

FY2021

Status of Traffic Accidents and
Current State of Traffic Safety Measures

FY2022

Plans Regarding the Traffic Safety Measures
(White Paper on Traffic Safety in Japan 2022)
(Outline)

June, 2022
Cabinet Office

Pursuant to the provisions of Article 13 of the Basic Act on Traffic Safety Measures (Act No. 110 of 1970), this White Paper on Traffic Safety reports on the FY2021 status of traffic accidents and current state of Traffic Safety Measures, and FY2022 Plans Regarding the Traffic Safety Measures that should be implemented.

About the White Paper on Traffic Safety

This White Paper on Traffic Safety is an annual report to be submitted to the Diet pursuant to the Basic Act on Traffic Safety Measures. This year's White Paper is the 52nd edition.

Basic Act on Traffic Safety Measures

Article 13: The government must submit a report on the status of traffic accidents, plans pertaining to the policies relating to traffic safety, and the outline of the measures taken in relation to traffic safety to the Diet every year.

White Paper on Traffic Safety

Special Feature

Urgent measures on traffic safety on roads in school zones and other areas and the eradication of drunk-driving

Chapter 1. Status of traffic accidents involving children (elementary school students) and traffic accidents involving drunk-driving

1. Status of traffic accidents involving children (elementary school students)
2. Status of traffic accidents involving drunk-driving

Chapter 2. Previous initiatives to inspect school zones and initiatives towards the eradication of drunk-driving

1. Previous initiatives regarding school zone inspections

2. Previous initiatives towards the eradication of drunk-driving

Chapter 3. Urgent measures on traffic safety on roads in school zones and other areas and the eradication of drunk-driving

1. Background to urgent measures
2. Outline of urgent measures on traffic safety on roads in school zones and other areas and the eradication of drunk-driving
3. Progress of urgent measure initiatives

FY2021 Status of Traffic Accidents and Current State of Traffic Safety Measures

Title 1 Land Transport

Part 1 Road Transport

Chapter 1 Road Traffic Accident Trends

Chapter 2 Overview of Current Road Traffic Safety Measures

1. Improvement of Road Traffic Environment
2. Dissemination and Reinforcement of Traffic Safety
3. Ensuring Safe Driving
4. Ensuring Vehicle Safety Measures
5. Maintaining Order in Road Traffic
6. Development of Rescue and Emergency Medical Systems
7. Improving and Promoting Victim Support
8. Improving R&D and Studies and Research

Part 2 Railway Transport

Chapter 1 Railway Traffic Accident Trends

Chapter 2 Overview of Current Railway Traffic Safety Measures

1. Improvement of Railway Environment
2. Dissemination of Knowledge about the Safety of Rail Traffic
3. Ensuring the Safe Operation of Railways
4. Securing the Safety of Rolling Stock
5. Measures for Traffic Safety in Railroad Crossings
6. Improving Rescue and First-Aid Activities
7. Promoting Victim Support
8. Investigating the Causes of Railway Accidents and Preventing Accidents
9. Improving R&D and Studies and Research

Title 2 Maritime Transport

Chapter 1 Maritime Accident Trends

Chapter 2 Overview of Current Maritime Traffic Safety Measures

1. Improvement of Maritime Traffic Environment
2. Dissemination of Knowledge Regarding Maritime Transport Safety
3. Ensuring Safe Operation of Boats and Ships
4. Securing the Safety of Maritime Vessels
5. Enhancing Safety Measures for Small Boats
6. Maintaining Law and Order regarding Maritime Traffic
7. Improving Rescue and First-aid Activities
8. Promoting Victim Support
9. Investigating the Causes of Maritime Vessel Accidents and Preventing Accidents
10. Improving Studies and Research into Maritime Traffic Safety

Title 3 Air Transport

Chapter 1 Aircraft Accident Trends

Chapter 2 Overview of Current Air Traffic Safety Measures

1. Further Promotion of Aviation Safety Program
2. Ensuring Safe Operation of Aircraft
3. Ensuring Aircraft Safety
4. Development of Air Traffic Environment
5. Safety Measures for Unmanned Aircraft etc.
6. Improving Rescue and First-aid Activities
7. Promoting Victim Support
8. Investigating the Causes of Aircraft Accidents and Preventing Accidents
9. Promoting R&D regarding Air Traffic Safety
10. Air Safety Measures Taken by the Ministry of Defense

FY2022 Plans Regarding the Traffic Safety Measures

Part 1 Measures Regarding the Safety of Land Transport

Chapter 1 Measures Regarding Road Transport Safety

Chapter 2 Measures Regarding Railway Transport Safety

Part 2 Measures Regarding Maritime Transport Safety

Part 3 Measures Regarding Air Transport Safety

Topics

○ Safe use of bicycles in deliveries

○ Safety measures at station platforms, etc.

Special Feature: Urgent measures on traffic safety on roads in school zones and other areas and the eradication of drunk-driving

In June last year there was a tragic accident in which children were killed in Yachimata City, Chiba Prefecture. There is still no end to traffic accidents such as this that threaten the safety of school zones. In response to the instruction given at the 1st Ministerial Meeting on Traffic Safety Measures held on June 30, 2021 by the Prime Minister at that time to “implement thorough measures to protect the safety of children,” the government formulated “urgent measures on traffic safety on roads in school zones and other areas and the eradication of drunk-driving” at the 2nd Ministerial Meeting on Traffic Safety Measures held on August 4 the same year.

In this Special Feature an analysis is provided of the current situation and characteristics regarding traffic accidents related to children and drunk-driving, in addition to which the content of urgent measures and the main state of progress is covered while taking into account of the measures hitherto implemented for traffic safety of school zones and against drunk-driving.



During the 3rd Ministerial Meeting on Traffic Safety Measures

1 Securing traffic safety in school zones and other areas

(1) Implementation of joint inspections in school zones and identification of locations requiring measures Creation and consideration of measures for locations requiring them as identified by the joint inspections

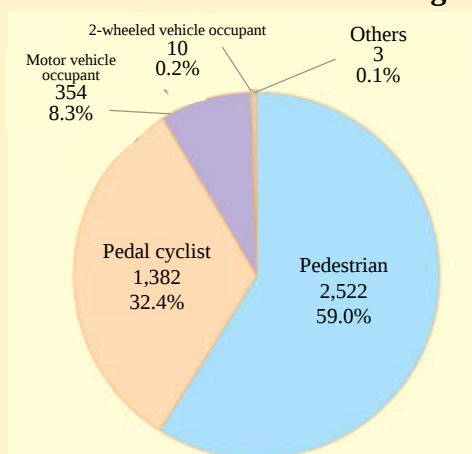
Joint inspections of elementary school zones were implemented, and as of the end of December 2021, 76,404 locations requiring measures were identified throughout Japan.

Locations requiring measures (total number)	76,404 locations
Locations where measures are to be implemented by boards of education and schools	37,862 locations
Locations where measures are to be implemented by road administrators	39,991 locations
Locations where measures are to be implemented by the police	16,996 locations

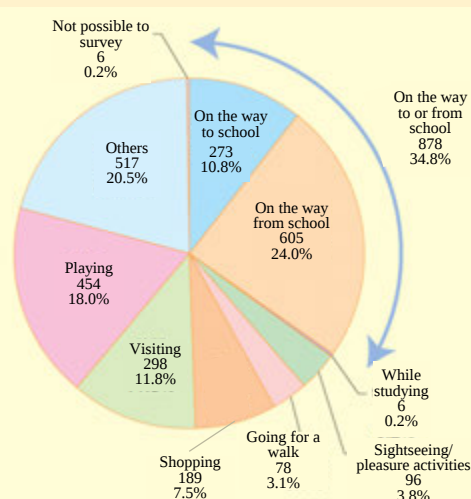
Summary of remarks made by the Prime Minister at the 3rd Ministerial Meeting on Traffic Safety Measures (December 24, 2021)

- **Initiatives will be pursued to put in place measures** at the required locations **by the end of FY2023**.
- With regard to the state of progress of urgent measures the Minister of State for Traffic Safety Measures will thoroughly manage them and ensure that there are not any delays.

From traffic accident statistics: the need to secure safety in spaces where elementary school students and other children walk through



- Looking at the circumstances of the elementary school students killed or seriously injured in traffic accidents (from 2017 to 2021), over half of them were “pedestrians.”



- With regard to the “pedestrians” in the left-hand graph, over one third were accounted for by going to or home from school when looked at in terms of purpose of using roads.

(2) Promotion of the development of a road traffic environment to secure child safety

Sidewalk development



Protective rail development



Examples of measures mainly taken by road administrators
(MLIT and prefectural civil engineering departments etc.)

Introduces signal control that completely separates the time when pedestrians can cross and the time when vehicles can proceed.



Increases luminance of road signs



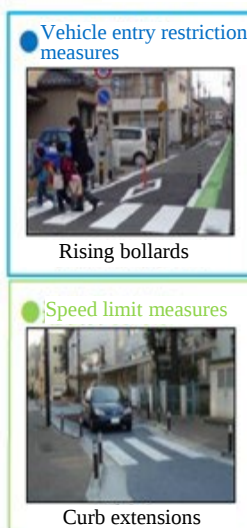
Examples of measures mainly taken by the police

- Development of people-first walking spaces offering safety and security on community roads while close collaboration between police and road administrators is undertaken. (**Zone 30 Plus**)

Conceptual diagram of Zone 30 Plus



Traffic restrictions by the police



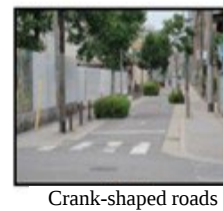
Curb extensions



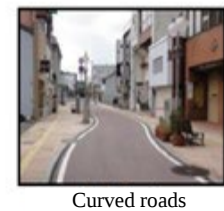
Humps



Slightly raised smooth pedestrian crossings



Crank-shaped roads



Curved roads

Installation of physical devices by road administrators

Case study: Case in which stakeholders conferred to examine measures (Kagoshima City, Kagoshima Prefecture)

- In the Masago Honmachi district of Kagoshima City drivers had been entering school zones to avoid traffic congestion on main roads, and the risk of accidents involving children and vehicles had become an issue.
- Therefore, after a joint inspection of school zones by schools, the police and road administrators, and an examination of the details of measures with local residents, a demonstration experiment of portable humps was implemented.
- Subsequently, explanations were made to local residents concerning the speed limiting effects confirmed by the demonstration experiment, the will of residents regarding installing humps confirmed, and an examination regarding road safety measures in school zones by the whole community conducted.
- When a Zone 30 in tandem with humps (smooth pedestrian crossings) was installed in response to this examination it had the result of reducing the speed of passing traffic.



During the examination meeting



Appearance of slightly raised smooth pedestrian crossings after installation

(3) Promotion of the further equipping of portable automated speed cameras and effective speeding enforcement

As of the end of FY2021 the police forces of 46 prefectures were supplied with a total of 117 units.



Traffic enforcement using portable automated speed cameras

(4) Traffic safety education and guidance to secure the safety of children and other pedestrians

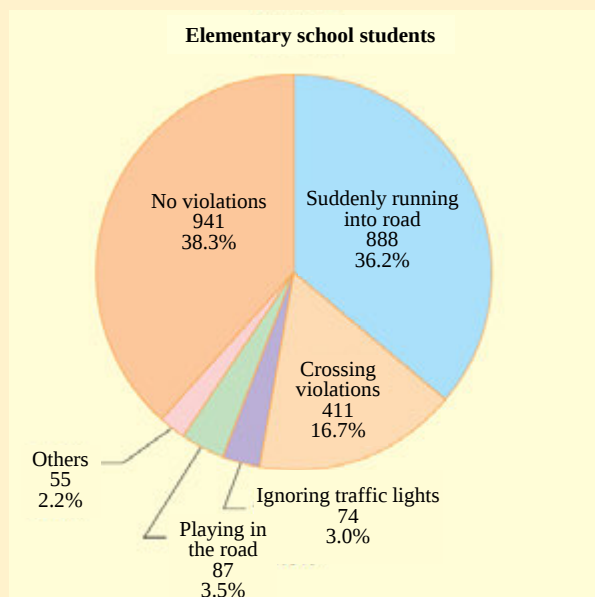
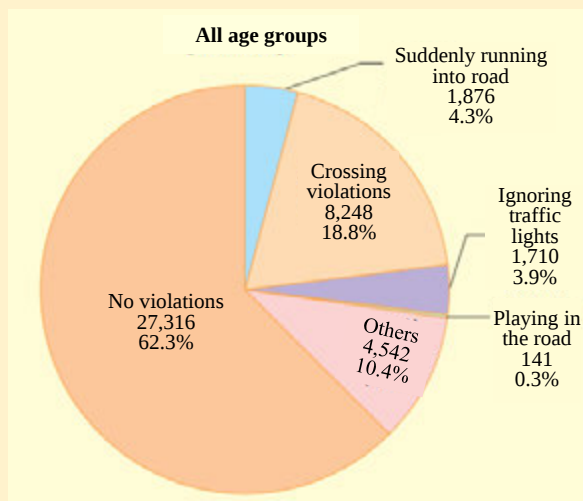


Road traffic safety education when going to and from school



Educational activities for drivers

From traffic accident statistics: the necessity of road traffic safety education



- Looking at whether or not those seriously injured or killed in road traffic accidents between 2017 and 2021 were violating the law (and if so in what way) revealed that across all age groups around 60%, but among elementary school students around 40%, were not in violation of the law. Suddenly running into the road was the most common violation among elementary school students.

(5) Securing the safety of children going to and from school

Through efforts to increase watching-over activities by school guard leaders and encourage the training and improved quality of school guards and volunteers, a further strengthening of the watching-over system is being attempted by collaboration between the police, parents and guardians, and PTAs etc.



Booklet to promote watching-over activities



Operation of school buses in Yachimata City, Chiba Prefecture

2 Eradication of drunk-driving

○ Purging places of business without an appointed driving safety supervisor, and the strengthening of measures for users aimed at eradicating drunk-driving

*The stipulations of the Road Traffic Act oblige users possessing a certain number of vehicles or above to appoint a driving safety supervisor. Driving safety supervisors are required to implement the work requisite for safe driving, including checking by roll calls etc. that drivers under their supervision have not been drinking alcohol and carrying out the education and instruction of these drivers.

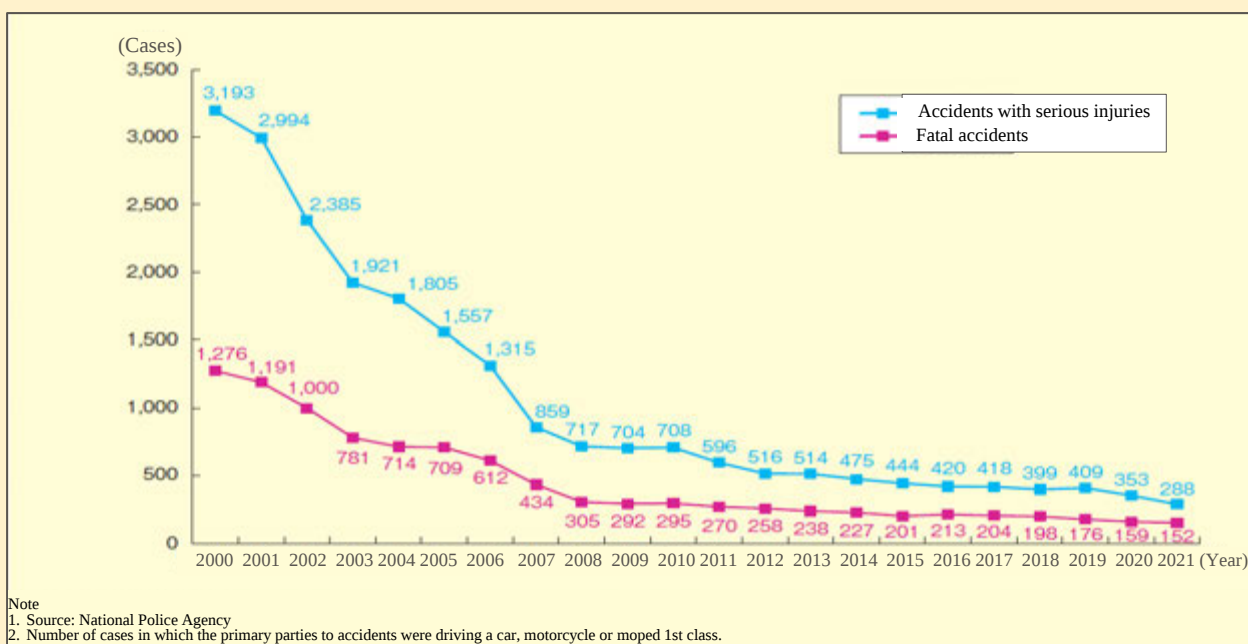
- Purging places of business without an appointed driving safety supervisor
 - Making vehicle users aware of their obligations including the obligation to appoint a driving safety supervisor
 - Ascertaining places of business without an appointed driving safety supervisor through the use of certification for car parking spaces information
 - Disclosure of the state of appointment of driving safety supervisors on the websites of all prefectural police forces
- Strengthening of measures for users aimed at eradicating drunk-driving

Amendment of the Enforcement Regulation of the Road Traffic Act (1960, Ordinance of the Prime Minister's Office 60), obliging driving safety supervisors, as part of their duties, to check drivers for influence of alcohol before and after driving using a breathalyzer.



PR & education poster

From traffic accident statistics: state of traffic accidents caused by drunk-driving



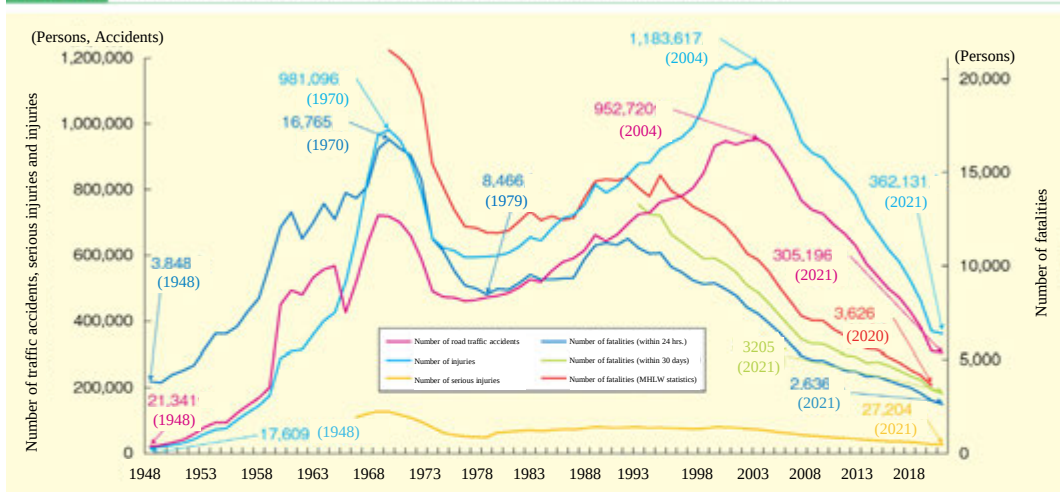
- There has been a decline in both the number of fatal accidents and accidents with serious injuries caused by drunk-driving. However, serious accidents due to malicious and dangerous driving still continue to occur, with 152 fatal accidents and 288 accidents with serious injuries caused by drunk-driving during 2021.

Title 1, Part 1, Chapter 1: Road Traffic Accident Trends

Long-Term Trends in Road Traffic Accidents

The number of traffic accident fatalities is the lowest since 1948 when the current traffic accident statistics were adopted

▶Chart 1-1 Trends in the number of road traffic accidents, fatalities, serious injuries and injuries caused by road traffic accidents



Note

1. Source: National Police Agency
2. "Number of fatalities (within 24 hrs.)" means the number of persons who died due to a traffic accident within 24 hours after its occurrence.
3. "Number of fatalities (within 30 days)" means the number of persons who died due to a traffic accident within 30 days after its occurrence (counting the day of the traffic accident as the first day).
4. "Number of fatalities (MHLW statistics)" is prepared by the National Police Agency based on "Vital Statistics" by the Ministry of Health, Labour and Welfare and is the number of fatalities whose cause of death is traffic accident among the fatalities in the year (which excludes anyone who died later than a year after the accidents or due to an after-effect). Data for 1994 and all preceding years indicate the number of automobile fatalities, and data for 1995 and all following years indicate the number of traffic fatalities except those not to be considered due to traffic accidents on roads.
5. "Number of serious injuries" means the number of persons who have suffered injuries in traffic accidents and need medical treatment for one month (30 days) or more.
6. Data on number of road traffic accidents for 1966 and all following years do not include property damage-only accidents.
7. Data on number of fatalities (within 24hrs.), injuries and road traffic accidents for 1971 and all preceding years do not cover Okinawa Prefecture.

Trends in the number of fatalities, accidents, serious injuries and injuries in traffic accidents

- The worst traffic accident fatality record was registered in 1970 with 16,765 people.
- The number of traffic accident fatalities fell to 8,466 people in 1979 and started to increase again. Since 1992, however, the number started to decline again.
- The number of both traffic accidents and injuries registered the worst record of 952,720 and 1,183,617 people, respectively in 2004.
- The number of traffic accident fatalities in 2021 (2,636 people) was even lower to the previous year in which had the fell to their lowest level since 1948, when the current traffic accident statistics were adopted. The number of serious injuries in 2021 was 27,204, and this number has continuously decreased since 2000. Both the number of traffic accidents and the number of injuries has decreased for 17 years in a row.

Status of Road Traffic Accidents during 2021

● Overall Condition

- | | |
|---|--|
| ○ Number of accidents: | 305,196 accidents (-3,982, -1.3% over the previous year) |
| ○ Number of casualties: | 364,767 people (-7,548, -2.0% over the previous year) |
| ○ Number of injuries: | 362,131 people (-7,345, -2.0% over the previous year) |
| ○ Number of serious injuries: | 27,204 people (-571, -2.1% over the previous year) |
| ○ Number of fatalities (within 24 hours): | 2,636 people (-203, -7.2% over the previous year) |
| (within 30 days): | 3,205 people (-211, -6.2% over the previous year) |

Targets in the 11th Traffic Safety Basic Plan (covering FY2021 to FY2025)

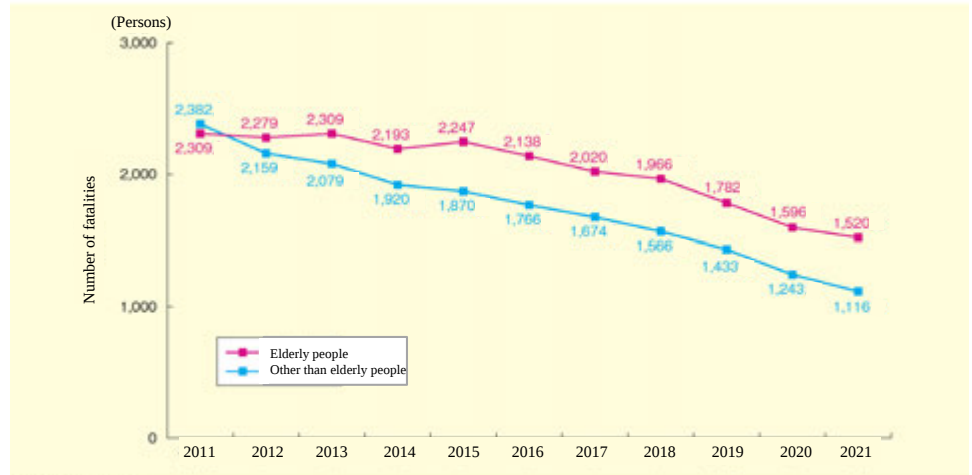
- Reduce the number of fatalities within 24 hours to 2,000 people or less per year by 2025.
- Reduce the number of serious injuries to 22,000 people or less per year by 2025

*The Basic Act on Traffic Safety Measures was established in 1970 and the Traffic Safety Basic Plan was formulated every five years based on the Act since 1971.

Number of traffic accident fatalities of elderly people

▶ Chart 1-4 Trends in traffic accident fatalities of elderly people and others

Although the number of traffic accident fatalities of elderly people per 100,000 population has continued to decrease, the number of elderly people among people killed in traffic accidents was 1,520 people, which is still high at 57.7%.

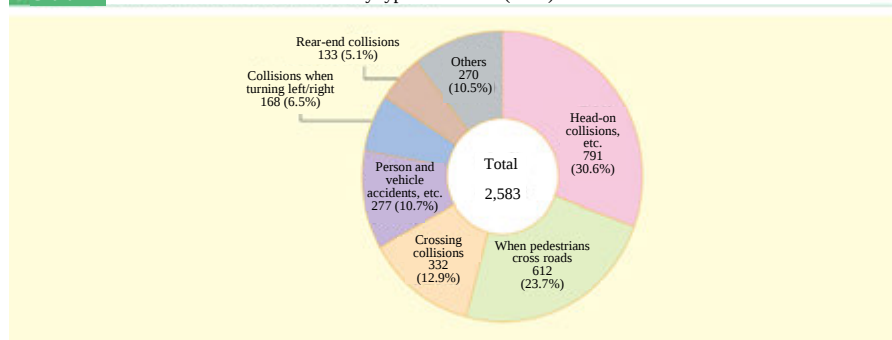


Note
Source: National Police Agency

Number of fatal traffic accidents by type of accident

Looked by type of fatal traffic accident in 2021 the most common type of accidents was “Head-on collisions, etc.”* (791, with the component ratio of 30.6%), followed by “When pedestrians cross roads” (612, with the component ratio of 23.7%), “Crossing collisions” (332, with the component ratio of 12.9%). These three types accounted for 67.2% of fatal accidents.

▶ Chart 1-7 Number of fatal traffic accidents by type of accident (2021)



Note
1. Source: National Police Agency
2. “Person and vehicle accidents, etc.” means accidents between vehicle and person (hit head-on, hit from behind, hit while lying or squatting on the road, etc.), excluding “When pedestrians cross roads.”
3. “Head-on collisions, etc.” means head-on collisions, road departure and hitting objects.
4. The figure in the bracket () shows the component ratio.

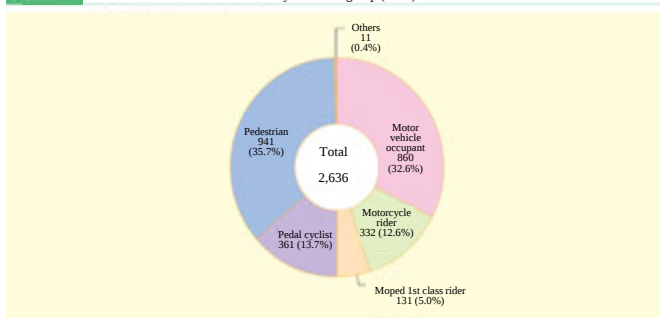
* Head-on collisions etc.

Includes accidents of a similar cause such as leaving the road and driving into objects.

Number of traffic accident fatalities by road user group

The number of traffic accident fatalities is the highest for pedestrians (941 people with the component ratio of 35.7%) followed by motor vehicle occupants (860 people with the component ratio of 32.6%) and the sum of both accounts for 68.3% of the total.

▶ Chart 1-11 Number of traffic accident fatalities by road user group (2021)

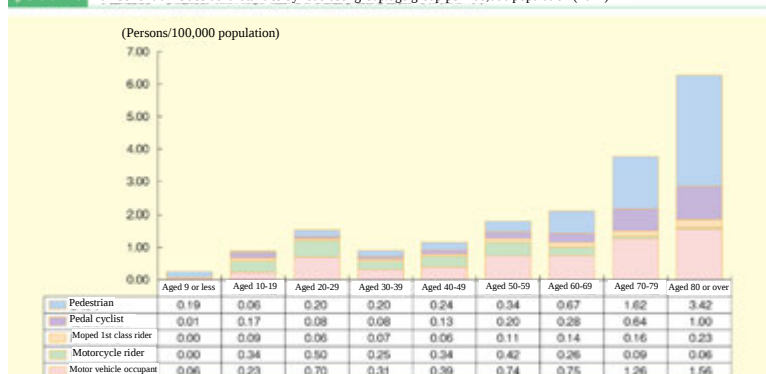


Note
1. Source: National Police Agency
2. The figure in the bracket () shows the component ratio.

Number of traffic accident fatalities by age group and by road user group

The number of pedestrians killed (per 100,000 population) is high amongst elderly people, and, in particular, that of elderly people aged 80 or over (3.42 people) is about five times higher than that of all age groups (0.75 people).

▶ Chart 1-18 Number of traffic accident fatalities by road user group/age group per 100,000 population (2021)



Note
1. Source: National Police Agency
2. The population used for the calculation is based on statistical data “Population Estimate” (as of October 1, 2020) by the Ministry of Internal Affairs and Communications.

Title 1, Part 1, Chapter 2: Overview of Current Road Traffic Safety Measures

Improvement of road traffic environment**◎Development in pedestrian-first walking spaces offering safety and security on community roads**

With regard to community roads, we designated as Zone 30 Plus areas in which to attempt to improve road safety through the appropriate combining of local speed restrictions of 30km/h, humps, curb extensions, and other physical devices, thereby seeking to promote further efforts towards the development of pedestrian-first safe and secure passage areas. In addition, low speed restrictions were introduced including in the already developed Zone 30 areas (of which there were 4,186 zones as of the end of FY2021). In the Zone 30 (3,864 areas) which had been developed by the end of FY2019, the number of traffic accidents with fatalities and serious injuries between the year before the development and the year after development was compared and it was found that the total number of traffic accidents and the number of accidents involving pedestrians and bicycles decreased (by 29.4% and by 26.5%, respectively), by which it was confirmed that these measures were effective in preventing traffic accidents and reducing through-traffic speed of vehicles within the Zone.

Dissemination and reinforcement of traffic safety**◎Promotion of stepwise and systematic traffic safety education**

We conducted stepwise and systematic traffic safety education to people of all ages from infants to adults in accordance with their mental and physical development and life stages based on the Traffic Safety Education Guidelines (Public Notice of National Public Safety Commission No. 15 of 1998). In particular, we not only enhanced the traffic safety awareness of the elderly (aged 65 or over) but also strengthened education for other generations to protect and consider the elderly through understanding their characteristics in this rapidly aging society. In addition, considering the fact that elementary, junior high and high school students are members of the traffic society and a significant number of them frequently use bicycles, we made efforts to enhance education on the basic road traffic rules for bicycle users, traffic safety awareness and traffic manners.

Ensuring safe driving**◎Promotion of measures for elderly drivers**

It is mandatory for elderly drivers aged 70 or over upon the last day of the renewal period of their driver's licenses to undergo senior driver training within six months before the last day of the renewal period of their driver's licenses. A total of 3,376,680 elderly people attended the courses in 2021.

In addition, it is mandatory for those who are aged 75 or over upon the last day of the renewal period of their driver's licenses to undergo cognitive assessment within six months before the last day of the renewal period of their driver's licenses. The police set three-hour training for elderly people determined as possibly having dementia or cognitive dysfunction from the result of the cognitive assessment, involving individual guidance using images of the state of their driving recorded by a drive recorder. The rest of them are required to take a two-hour course.* A total of 2,086,706 people took the cognitive assessment in 2021.

In addition, considering the fact that the reduction of waiting times before cognitive assessment or senior driver training has been regarded as an issue to be solved in some prefectures, cognitive assessment and senior driver training, which are outsourced to driving schools in most cases, are implemented by the prefectural police directly and consultation services for elderly drivers are expanded for ensuring appropriate and smooth implementation of them.

*From May 13, 2022 onwards it is required that drivers undergo a two-hour course including on-board driving instruction or a one-hour course not including on-board driving instruction regardless of the results of their cognitive assessments.

Ensuring vehicle safety measures**◎Promotion of the development and diffusion of advanced safety vehicles (ASV)**

Under the Advanced Safety Vehicle (ASV) Promotion Project, which seeks to encourage the development and diffusion of cars equipped with the advanced technology, the Phase 7 Study Group for the Promotion of ASV was launched. It decided to pursue examinations, over the five years from FY2021 to FY2025, of the following: effective diffusion strategies for the correct understanding and use of existing ASV technologies; safety technologies enabling systems to operate safely even when drivers make clear steering errors; common specifications aimed at the commercialization and diffusion of collaborative safety technologies using telecommunications and maps; and the coordination of the scope of responsibility to be apportioned to automatic car systems.

Title 1, Part 2, Chapter 1: Railway Traffic Accident Trends

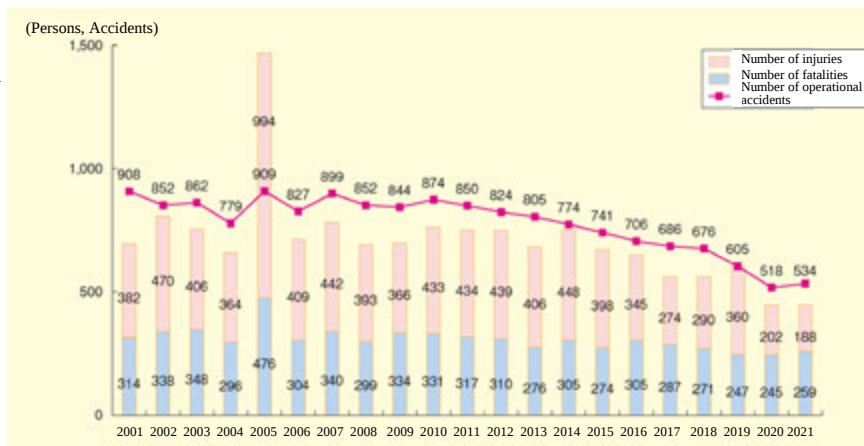
The number of operational railway accidents* has been in a long-term decline. There were 908 accidents in 2001 and the number fell to 850 in 2011, 534 in 2021, an increase of 3.1% compared to the previous year.

The number of fatalities in operational railway accidents was 259 people, an increase of 5.7% compared to the previous year and the number of fatalities of passengers was none.

* Operational railway accidents

Operational railway accidents include train collision accidents, train derailment accidents, train fire accidents, railway crossing accidents, road impediment accidents, railway accidents causing injury or death and railway accidents causing property damage. Incidentally, operational accidents regarding streetcars are treated as operational railway accidents.

▶Chart 1-43 Trends in the number of operational accidents and the number of casualties



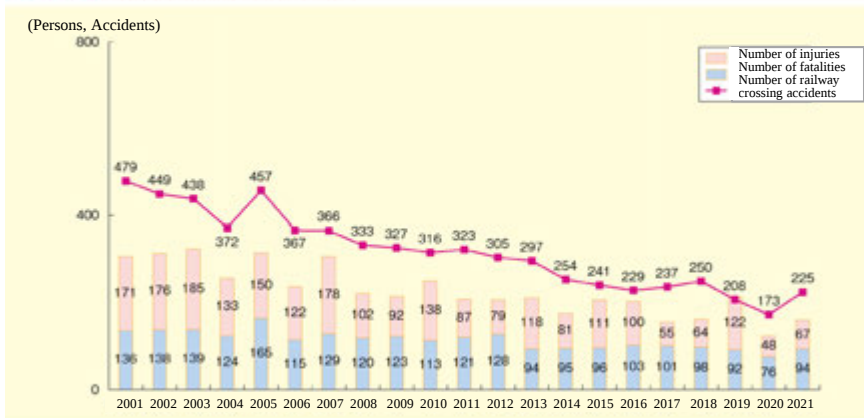
Note
 1. Source: Ministry of Land, Infrastructure, Transport and Tourism
 2. The number of fatalities was registered within 24 hours after accidents.

Railway crossing accidents* have been in a decreasing trend in the long run due to the development of safety facilities at railway crossings, etc. There were 225 accidents in 2021, an increase of 30.1% compared to the previous year, while the number of fatalities due to railway crossing accidents was 94 people, an increase of 23.7% compared to the previous year.

* Railway crossing accidents

Railway crossing accidents include train collision accidents, train derailment accidents and train fire accidents that occur at a railway crossing and the accidents in which a train or rolling stock collide or come into contact with a person or automobile passing through a railway crossing.

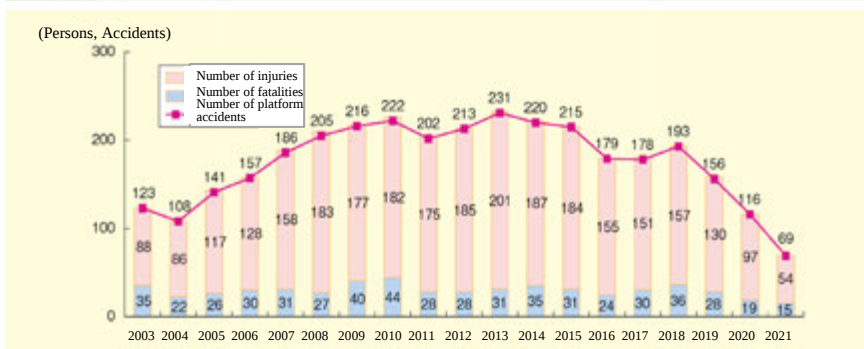
▶Chart 1-44 Trends in the number of railway crossing accidents and the number of casualties



Note
 1. Source: Ministry of Land, Infrastructure, Transport and Tourism
 2. The number of fatalities was registered within 24 hours after accidents.

The number of railway accidents causing injury or death in 2021 was 266, a decrease of 14.2% compared to the previous year, while the number of fatalities was 165 people, a decrease of 1.8% compared to the previous year. The number of railway accidents causing injury or death by falling from the platform, or by being brought into contact with a train (platform accidents) was 69, a decrease by 47 (40.5%) compared to the previous year, while the number of fatalities in platform accidents was 15 people, a decrease by four people (21.1%) compared to the previous year.

▶Chart 1-46 Trends in the number of platform accidents and the number of casualties



Note
 1. Source: Ministry of Land, Infrastructure, Transport and Tourism
 2. The number of fatalities was registered within 24 hours after accidents.

Title 1, Part 2, Chapter 2: Overview of Current Railway Traffic Safety Measures

Improvement of railway environment

◎Strengthening measures against torrential rain at railway facilities

Torrential rain measures have been promoted to deal with the torrential rain damage occurring in recent years with increased frequency and ferocity. These measures include preventing railway bridges over rivers from being washed away and defending against landslides from slopes near railway lines.

◎Promotion of measures to improve safety at station platforms

In order to improve the safety at station platforms, we are promoting both hardware and software measures to prevent people from falling from station platforms, such as the advancement of the platform door installation schedule and guidance by station staff. Of these, our goal was to install platform doors at about 800 stations by FY2020, and as of the end of FY2020, 943 stations had been equipped with platform doors, achieving the goal. Furthermore, as a target starting in FY2021, we are aiming to install by FY2025 platform doors on 3,000 platforms across all railway stations including 800 platforms at stations with average daily users of 100,000 or more people. In addition, at stations without platform doors, the Interim Report on Safety Measures for Visually Impaired People on Railway Platforms Using New Technologies was compiled and published in July 2021, and examinations are still underway with regard to measures to prevent visually impaired people from falling from a station platform using IT and sensing technology.

Dissemination of knowledge about the safety of railway traffic

In addition to conducting campaigns to prevent accidents at railway crossings using posters and others, dissemination of knowledge and awareness-raising on the manner to safely cross railway crossings and on the prevention of railway accidents were conducted for schools, residents along the railway tracks and road transport operators among others. Furthermore, the railway operators in the Tokyo metropolitan area have come together positively work on PR activities for the “zero platform accidents” campaign to raise awareness about preventing accidents involving intoxicated passengers, and have tried to spread correct knowledge about railroad safety.

Ensuring the safe operation of railways

◎Improvement of meteorological information

Measures such as the development of a weather monitoring system were taken to prevent accidents and mitigate damage by accurately monitoring natural phenomena that affect railway traffic and issuing and communicating forecasts and warnings in a timely and appropriate manner, and to enhance the content and effective use of such information. Earthquake Early Warning is provided to railroad operators so that they can use it to prevent the damage of rolling stock falling over by reducing the speed of or halting trains when an earthquake strikes.

◎Appropriate response in cases of large-scale accident occurrence

In order to cope with emergency situations such as a large accident or a disaster, procedures were taken to check and validate the emergency contact system at night and on a holiday, which enables the establishment of contact with relevant persons in the government and railway operators in a quick and appropriate manner.

In addition, railway operators were instructed to provide information appropriately to railway users and establish systems to quickly restore services in case of accidents including transportation failure with a view to reducing social impact in major cities and trunk railway lines.

Regarding the protection of railways against tsunami, response guidelines for keeping railway passengers safe in times of tsunami based on the key concept of evacuation from the largest possible tsunami ever, such as one that could be caused by Nankai Tough megaquakes (that is, the prompt evacuation is the most effective and most important response, for example), have been worked out, along with specific examples of such evacuation, to encourage the railway operators drive their respective approaches.

Measures for traffic safety at railway crossings

◎Current status of measures for prevention of accidents at railway crossings

In FY2021, we designated additional 156 railway crossings to be improved based on the amended Act on Promotion of Railway Crossings. Regarding the designated railway crossings and the ones regarding which there are issues, we held meetings to improve regional railway crossings as necessary, and road administrators and railway operators agreed to promote further measures for railway crossings in accordance with local conditions.

In addition, the number of railway crossings which were improved in FY2020 including those designated in the past and those voluntarily improved by road administrators and railway operators was 31 (grade separation), 269 (structural improvement) and 31 (improvement in railway crossing security facilities). Moreover, streamlining of railway crossings were performed in conjunction with grade separation project, etc.

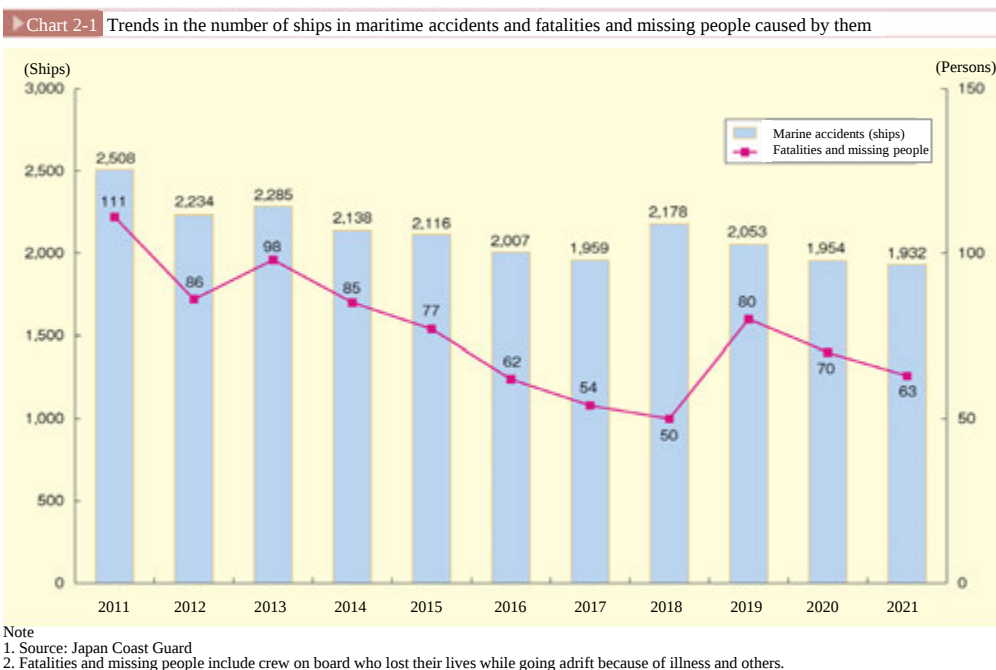
Title 2, Chapter 1: Maritime Accident Trends

Current status of maritime accidents

When we look at the changes in the number of ship accidents that were subject to the Traffic Safety Basic Plan in the seas around Japan, there were 2,256 ship accidents as an average during the 9th Traffic Safety Basic Plan (FY2011 to FY2015). However, the number of ship accidents was 1,932 in 2021, a decrease of about 10%.

The number of fatalities and missing people in ship accidents was approximately 91 people as an average during the 9th Traffic Safety Basic Plan. However, there were 63 people in 2021, a decrease of about 30%.

Furthermore, there was not a single major maritime accident in congested waters during 2021.



Maritime accidents and rescues during 2021

- (1) Among the number of fatalities and missing people due to ship accidents in 2021 the proportion accounted for by pleasure boats was the highest, 49% of the overall total. The highest proportion of those who died or went missing due to falling into the sea from ships was accounted for by fishing vessels, 47% of the overall total.
- (2) The number of maritime accidents of small ships in 2021 was 1,527, a decrease by 23 ships compared to the previous year. The number of fatalities and missing people as a result of these accidents was 46 people, an increase by five people compared to the previous year.
- (3) The 11th Traffic Safety Basic Plan stipulated a target of reducing the number of fatalities and missing people due to maritime accidents and increasing rescue rates* to 95%. As a result of the Japan Coast Guard's improvement and strengthening of its rescues and assistance system, and efforts to collaborate and cooperate with private sector rescue organizations, the target rescue rate was achieved in 2021.
- (4) Of the 7,665 people aboard ships in maritime accidents during 2021, excluding the 4,741 people who saved themselves, 2,874 of the remaining 2,924 were rescued, which accounted for 98% of the total.
- (5) Of the 2,607 people aboard pleasures boats* etc. involved in maritime accidents during 2021, excluding the 844 who saved themselves, 1,743 of the remaining 1,763 were rescued, which accounted for 98% of the total.

*Rescue rates:

The proportion of the rescued among those aboard ships requiring rescue in maritime accidents and those falling into the sea (excluding those who saved themselves)

*Pleasure boats:

A collective term for yachts and motorboats to be used for sports or recreation.

Title 2, Chapter 2: Overview of Current Maritime Traffic Safety Measures

Improvement of maritime traffic environment

◎Development of aids to navigation

In order to prevent destruction and/or extinction of aids to navigation caused by natural disasters, such as earthquakes and typhoons, and ensure maritime traffic safety in disaster-stricken-areas even in times of disasters, we promoted measures to strengthen the disaster-resistance of aids to navigation on the basis of the Priority Plan for Infrastructure Development.

Dissemination of knowledge regarding maritime transport safety

◎Raising awareness of the prevention of maritime accidents

To prevent maritime accidents, it is important for each of us to raise our awareness of maritime accident prevention. In parallel, efforts have been made to diffuse and enhance the concept of maritime accident prevention and encourage the acquisition of, and enhancing the knowledge of maritime accident prevention in conjunction with the relevant agencies. These efforts included encouraging the whole nation, as well as maritime personnel concerned, to ensure thorough adherence to the practice of self-rescue measures, such as acting in compliance with relevant laws and regulations and wearing life-jackets at all times, by taking advantage of all possible opportunities, such as maritime accident prevention training sessions and on-board guidance.

In particular, during the period from July 16 to 31, 2021, we conducted the “Campaign for Zero Sea Accidents” across Japan with the participation of the government and people as an effort focused on “Prevention of marine accidents for small boats,” “thorough watch-keeping and promotion of inter-ship communication,” “securing measures for self-protection such as wearing a life-jacket at all times,” and “securing safety in congested waters.” We also conducted local-level activities in consideration of regional characteristics including weather conditions, such as fogs, occurrence trend of maritime accidents, as well as characteristics of various ships.

Ensuring safe operation of boats and ships

◎Thoroughness in measures to prevent reoccurrence of accidents

In the event that ships are involved in accidents the operating company is encouraged to take appropriate measures to prevent its reoccurrence according to the cause of the accident, and the measures were thoroughly implemented through audits and guidance by the Safety Management and Seafarers Labour Inspector.

In addition, with the objective of improving operating companies’ awareness of “transport safety” and securing safer sea transport, the state of implementation of the Safety Management and Seafarers Labour Inspector’s on-the-spot inspections and examples of punishments and instruction are made public.

Enhancing safety measures for small boats

◎Safety measures for pleasure boats

The Ministry of Land, Infrastructure, Transport and Tourism (MLIT) called for the implementation of regular inspections and maintenance using leaflets at all opportunities, such as maritime accident prevention seminars and on-board guidance. In addition, the Japan Coast Guard (JCG) used pamphlets and other materials to raise awareness about compliance with maritime traffic rules and early access to safety information such as weather and marine conditions as well as navigation warnings via the internet and smartphones.

MLIT, in coordination with the Japan Craft Inspection Organization, made known the need to undergo ship inspection at appropriate intervals to people concerned.

Furthermore, through patrol activities and awareness education activities regarding rules to be observed, MLIT, in cooperation with related organizations, cracked down upon violations of these rules and distributed leaflets.

The police ensured maritime traffic safety, not only by patrolling sea areas focused on harbors, other ship congestion areas, bathing beaches with many swimmers, water areas where water sports are actively practiced, etc., but also by providing safety guidance to people related to marine leisure sports in cooperation with related organizations and groups.

Title 3, Chapter 1: Aircraft Accident Trends

Aircraft accidents in recent years

The number of aircraft accidents in Japan was 11 in 2021, in which three persons were killed and 10 injured. In recent years, only a few aircraft accidents of large airplane have occurred per year, most of which are caused by air turbulence, and most of the aircraft accidents are that of small airplane.

▶ Table 3-1 Numbers of aircraft accidents and casualties

Type Year	Number of accidents								Number of casualties	
	Large airplane	Small airplane	Ultralight aircraft	Helicopter	Gyro plane	Glider	Airship	Total	Fatality	Injury
2017	3	8	3	5	1	2	0	22	22	6
2018	5	3	4	3	0	1	0	16	11	5
2019	5	1	2	2	0	3	0	13	1	12
2020	4	1	4	3	1	0	0	13	2	16
2021	1	2	2	3	0	3	0	11	3	10

Note:

1. Source: Ministry of Land, Infrastructure, Transport and Tourism.
2. Data as of the end of December each year
3. Includes accidents involving Japanese aircraft that occurred outside of Japan.
4. Includes accidents involving foreign aircraft that occurred in Japan.
5. Accidents/casualties regarding such as natural deaths or deaths caused by violence are not included.
6. The number includes those who died within 30 days after the accident and missing persons.
7. A large airplane is an airplane with a maximum takeoff weight of over 5.7 tons and a small airplane with that equal to or less than 5.7 tons.

Incidents related to air traffic safety during 2021

Safety issues involving air carriers

There were two cases of accidents and serious incidents* which air carriers are obliged to report to Government in 2021.

Furthermore, an aircraft accident involving passenger fatalities of specified Japanese air carriers (Japanese air carriers that operate an air carrier business that is conducted using aircraft with more than 100 passenger seats or a maximum takeoff weight of 50,000 kg) has not occurred since the crash of Japan Airlines Flight 123 at the mountain Osutaka in 1985.

* Serious incident: An incident which did not result in an accident, but could have resulted in an accident.

Title 3, Chapter 2: Overview of Current Air Traffic Safety Measures

Further promotion of aviation safety program

◎Strengthening SMS (Safety Management System) in service providers

Guidance was provided to improve the quality of SMS, which is a mechanism for risk management related to safety by promoting safety performance indicators and safety performance targets directly linked to the measures to improve safety for service providers such as Japanese air carrier. Specifically, for service providers such as new entrants of the air carriers or new airport operators based on the Act on the Operation of National Airports, etc. Utilizing the Capabilities of the Private Sector (No.67, 2013) who have limited experience with SMS measures, guidance, supervision and advice etc. were provided by maintaining close coordination so that the setting of safety performance indicators and safety performance targets can be implemented properly.

Ensuring safe operation of aircraft

◎Implementation of Transportation Safety Management Evaluation

Utilizing the “Disaster Prevention Management Guidelines for Transport Operators” formulated and published in July 2020, during FY2021 evaluations regarding disaster prevention management within the management evaluation of transport operators were implemented.

◎Improving measures to prevent the performance of duties under the influence of alcohol

In response to a series of inappropriate events involving airmen drinking alcohol that occurred from October 2018, stringent regulations for alcohol intake were established between January to July 2019. In FY2021, we provided guidance and supervision through audits and other measures to ensure that these regulations are properly observed as in previous years, and also promoted the dissemination and enlightenment of knowledge that contributes to the daily health management of pilots (including appropriate education on alcohol intake) as well as the proper operation of medical examinations (including knowledge about diseases and medicines that affect aviation operations) through the implementation of lecture meetings for the personnel in charge of health management at airlines. Furthermore, in light of the fact that inappropriate cases of alcohol testing by cabin crew members have come to light, instructions and supervision have been given to domestic airlines in order to enhance their alcohol testing systems, adequately conduct alcohol-related education (including effect measurements), and ascertain organizational drinking culture.

Ensuring aircraft safety

◎Improvement of technical standards of maintenance and inspection of aircraft

To further improve the safety of aircrafts and its components, we have been developing technical standards for the safety of aircraft and its components, in light of latest technologies and international standard formulation.

Development of air traffic environment

◎Measures against runway incursion

To prevent erroneous entries to runways due to human error, etc., we are promoting measures to avert communication discrepancies between air traffic controllers and pilots, including formulation of rules which oblige pilots to repeat controller's instructions. In addition, information regarding events when runways have been erroneously entered is being shared between air carriers, traffic controllers and airports, analyzed from their respective perspectives, and the requisite measures discussed and considered.

Topics

Road transport

Efforts by volunteers for traffic safety

Holding of the Traffic Safety Forum

Safe use of bicycles in deliveries

Future safety of vehicles in a society aiming for zero traffic accidents

Development of traffic rules for varied means of transport including new mobilities

Enforcement of the Act Partially Amending the Road Traffic Act (elderly driver measures) in 2020

Holding of “Symposium for supporting children who lost their families in traffic accidents”

State of and measures for traffic accidents while riding motorcycles

Railway transport

Safety measures at station platforms

Maritime transport

Anchor dragging risk appraisal system (known as “ikaring”)

Initiatives to prevent maritime accidents in collaboration with Sea Bird Japan, a waterside protection organization

Air transport

Development of a system for the steady implementation of security checks