

FIRE PREVENTION

1. Fire Prevention Inspection

(1) On-site Inspections

On-site inspections are based on the Fire Service Act. Firefighters visit buildings and HAZMAT facilities to conduct inspections from the viewpoint of fire prevention.

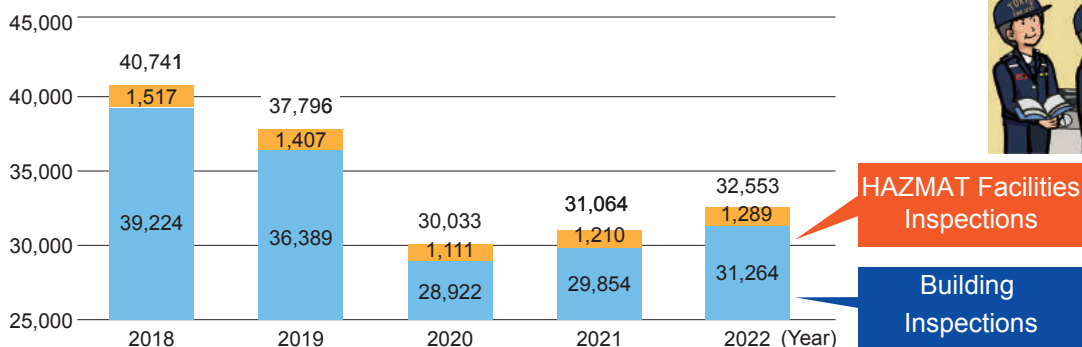
The number of on-site inspections conducted at buildings (excluding residences and tenements) and HAZMAT facilities (e.g., gas stations) was 32,553 in 2022.

Following the fire that occurred in Kita-ku, Osaka City, Osaka Prefecture, on December 17, 2021, we conducted inspections of fire protection facilities for the entire target, including those that could not be inspected during the simultaneous inspection conducted and those that were in violation of the Fire Service Act. We also enforced continuous fire safety measures. Furthermore, in conjunction with the Japan-U.S.-Australia-India Quad Summit and the funeral of the late Shinzo Abe, which led to visits by leaders and dignitaries from various countries to Tokyo, we conducted venue management inspections of relevant facilities to prevent potential fire and other incidents and ensure the safety of individuals. A total of 121 venue management inspections (including events) were conducted during the year.

In addition, we conducted 10,671 post-disaster access inspections, 1,939 confirmation inspections, and 3,093 inspections of entertainment districts.

A total of 727 inspectors and 1,164 pumper units were involved in conducting inspections.

Chart 1-1. On-site Inspections



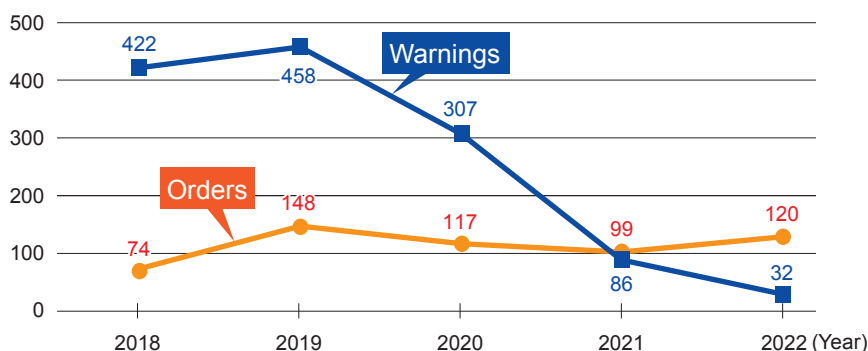
(2) Issued Warnings and Orders

When the TFD confirms the violation of the Fire Service Act at the buildings or HAZMAT facilities that have undergone on-site inspections, the TFD instructs the violators to correct the buildings or facilities.

The TFD strongly instructs and warns the violators who are not willing to refurbish their buildings or facilities as necessary, and issues orders in accordance with the Fire Service Act.

The graph below shows the changes in the number of warnings and orders issued. In 2022, the TFD issued 32 warnings and 120 orders.

Chart 1-2-1. Issued Warnings and Orders

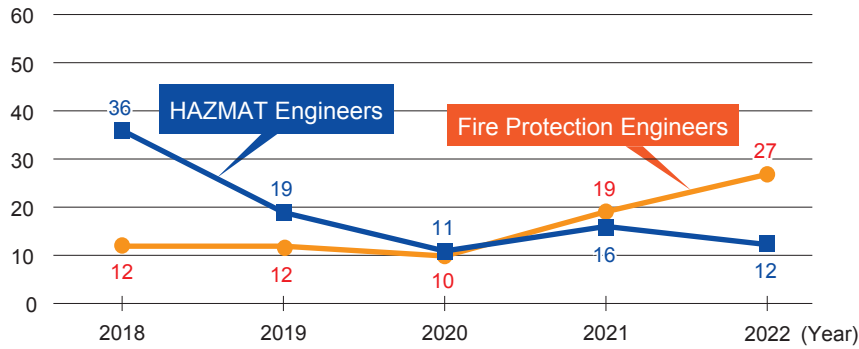


1 Licensed HAZMAT and Fire Protection Engineers in Receipt of Violation Notifications

If the TFD has confirmed that licensed HAZMAT/ fire protection engineers engaged in acts in violation of the Fire Service Act, the TFD shall notify them of the violations and instruct them not to reoccur.

The graph below shows the changes of the licensed engineers in receipt of violation notifications.

Chart 1-2-2. Licensed Engineers in Receipt of Violation Notifications

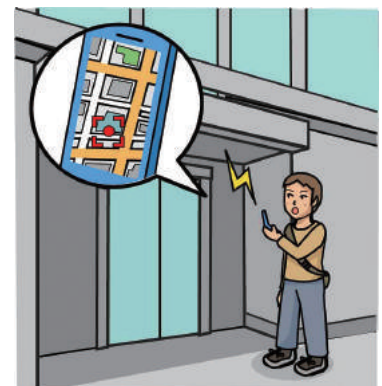
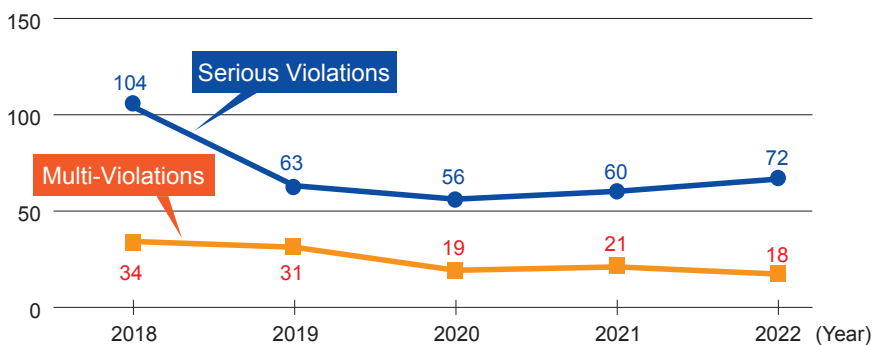


2 Buildings with Publicly Announced Violations

The public announcement system provides information on the violations that the TFD found through on-site inspections so that the people who will use the buildings (excl. residences and tenements) can obtain safety information and see their safety before its use. The violations subject to public announcements are serious violations and multiple maintenance obligation violations. Serious violations are violations of installation obligations such as the absence of indoor fire hydrants, sprinklers, or automatic fire alarms. Multiple maintenance obligation violations are repeated violations for building and fire equipment maintenance by building owners.

The graph below shows the changes in the number of the buildings publicly announced each year. The TFD provides thorough guidance to urge quick correction of the announced violations.

Chart 1-2-3. Change in Number of the Buildings with Publicly Announced Violations



(3) Fire Safety Building Certificate (Excellence Mark)

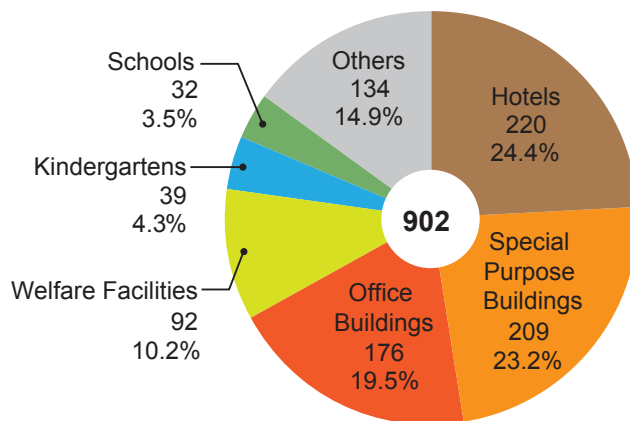
The fire safety building certification (Excellence Mark) system issues a fire safety building certificate to be displayed on a building. It can be issued if Fire Station Chief recognizes the high fire safety level of the building based on the application from the party concerned with the building.

As of December 31, 2022, there were 902 buildings with certification, and the graph below shows a breakdown of the buildings classified by usage.



Fire Safety Building Certificate

Chart 1-3. Fire Safety Buildings



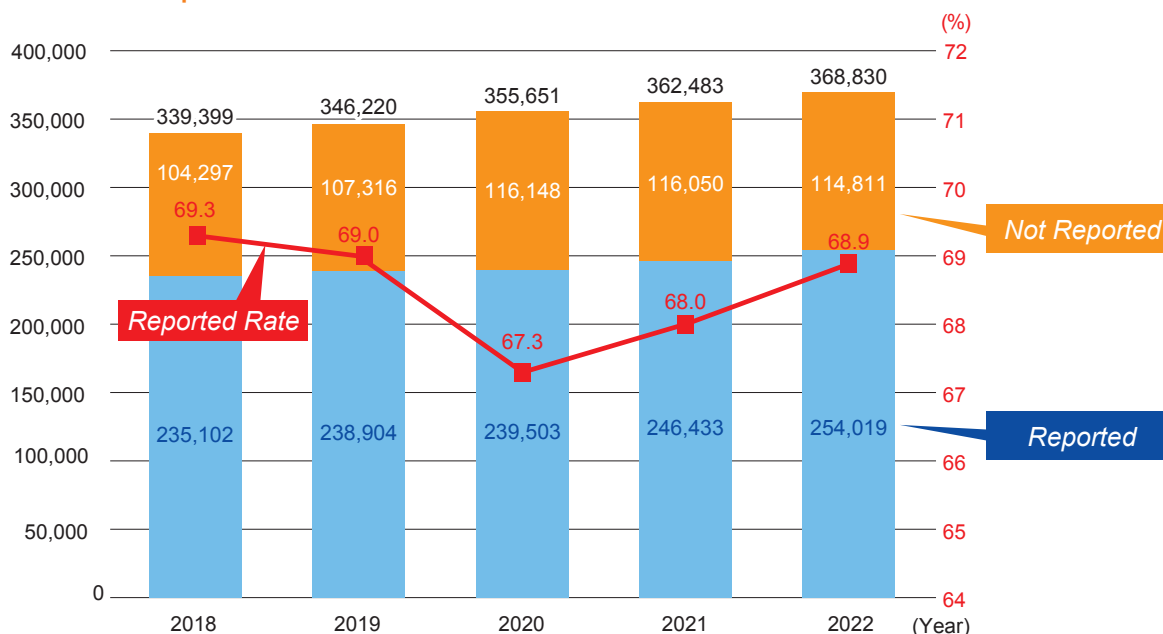
*Due to statistical rounding, the summation may not be 100%.

(4) Inspection Reporting

1 Fire Protection Equipment Inspection Report System

The inspection reporting system for firefighting equipment obligates the parties concerned with buildings to inspect or have qualified personnel inspect firefighting equipment, such as fire extinguishers, automatic fire alarms, and the sprinklers installed in the buildings, and to report the results to the Fire Station Chief.

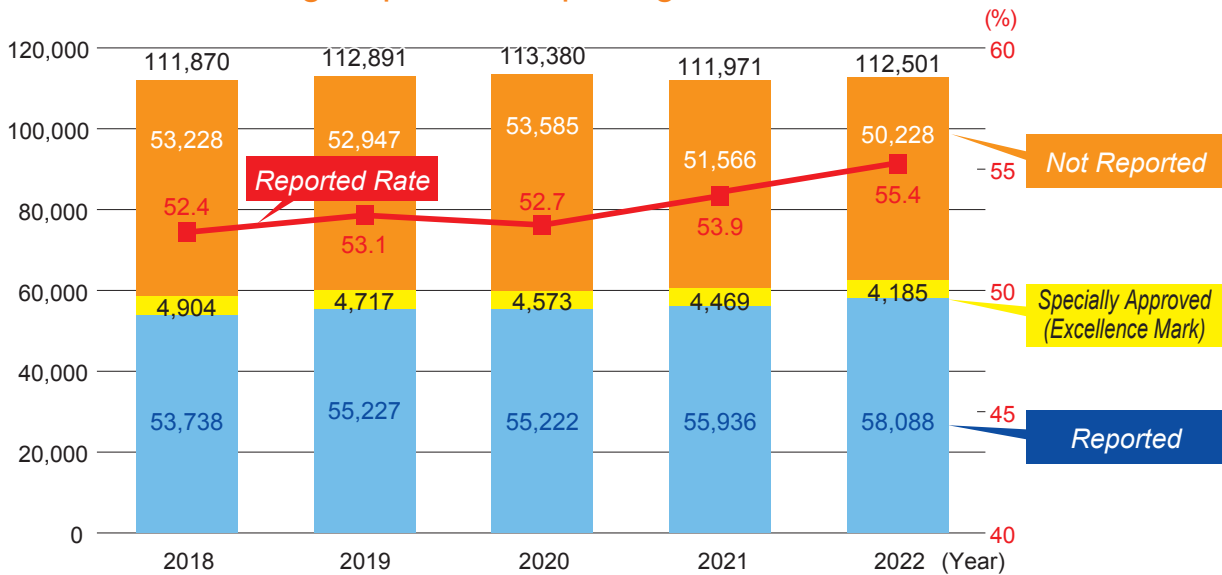
Chart 1-4-1. Report Results



2 Fire Prevention Property Inspection and Report System

The system was established with lessons learned from the building fire in Kabuki-cho, Shinjuku in 2001. The system requires the tenant manager to have the qualified inspector check how the building has been managed in terms of fire protection. The result is to be reported to the local fire station chief. The building showing successful achievement for three years can be exempted from inspection for three years from then or through the authorities' judgement. ("Specially Approved")

Chart 1-4-2. Building Inspection Reporting

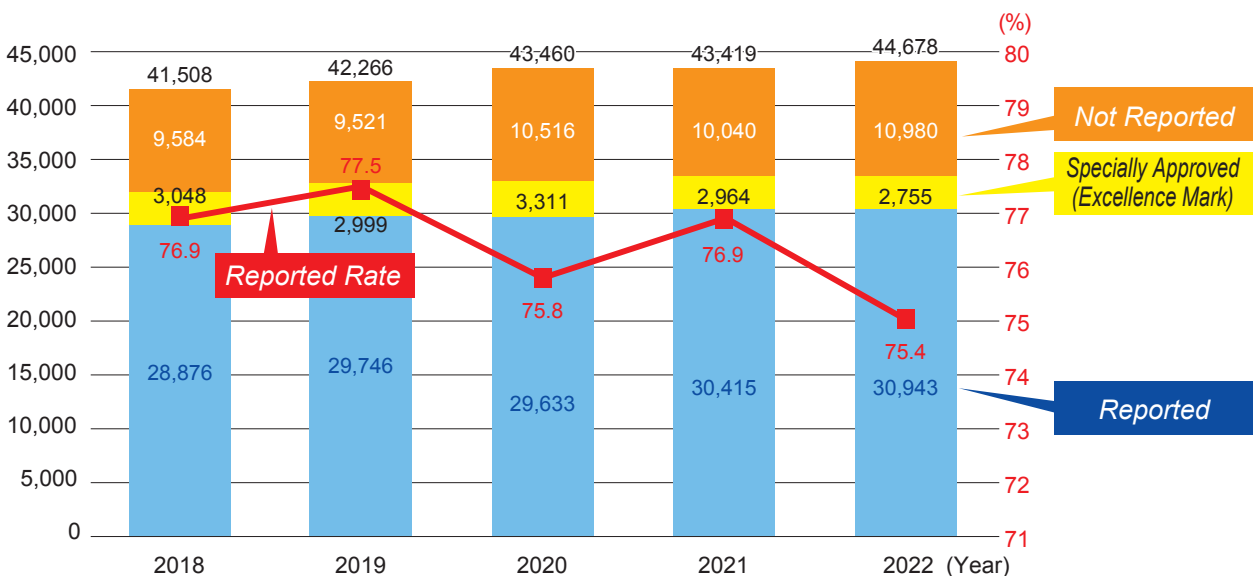


*Reported Rate includes Specially Approved.

3 Disaster Protection Management Inspection and Report system

The System requires the tenant manager (of a law-stated "large" building) to have the qualified inspector check how the building has been managed in terms of earthquake and terrorism preparedness. The result is to be reported to the local fire station chief. The building showing successful achievement for three years can be exempted from inspection for three years from then on through the authorities' judgement. ("Specially Approved")

Chart 1-4-3. Disaster Protection Management Inspection Reporting



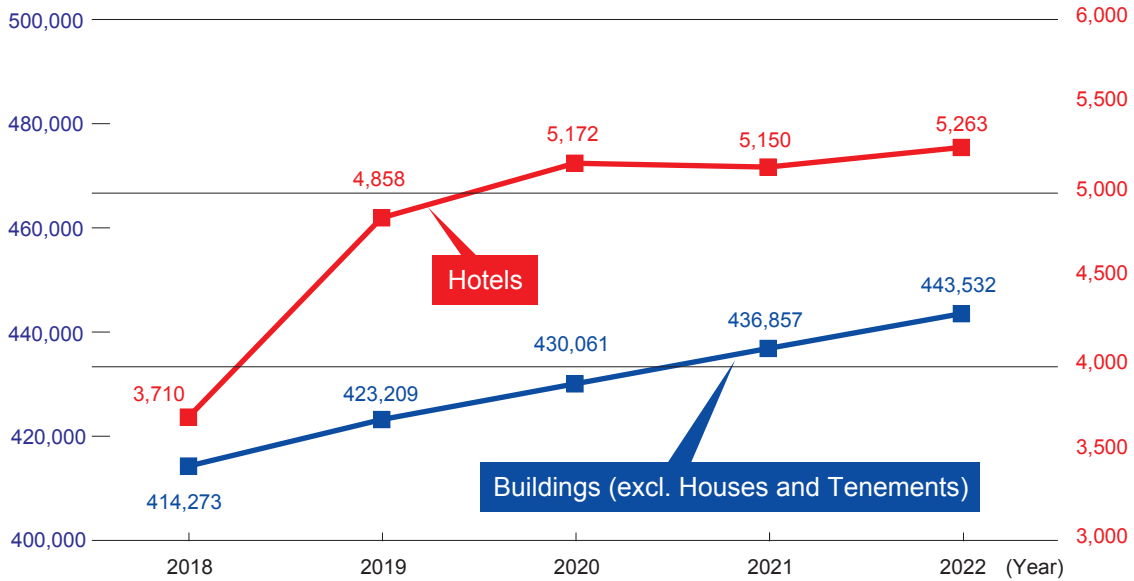
*Reported Rate includes Specially Approved.

2. Change in Number of Buildings and Fire Prevention Managers

(1) Change in Number of Buildings

As of the end of December 2022, there were 443,532 buildings (excl. houses and tenements) and 5,263 hotels within the TFD jurisdiction. Compared with 414,273 buildings and 3,710 hotels in 2018, the number of buildings, 29,259 (7.1%), and that of hotels, 1,553 (41.9%), are both increasing.

Chart 2-1-1. Buildings (excl. Houses and Tenements) and Hotels

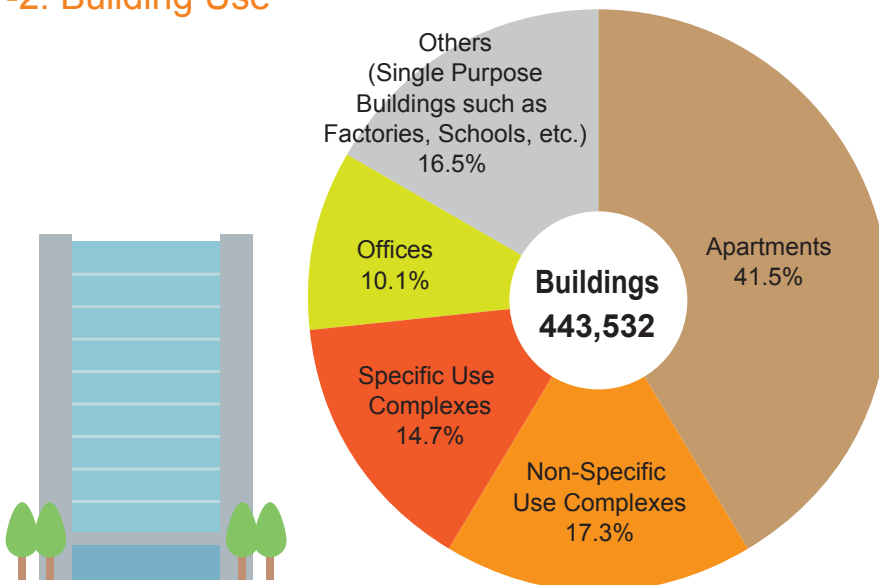


*The hotels are counted under Table 1, Fire Service Ordinance.

With an increase in foreign visitors to Japan and the relaxation of regulations under the Hotel Business Act, the number of hotel facilities has been on the rise in recent years.

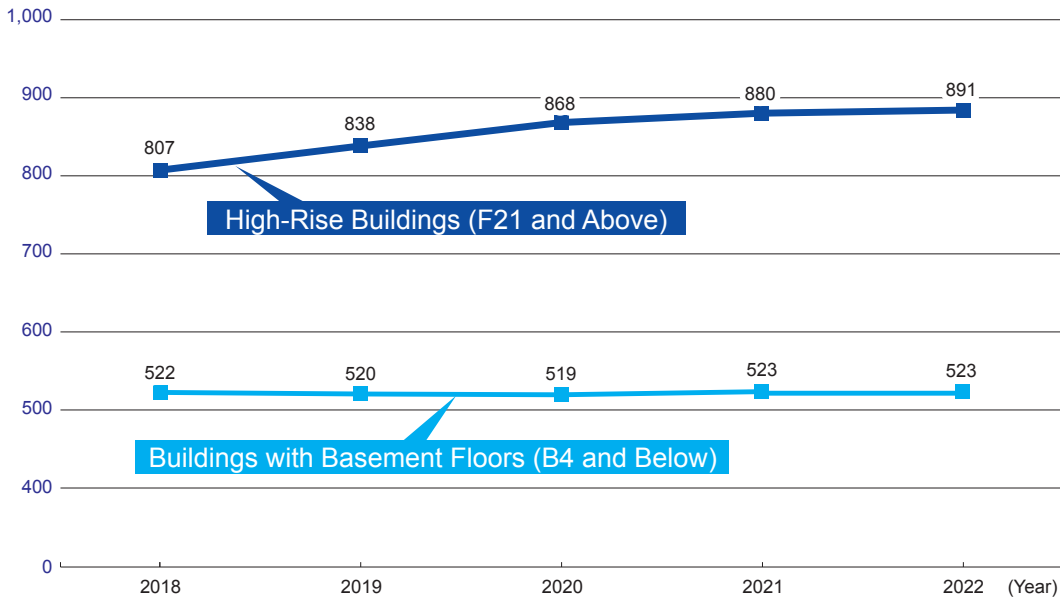
73.5% of the total building (443,532) occupies Apartments (183,870, 41.5%), Non-Specific Use Complexes (76,583, 17.3%), e.g. apartment and office combined buildings and Specific Use Complexes (65,091, 14.7%), e.g. commercial facility and restaurant combined buildings.

Chart-2-1-2. Building Use



*Due to statistical rounding, the summation may not be 100%.

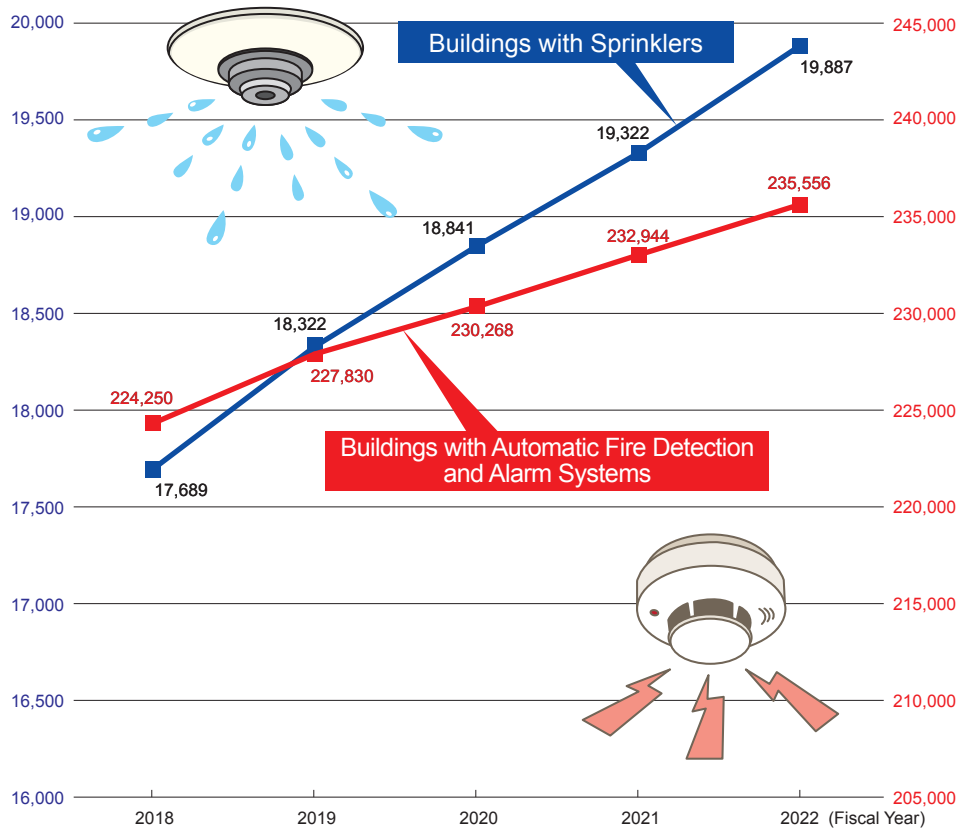
Chart 2-1-3. High-Rise Buildings (F21 and Above) and Buildings with Basement Floors (B4 and Below)



Buildings within the TFD jurisdiction are getting high-rised, large-scaled and deeper in ground. Still today, the urban redevelopment is in progress and large-scale buildings are under construction.

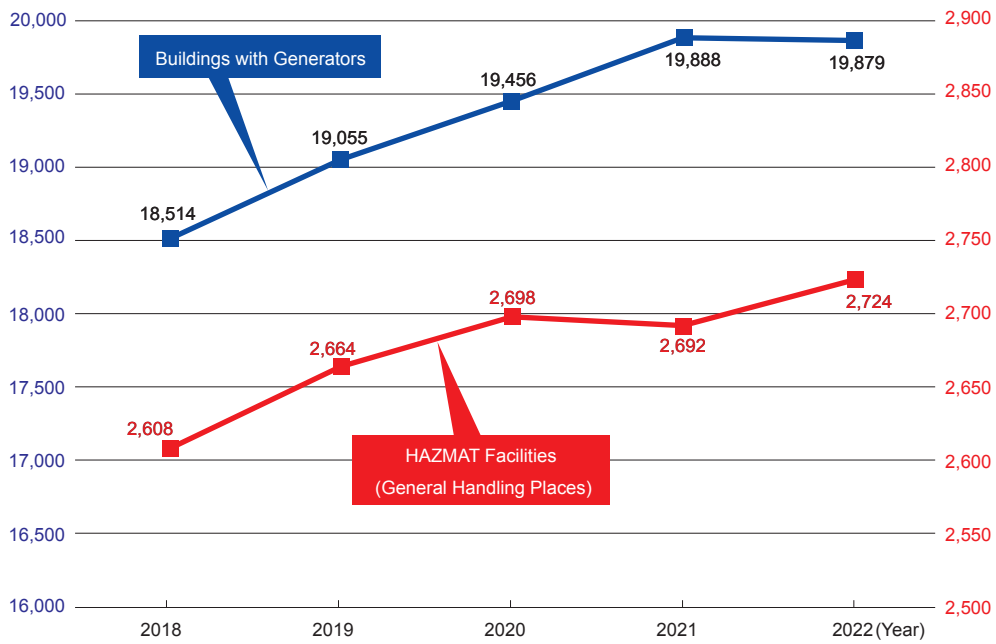
*31m and higher buildings are defined as high-rise under the Fire Service Law; however, to express buildings higher, we sum up the ones with 21 stories (roughly 60m) and higher.

Chart 2-1-4. Buildings with Sprinkler and Automatic Fire Detection and Alarm Systems



The increase of buildings installed sprinkler and automatic fire detection and alarm systems is because 11-story and higher or 31m and higher buildings in which those systems are required to install has accelerated constructed more. Also, the Fire Service Law was revised in 2015. The automatic fire detection and alarms and sprinkler systems are required installations for small-scale social welfare facilities, the automatic fire detection and alarm system for hotels and the sprinkler system for clinics. These are the factors for the increase.

Chart 2-1-5. Buildings with Generators and HAZMAT Facilities (General Handling Places)



*The number of HAZMAT facilities (General Handling Places) are as of the end of each year.

General Handling Facilities are where designated quantity or larger amount of hazardous materials at power plants, boiler facilities and paint plants or paintings are consumed.

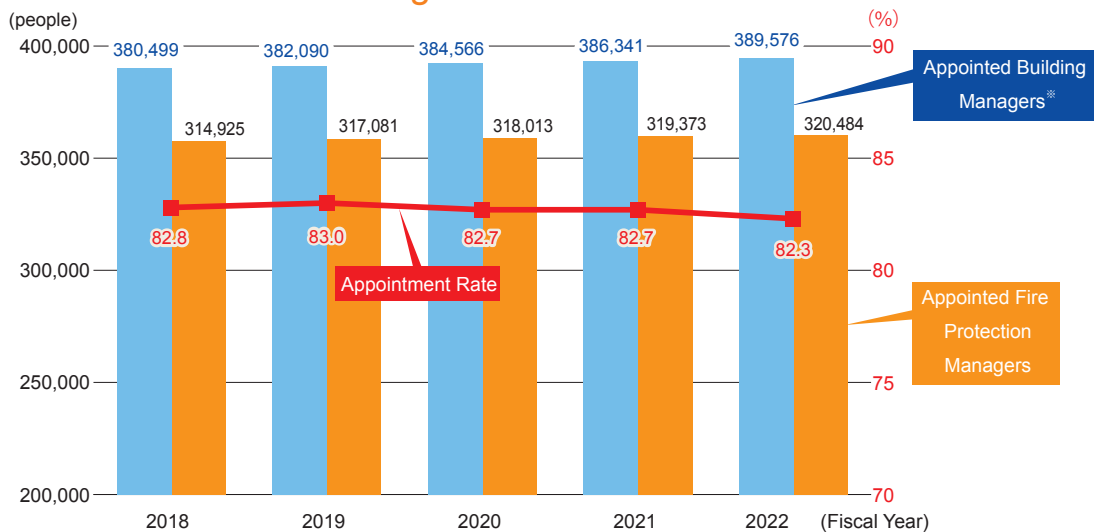
After the East Japan Earthquake, companies tend to install backup power supply systems and fuel storage tanks for the BCP and earlier recovery.



(2) Fire Protection Managers

As of the end of fiscal 2022, there were 389,576 establishments obligated to appoint fire protection managers. In recent years, the number of establishments has been increasing. The rate of the appointment of fire protection managers at the end of fiscal 2022 was 82.3%. In recent years, the appointment rate has been around 83%.

Chart 2-2. Fire Protection Managers



*Appointed Building Managers have authority over the buildings under Article 8 of the Fire Service Law.

3. Private Fire Brigade Training

Private Fire Brigade training is mandatory at least twice a year at business establishments where an unspecified number of people visit, such as department stores, hospitals, hotels, theaters and underground station buildings.

In 2020, the number of training sessions decreased due to the impact of the COVID-19 pandemic. However, as each facility adapted to the “new normal” and conducted voluntary training with creativity, the number of training sessions in 2021 recovered to a level similar to that in 2019. In 2022, it further increased.

Chart 3. Private Fire Brigade Training

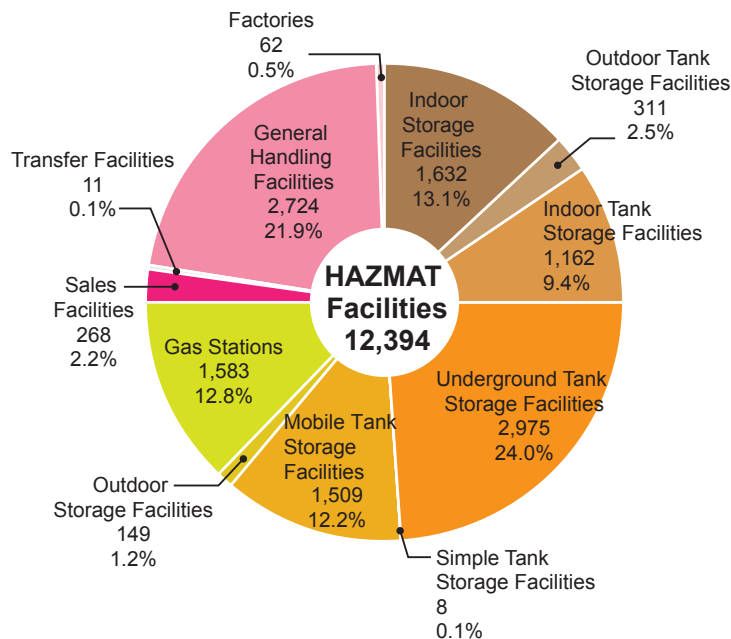
	Total (Cumulative Number of Times)	Comprehensive Training	Partial Training			Others	Training Participants (Hundred)	Trainers (People)
			Emergency Call Procedures	Firefighting	Evacuation			
2018	144,096	99,515	2,781	11,572	22,159	8,069	84,740	45,287
2019	151,860	105,656	2,397	11,191	21,714	10,902	86,205	40,611
2020	134,831	91,987	2,306	10,375	20,680	9,483	68,200	10,956
2021	150,828	97,447	2,388	13,375	25,035	12,583	81,853	12,327
2022	164,592	102,432	2,561	16,469	28,077	15,053	83,190	28,756

4. HAZMAT Administration

(1) HAZMAT Facilities by Category

HAZMAT facilities are classified according to each facility type. In terms of each facility type, the number of underground tank storage facilities was the largest with 2,975 facilities, followed by 2,724 general handling facilities and 1,632 indoor handling facilities as of the end of fiscal 2022.

Chart 4-1. HAZMAT Facilities



(2) HAZMAT Accidents by Category

The number of HAZMAT accidents was 118 in 2022, down 6 from the previous year. There were 38 fires (up 5 from the previous year), 22 leaks (up 2 from the previous year), and 58 other accidents (down 13 from the previous year). Although there were no deaths in these HAZMAT accidents, 11 people were injured (up 8 from the previous year).

Chart 4-2. HAZMAT Facilities Accidents by Category

Year	Total	Fires	Leaks	Others	Deaths	Injuries
2018	114	30	32	52	0	16
2019	122	28	23	71	0	16
2020	123	24	19	80	0	11
2021	124	33	20	71	0	3
2022	118	38	22	58	0	11
Change from 2021	▲6	5	2	▲13	0	8

(3) HAZMAT Accidents by Factor

The HAZMAT Accidents by Factor shows that 71 physical factors, 60.2% of the total, was the highest in numbers and 29 human factors, 24.6%, was the second highest. Followed by those, there were 18 Others, 15.3%.

Chart 4-3-1. Accidents

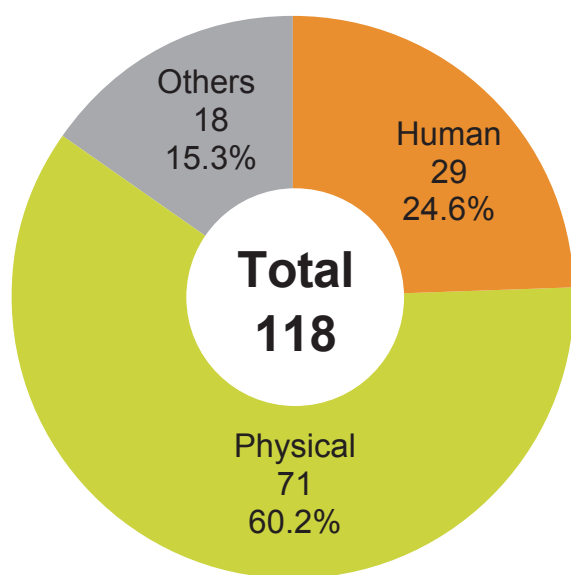


Chart 4-3-2. Factors and Causes

Factor	Cause
Human Factor	Inadequate Maintenance Incorrect Operation Inadequate Operation Checking Operation Undone Inadequate Monitoring
Physical Factor	Deterioration Defective Design Disorder Defects in Workmanship Breakage
Other Factor	Arson Traffic Accident Catch Fire Disaster (e.g. earthquake) Unknown (under investigation)

Chart 4-3-3. Fires

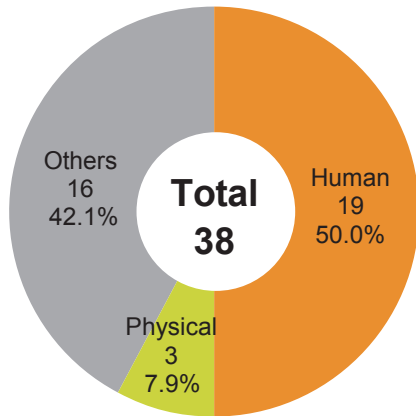


Chart 4-3-4. Leaks

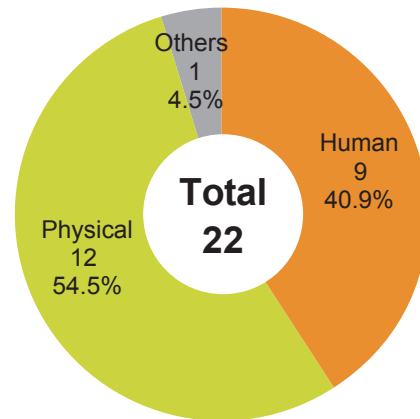
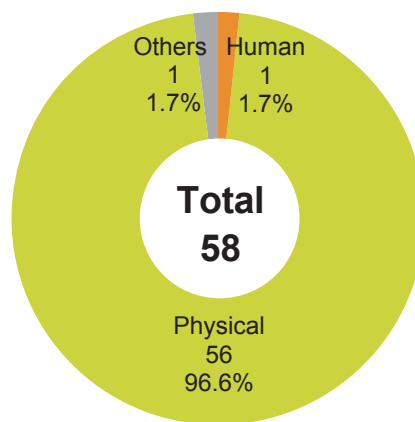


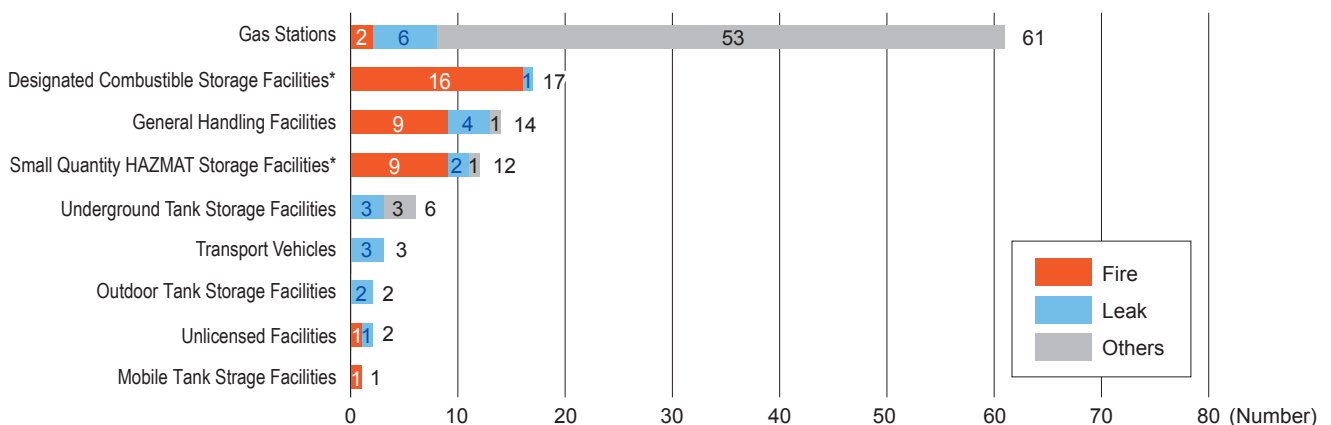
Chart 4-3-5. Other Accidents



(4) HAZMAT Facilities Accidents

In terms of the occurrence of accidents by facility types in 2022, there were 61 gas stations, down 13 from the previous year, and accounted for about half the total, followed by 17 designated combustible storage facilities, up 9 from the previous year, 14 general handling facilities, up 1 from the previous year, and 12 small quantity HAZMAT storage facilities, up 1 from the previous year. Many accidents at gas stations are caused by property damage accidents caused by driving mistakes. Be sure to drive safely on the premises of gas stations.

Chart 4-4. HAZMAT Facilities Accidents



* 5 fires of the unregistered Small Quantity HAZMAT Storage Facilities and 2 fires of the unregistered Designated Combustible Storage Facilities included