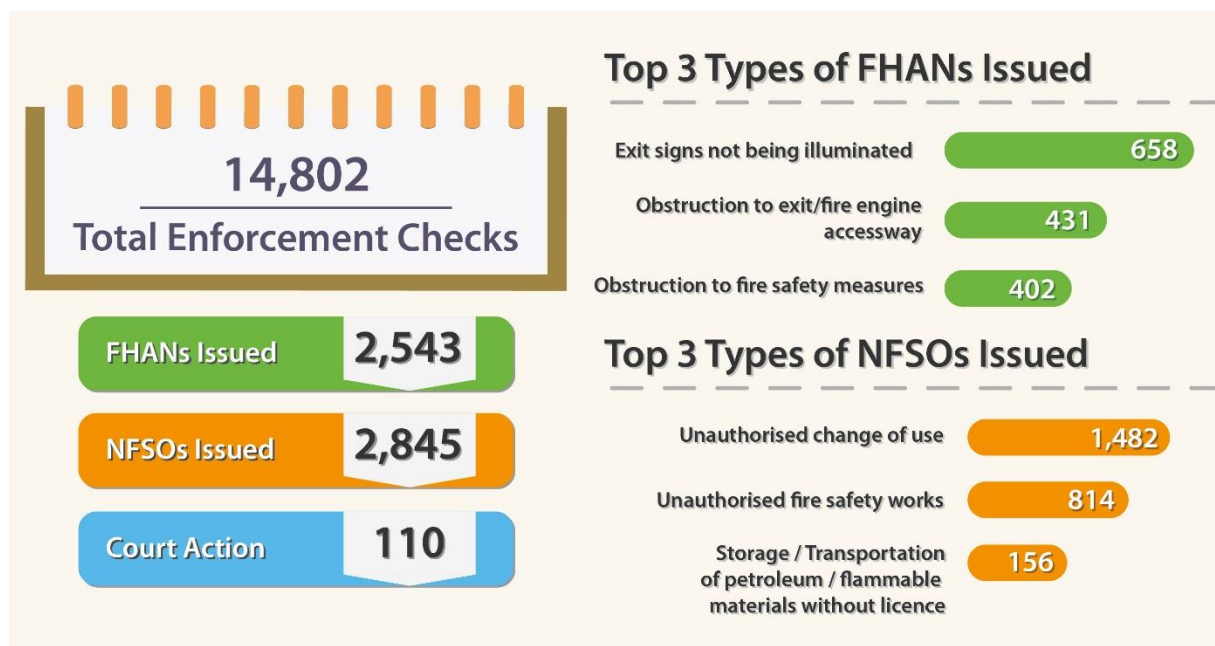


Close-up view of the burnt electric scooter



Fire and smoke damages sustained in the bedroom

Overview



SCDF conducted 14,802 enforcement checks in 2017 and issued 2,543 Fire Hazard Abatement Notices (FHANs⁷) and 2,845 Notices of Fire Safety Offences (NFSOs⁸).

Fire Hazard Abatement Notice

2. The most common fire hazard in 2017 was related to exit signs not being illuminated, which contributed to 25.9% of the total FHANs issued.

Notice of Fire Safety Offence

3. The most common fire safety violation was the unauthorised change of use of premises, which accounted for 52.1% of the total NFSOs issued in 2017.

4. 110 cases of fire safety violations were brought to court in 2017. A majority of the offences was unauthorised change of use, at 59 cases (53.6%), followed by unauthorised fire safety works at 37 cases (33.6%).

5. SCDF views fire safety infringements seriously and will not hesitate to take firm action against those who do not make prompt rectifications to the violations despite warnings and fines. SCDF's enforcement powers against fire safety offenders are at [Annex B](#).

⁷ Under the Fire Safety Act, a FHAN is a warning given to building owners and management to remove fire hazards.

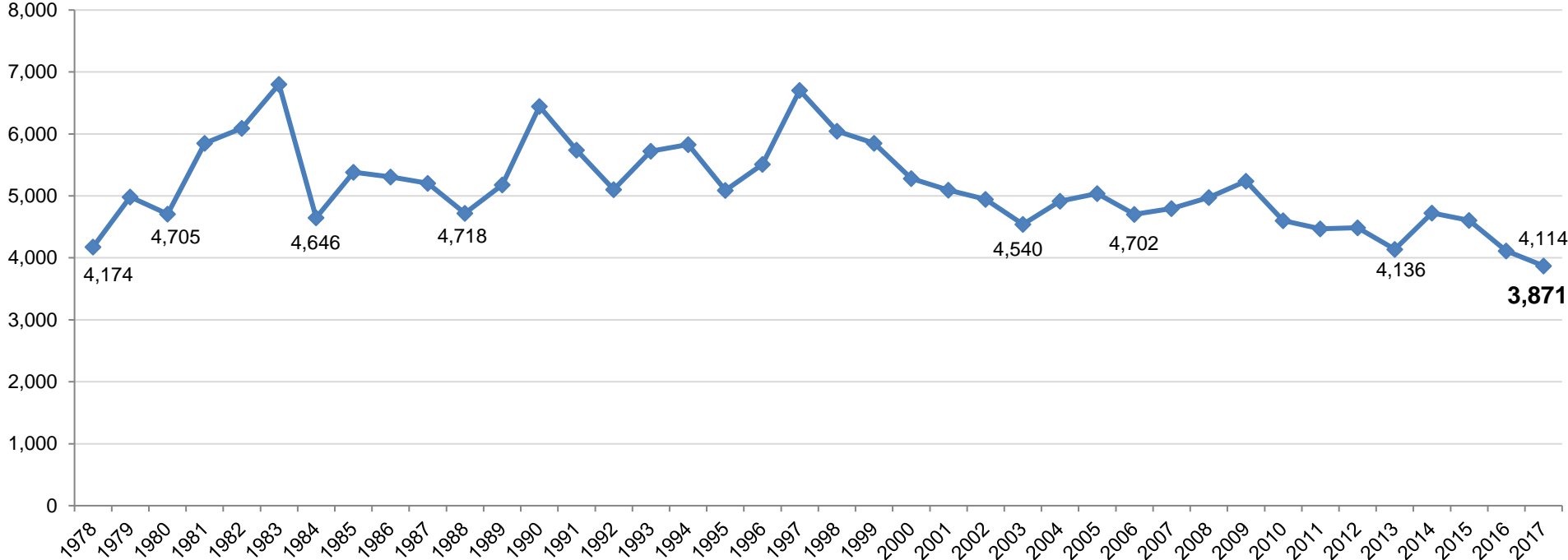
⁸ An NFSO is issued when the contravention is of a serious nature which warrants a heavier penalty.

Fire Safety Feedback

6. Members of the public are encouraged to report fire hazards. The public can do so by submitting photographs and a brief description of the fire hazard using the *mySCDF* mobile application, by calling the fire hazard reporting line at 1800-280-0000 or by sending an email to SCDF_Fire_Safety_Feedback@scdf.gov.sg.

Total Number of Fire Calls from 1978 – 2017 (40 years)

Number of Fire Calls



SCDF's Enforcement Powers against Fire Safety Offenders

Enforcement Action	Description
Fire Hazard Abatement Notice (FHAN)	Under the Fire Safety Act, the FHAN is a warning given to building owners and management to remove fire hazards. One of the most common fire hazards are obstructed exits.
Notice of Composition (NOC)	Offenders who fail to rectify the violations after being issued with FHANs will be served with an NOC of up to \$5,000.
Notice of Fire Safety Offence (NFSO)	An NFSO is issued when the contravention is of a serious nature which warrants a heavier penalty, e.g. unauthorised works that may pose fire safety risks. It carries a composition fine of up to \$5,000.
Court Action	<p>Court action will be taken for serious cases. For general fire safety violations, the maximum penalty can be up to \$10,000 and/or jail term not exceeding 6 months.</p> <p>For carrying out unauthorised fire safety works, the person responsible (e.g. owner, building management, MCST⁹) can be fined up to \$200,000 and/or jailed for a term not exceeding 24 months.</p> <p>In extreme cases, SCDF can exercise its powers to require a temporary closure of the premises.</p>

⁹ Management Corporation Strata Title (MCST) refers to the managing body of a condominium or any compound which has multiple owners and shared public facilities.