

Winter Driving Safety

Drive safely with appropriate winter equipment and an abundance of caution



There's no such thing as an "expert driver" on snowy roads.

In the winter, approximately half of the Japanese archipelago is covered with snow, and Japanese expressways run through many snowy regions. At NEXCO East, NEXCO Central, and NEXCO West, we use snow removal and other measures in an effort to provide safe and comfortable winter driving for our users, but traffic accidents on snowy roads continue to occur.

Everyone knows that snowy roads are slippery and that it's dangerous to be in a hurry when driving in the winter. Falling and blowing snow makes it hard to see, so a driver must slow down and maintain a safe distance from the vehicle ahead. Nevertheless, many accidents occur due to excessive speed and a failure to maintain a safe distance between vehicles. Furthermore, many drivers put too much trust in their own driving skills and their vehicles' performance, which leads to accidents when they cannot respond appropriately to unexpected movements on snowy roads, where the state of the road surface is far different from what they are used to. If you have not yet had an accident on a snowy road, it's only because you've been lucky, not because you're an expert driver.

When it comes to driving on snowy roads, there are no beginners and no experts. Please read this pamphlet on Winter Driving Safety and use it to make your own driving safer.



How to drive safely on snowy roads

- 1. Don't put too much trust in your own driving skills and your vehicle's performance.
- 2. Think ahead.
- 3. Don't overdo it.
- 4. Use winter tires, etc.
- Please equip your car for winter before winter comes.

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On expressways in the winter, be especially careful in these spots!

- Approaching a curve**
→ Slow down as you approach a curve, and never swerve or brake suddenly!
- On bridges**
→ Exposed to the wind, bridge decks often become icy. Be careful to avoid skidding!
- Long downhill grades**
→ A vehicle tends to pick up speed on a downhill. Slow down and maintain a safe distance from the vehicle ahead.
- Tunnel entrances and exits**
→ Strong winds and sudden snowfalls are common. Inside a tunnel, the road tends to become icy.
- Road surfaces in shaded areas**
→ In shaded areas, the temperature drops, and the road tends to become icy.

Expressway Network and Maximum Snow Depths



In Japan, the typical winter weather pattern is for high pressure to form in the west and low-pressure to form in the east, such that strong northerly winds blow off the Asian continent, picking up moisture as they cross the Sea of Japan. This brings heavy snows along the Sea of Japan coast from Hokkaido to the Tohoku, Hokuriku, and Sanin regions. Along the Pacific coast, passing low-pressure centers also bring frequent snows. Features such as topography and the like may also create heavy snow and sudden changes in the weather in certain regions. Snowfall patterns vary widely across the Japanese archipelago due to the advent of low-pressure and cold-air masses. Please be careful to obtain the latest weather and road information before you set out on a drive.

Use winter tires on snowy roads! And don't forget to bring along chains!

Japan's expressway network extends throughout the country. In the winter, even if the skies are clear when you start out, snow may be falling at your destination or in locations that you pass through along the way. Before you drive on expressways in the winter, we ask that you mount winter tires such as studless tires or the like, and that you bring along tire chains just in case. However, even if you use all of the proper winter equipment, there is no absolute guarantee against skidding on snowy roads, so please be careful to reduce your speed and drive safely.

● Studless tires

Unlike studded tires, these tires do not have metal studs. They are made from a specially formulated rubber that does not lose its pliability at low temperatures, with improvements to the shape of the tread and the siping that provide dramatically better braking performance than do conventional snow tires.



● Snow tires

The surfaces of these tires have greater relief than do ordinary tires, in order to provide better braking on snowy and icy road surfaces. The grooves in the tread are wider and deeper to provide a more reliable grip on snow.



● Tire chains

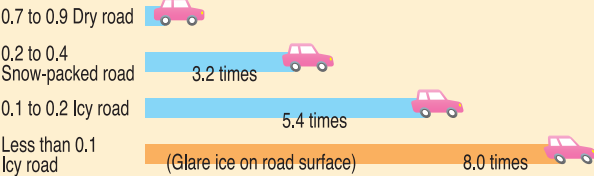
Chains are better than winter tires such as studless tires at achieving the maximum braking effect. Although winter tires do improve braking, they are not certain to be effective in every possible circumstance. Depending on the snow conditions, all vehicles may be legally required to be fitted with chains. Please take tire chains with you regardless of the type of tires you're using.



* The words "STUDLESS" or "SNOW," or the characters "M+S," M.S," M&S," or "M/S" are printed on the sidewalls of winter tires (studless tires and snow tires).

● Stopping distances under different conditions ●

Coefficient of friction



Note: The coefficient of friction is an indicator of the frictional force between the tire and the road surface. The smaller the value, the more likely the vehicle is to skid.

Material: Japan Automobile Tyre Manufacturers Association

We speak in terms of snow accumulation and freezing, but snow takes a variety of forms, depending on the region and location, the temperature and amount of snowfall, the time of day, and the differences between sunny and shady areas, and it may best be described as sticky snow, dry snow, new snow, packed snow, sherbet snow, partially frozen snow, or the like. Based on the Road Traffic Law, the Public Safety Commission in each prefecture determines when drivers are obligated to mount anti-skid equipment such as chains and winter tires in the event of snowy or freezing conditions. However, on expressways where vehicles travel at high speed through a series of regions with differing weather conditions, it is not enough simply to follow the rules. Ultimately, in anticipation of the harshest possible conditions, safety is increased by requiring **winter tires to be mounted on all wheels** (as the great majority of prefectures do), thereby helping to prevent accidents on expressways. Depending on the amount of snowfall and the degree of icing on the roads, emergency measures may also be implemented that require chains to be mounted on all vehicles, so that vehicles without chains are not allowed on the road, even if they have winter tires on all wheels. Obviously, **winter tires should be mounted for driving on expressways in the winter, but please be absolutely sure to take tire chains with you, just in case.**



Important Points When Mounting Chains

☞ Don't forget to confirm the mounting procedure ahead of time!

Be sure to select chains that match the size of your tires, and rehearse the mounting procedure in advance in accordance with the instructions. You will actually be mounting the chains under cold, snowy conditions. By practicing in advance, you will become able to perform the procedure smoothly.

☞ Be careful to check that the chains are mounted properly!

Mounting the chains loosely or forgetting to engage the hooks on the rubber straps can cause the chains to fall off. Wear and damage to the chains can also lead to the chains breaking.

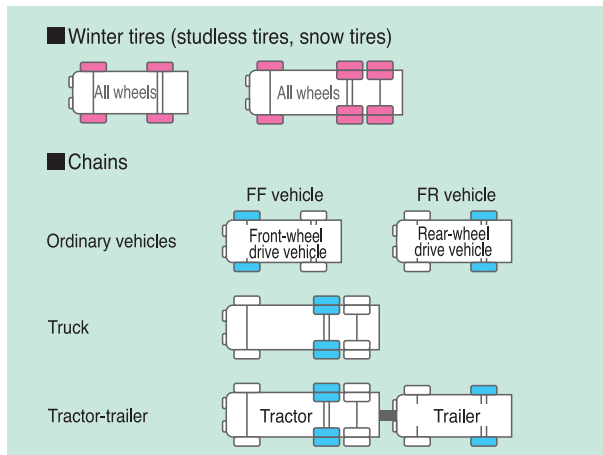
☞ Be careful not to drive too fast!

Driving too fast can cause the chains to expand and come into contact with the vehicle body, leading to breakage. Be alert to abnormal noises (squeaking, knocking, etc.) while you are driving.

☞ Mount/dismount tire chains at frequent intervals!

When you see a road sign that says "Mount Chains," pull off at the nearest service area, parking area, or chain mounting station and mount the chains. Mounting chains on the main thoroughfare is extremely dangerous. Note also that before entering some areas, such as long tunnels, for example, it is best to remove the chains in order to prevent them from breaking. We ask that you mount and dismount chains at frequent intervals.

Correct mounting positions for winter tires and chains



* Please mount the chains on the front wheels of a front-wheel drive vehicle and on the rear wheels of a rear-wheel drive vehicle. On a four-wheel drive vehicle, the chains should be mounted on the wheels that are the drive wheels when the vehicle is operating in two-wheel drive. This may be the front wheels or the rear wheels, depending on the vehicle's configuration. Please check the owner's manual for the vehicle in question.



Checking and maintenance before you drive

✓ Battery

Before you go, have your battery checked at a service station.

✓ Non-freezing diesel fuel

Ordinary diesel fuel can freeze at temperatures below -10°C . Fill up your diesel vehicle with non-freezing diesel fuel before you travel to cold regions.

✓ Fill up the tank

On snowy roads, your vehicle consumes fuel more quickly. Always check the fuel gauge.

✓ Wiper blades

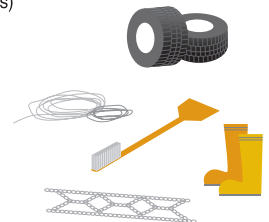
Check for damage and cracks. If possible, replace the blades with snow-resistant winter blades.

✓ Radiator & washer fluids

Choose non-freezing fluids. Don't forget to refill the washer fluid.

Winter Equipment Checklist

- ☐ Winter tires (studless tires or snow tires)
- ☐ Tire chains
- ☐ Wire (for connecting broken tire chains)
- ☐ Work gloves (cotton gloves)
- ☐ Boots
- ☐ Blankets, towels
- ☐ Tow rope
- ☐ Snow shovel
- ☐ Snow brush
- ☐ De-icer (for keyholes, wipers)
- ☐ Wheel blocks
- ☐ Booster cables (for a diesel vehicle, carry a diesel cord.)
- ☐ Flashlight



Drive with time to spare, without rushing and without pushing the vehicle's limits.

Plan your drive allowing plenty of time.

When encountering snow, many drivers tend to panic and hurry to get away from it, leading them to drive in a risky manner. This is a trap that drivers who are unaccustomed to snowy roads often fall into. On expressways in the winter, speed restrictions and road closures often occur, so make a driving plan that allows for plenty of time.



Take plenty of breaks.

Don't rush headlong to your destination, but take more breaks than usual at service areas and parking areas. Brush the snow off your car, including the headlights and taillights, make sure that skis, snowboards, and the like are well secured to the roof rack, and don't forget to check the latest weather and road information.



Running out of gas in sub-freezing weather is a serious risk! Refuel before the fuel level gets too low.

Even if you encounter congestion or stoppages due to speed restrictions or accidents, keep the engine running to heat the passenger cabin. If you run out of gas in sub-freezing weather, the cold becomes a serious threat! Refuel promptly at service stations in service areas and parking areas. Service stations in snowy regions often sell chains and rubberized cotton gloves.

Clear the snow off the roof before you drive!

If you drive with snow piled high on the vehicle's roof, the snow will fall off while you're driving on the expressway, forcing the vehicles behind you to drive over it. Vehicles swerving to avoid large chunks of snow can lead to collisions, so please be absolutely sure to clear the snow off the roof before you drive.



Make sure the roof rack doesn't come loose.

Please mount the roof rack for skis and snowboards securely. When affixing skis to the rack, be absolutely sure to turn the tail ends of the skis toward the front. At service areas and parking areas along the route, check to make sure the rack hasn't loosened.

Check your load!

An unbalanced load can cause a truck's wheels to lose contact with the road and can even lead to a rollover, so please check the state of your load carefully.

Danger lurks in the shadows of too much trust.

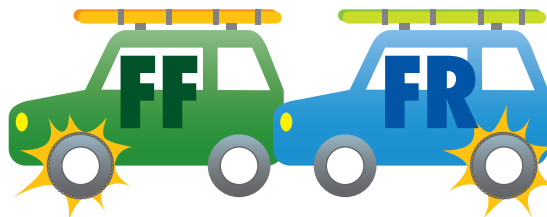
Don't believe in the myth of vehicle performance.

Vehicle performance and vehicle functionality have advanced considerably, as exemplified by four-wheel drive, traction control systems, four-wheel steering, anti-lock braking systems, and the like. However, these are ultimately just auxiliary functions that assist the basic vehicle operations of running, turning, and stopping. Unforeseeable events lie in wait for drivers on snow-covered and icy roads, where technique and technology may be of no use. Above all else, please be careful not to trust too much in your vehicle, and don't push the vehicle to its limits when you drive.



Snowy roads are a challenge for both front-wheel drive and rear-wheel drive vehicles.

Front-wheel drive vehicles and rear-wheel drive vehicles use different sets of wheels as the drive wheels that are linked to the engine. Front-wheel drive vehicles are generally regarded as having better stability on curves, but that applies only on dry road surfaces. Don't believe in the myth of front-wheel drive. Note that tire chains should be mounted on both drive wheels (the front wheels of front-wheel drive vehicles and rear wheels of rear-wheel drive vehicles).



Sudden actions are strictly prohibited on snowy roads!

Sudden steering

Sudden acceleration

Sudden braking

A photograph of a white truck that has rolled over onto its side in a snowy environment. The truck is heavily damaged and surrounded by snow.

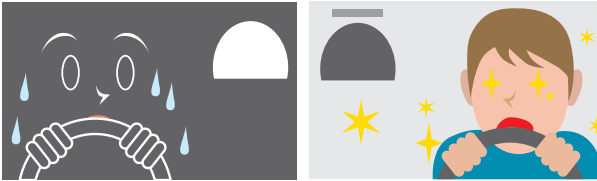
These cause accidents!

A blue hand icon with the index finger pointing towards the text "These cause accidents!".

Unexpected things you'll encounter on snowy roads

⚠ Black-hole and white-hole phenomena

The black-hole phenomenon occurs when you drive from a bright, snowy environment into a dark tunnel, which appears to be pitch black until your eyes adjust to the darkness. Conversely, the white-hole phenomenon occurs when you emerge from a dark location into a brightly lit location, and you are temporarily blinded by the glare. Use sunglasses or the like to deal with the changes in conditions.



⚠ Ruts can override your steering.

On a road surface covered by hard, densely packed snow, ruts can form that cause your vehicle to swerve and to bump up and down. These conditions can cause the vehicle to move in unpredictable directions.

⚠ Glare ice turns the road into a skating rink.

A road surface covered with glare ice is eight times more slippery than a dry road surface, and once you start to skid, it's nearly impossible to regain control.

⚠ Watch out for sudden skids on sherbet snow.

Sherbet snow is a condition that occurs when snow first starts to fall and when the snow is melting. The tire treads can become packed with snow, which leads to sudden skidding.

⚠ Snow drifts block the view ahead.

Snow drifts can build up to as high as two meters. This does not present a problem for the driver of a large vehicle such as a truck, but the drifts can entirely block the view in all directions for the driver of a passenger car.

⚠ Splattered snow can block the view.

When a large vehicle is driving alongside you, its wheels can splatter snow that covers your windshield in an instant, blocking your view. Don't panic, and don't do any sudden braking or swerving.

⚠ Windshield wipers fail to clear off snow.

Sometimes wet snow builds up on the windshield, such that the wipers lose contact with the glass and completely fail to clear off the snow. Please use a scraper to clear snow and ice off the windshield before you start driving.

⚠ Snow adheres to the headlights and taillights.

This is dangerous not only because you can't see ahead, but also because the drivers of vehicles behind you cannot readily see your vehicle. Stop frequently at service areas and parking areas to remove the snow.

⚠ Ice buildup in the wheel wells.

Snow that is thrown up by the tires as you drive sticks to the wheel wells and forms ice. The ice can interfere with steering. Remove the built-up ice before it creates a problem.

What to do when you encounter snow-removal and de-icing work in progress



When work is underway to remove snow from the road and spread a de-icing agent to prevent ice from forming on the road surface, multiple vehicles traveling at less than 50 kilometers per hour may block the lanes. Please follow the vehicles at a safe distance, and do not attempt to pass them or overtake them.

Packed snow-removal vehicle



Snow-removal truck



Rotary snow-removal vehicle



How to Deal with an Emergency on an Expressway

* A car stopped on the main thoroughfare is obstructing snow-removal work. In the event of trouble such as an accident or a breakdown, please report it immediately by **dialing 110, using an emergency telephone, or calling the road emergency number (#9910).**

* Please do not leave broken tire chains on the shoulder of the road. The chains can become entangled in the snow removal equipment and be a hindrance to the work.

Emergency telephone

Emergency telephones are provided along the main thoroughfare (at 1-kilometer intervals), in tunnels (at 200-meter intervals), and at interchanges, service areas, parking areas, bus stops, and emergency parking areas. Simply lifting the receiver connects you automatically to the road control center. Please report the circumstances of the accident or breakdown and whether or not anyone has been injured.

Road emergency number (#9910)

On a mobile phone or smart phone, please dial the road emergency number (#9910). Select the name of the expressway in accordance with the automated voice instructions, and you will be connected to the nearest road control center. Please report the nature and the location of the trouble on the road. The system covers all expressways nationwide, as well as all national highways that are managed by the Ministry of Land, Infrastructure and Transport. The system can be used 24 hours a day at no charge.

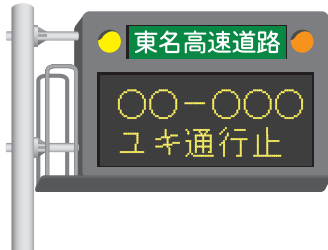
*** The use of mobile phones and the like while driving is prohibited by the Road Traffic Act. Please be absolutely sure to have someone other than the driver call the emergency number, or pull off the road into a safe location, such as a service area or parking area, before calling.**

Safe driving on snowy roads starts with information.

If you're going to be driving where bad weather such as snow is in the forecast, please get accurate information on the weather and roads, so that you can drive safely.

Get your expressway information here!

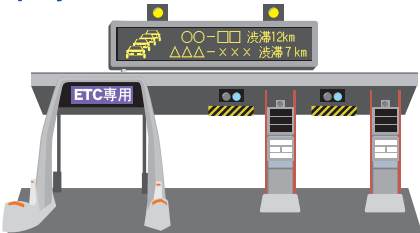
Information displays at interchange entrances



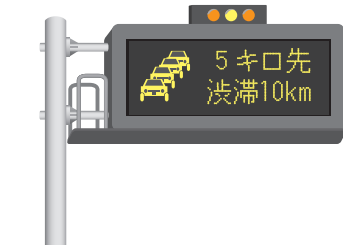
Displays provide accurate information on the current state of the road and traffic. In a case where the expressway is closed due to falling snow, blowing snow, or the like, please detour via ordinary roads.

Information displays at toll stations

Information is displayed at toll station entrances. Check the road and traffic information again at these points.



Information displays on the main thoroughfare



You will encounter information displays on the main thoroughfare as you approach interchanges, and they provide information on the road and traffic conditions that lie ahead.

Wide area information displays

Wide area information displays on the main thoroughfare provide information on the road and traffic conditions ahead across a wide area.



Highway radio



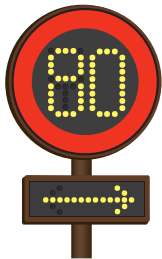
Highway radio provides necessary road information about accidents, congestion, construction, weather, and the like in real time over your car radio.

Weather information displays

Weather information displays provide information such as wind speed, temperature, and the like that drivers cannot apprehend directly while they are driving.



Variable speed-limit markers



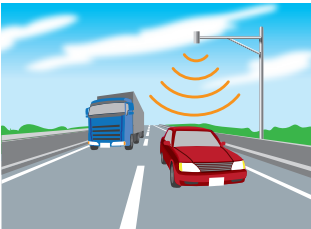
The legal speed limit can vary according to the weather and road surface conditions.

Warning markers

Warning markers indicate locations where drivers must be particularly cautious.



Car navigation (VICS-compatible systems)



A VICS-compatible car navigation system can display necessary road and traffic information about accidents, congestion, construction, weather, and the like in the form of text and graphics.

Highway-information terminals

Highway-information terminals provide road and traffic information at service areas. Please check for information on congestion, road closures, and the like on the way to your destination.



Information at rest areas

Attendants are on duty to provide comprehensive guidance and assistance so that you can pass the time in comfort on expressways and at service areas and parking areas. Please do not hesitate to call on us if you need help with solving problems, choosing gifts at service-area shops, ordering at service-area restaurants, and even travel planning.



Traffic information is also available through your mobile phone or smart phone.

You can search for traffic information and tolls on expressways nationwide.

NEXCO East

ドラとら ドライブトラフィック

<https://en-www.drivetraffic.jp/map.html>



NEXCO Central

中日本
iHighway

<http://c-ihighway.jp/>



NEXCO West

西日本
iHighway

<http://ihighway.jp/>



● Information is provided at no charge.

(Users do pay a separate packet transmission charge.)

● The use of mobile phones while driving is prohibited by the Road Traffic Act. Please use the system before you start driving or while you are parked at a rest area, or have someone other than the driver use the system.

Keep your eye on changing conditions when you drive on snowy roads.

Winter weather and road conditions are constantly changing.

Stay prepared for the unexpected on winter roads by constantly updating yourself with the latest traffic information and weather information. Please drive safely by using the appropriate winter equipment, such as winter tires and chains, and by exercising an abundance of caution.

If the snowfall becomes heavy, don't push the limits, but pull off at the next service area or parking area and take a breather.



Pre-travel updates

Highway Hotline(available 24 hours a day and updated every 5 minutes)

● Hokkaido			
Sapporo	.....011(896) 1620	Asahikawa	.....0166(54) 1620
Muroran	.....0143(59) 1620	Obihiro	.....0155(42) 1620
● Tohoku region			
Aomori	.....017(781) 1620	Morioka	.....019(639) 1620
Akita	.....018(826) 1620	Sendai	.....022(711) 1620
Koriyama	.....024(961) 1620	Yamagata	.....023(685) 1620
● Kanto region			
Tohoku, Tokyo-Gaikan, Joban, Kanetsu, Joshinetsu, Nagano, and other expressways			
Iwatsuki	.....048(758) 1620	Utsunomiya	.....028(665) 1620
Kashiwa	.....04(7171) 1620	Mito	.....029(254) 1620
Oizumi	.....03(3922) 1620	Tokorozawa	.....04(2946) 1620
Maebashi	.....027(252) 1620	Nagano	.....026(278) 1620
Chuo and Nagano expressways			
Hachioji	.....042(692) 1620	Kofu	.....055(275) 1620
Suwa	.....0266(57) 1620		
Chiba area (Higashi-Kanto, Tateyama, Tokyo Wan Aqua-Line, and other expressways)			
Chiba	.....043(257) 1620		
Keihin (Greater Tokyo-Yokohama) area (Daisan Keihin Road, Yokohama Shindo, Yokohama-Yokosuka Road)			
Keihin	.....045(780) 1620		
● Tomei and Shintomei expressways			
Tokyo	.....03(5491) 1620	Kawasaki	.....044(866) 1620
Yokohama	.....045(923) 1620	Gotenba	.....0550(82) 1620
Fuji	.....0545(51) 1620	Shizuoka	.....054(288) 1620
Hamamatsu	.....053(435) 1620		
● Chubu region			
Nagoya	.....052(709) 1620	Toyokawa	.....0533(82) 1620
Gifu	.....058(259) 1620	Yokkaichi	.....059(352) 1620
● Hokuriku region			
Tsuruga	.....0770(21) 1620	Fukui	.....0776(57) 1620
Kanazawa	.....076(253) 1620	Toyama	.....076(476) 1620
Joetsu	.....025(535) 1620	Nigata	.....025(286) 1620
Yuzawa	.....025(784) 1620		
● Kinki region			
Osaka	.....06(6876) 1620	Kyoto	.....075(602) 1620
Otsu	.....077(564) 1620	Kobe	.....078(903) 1620
● Chugoku region			
Hiroshima	.....082(876) 1620	Yonago	.....0859(37) 1620
Okayama	.....086(256) 1620	Hamada	.....0855(24) 1620
Yamaguchi	.....083(941) 1620		
● Shikoku region			
Kagawa	.....087(851) 1620	Matsuyama	.....089(905) 1620
Kochi	.....0887(72) 1620	Tokushima	.....088(641) 1620
● Kyushu			
Fukuoka	.....092(942) 1620	Kumamoto	.....096(275) 1620
Miyazaki	.....0985(86) 1620	Oita	.....097(514) 1620

Dial #8162 on your cell phone from anywhere in Japan (excluding Okinawa) to connect to the nearest regional Highway Hotline call center.

Traffic Safety Campaigns from NEXCO

■ NEXCO East



HEARTFUL HIGHWAY

The Heartful Highway Project provides motorists who use our expressways with the information they need about traffic rules and etiquette to enjoy a safe and pleasant journey on Japan's expressways.



■ NEXCO Central

Have Lecture, Will Travel

NEXCO Central
Expressway Traffic Safety Seminars

NEXCO Central instructors are available to visit your organization at anytime and anyplace to lecture on safe driving techniques as part of our Expressway Traffic Safety Seminars. We use photos and data to illustrate the major points of traffic safety to your members or employees. Lectures are available for a minimum of 20 participants at a venue provided by the applicant.



■ NEXCO West



Let's all work together to eliminate traffic accidents.

Our motivation is expressed in the motto "For those we love and those who love us." And the objective our safety program is to eliminate traffic accidents by appealing to the sensibilities of one and all in expanding our circle of friends who understand the importance of being considerate of others when driving.



Emergency contact

In the event of an accident or breakdown, move to a safe location and contact us as shown below. (toll free)

1-1-0 / Emergency freeway telephones / Road emergency hotline #9910

Expressway Information

We offer 24-hour-a-day support for motorists traveling on expressways. We provide up-to-date information on tolls, ETC discounts, routes, and other information about traveling on expressways.

NEXCO East Customer Center



and

0570-024-024

03-5338-7524

NEXCO Central Customer Center



0120-922-229

Customers with PHS/IP telephones

052-223-0333

NEXCO West Customer Center



0120-924-863

Customers with PHS/IP telephones

06-6876-9031

Japan Road Traffic Information Center

Road traffic information via the Internet

<http://www.jartic.or.jp/>

For up-to-date traffic information call:

● Nationwide/Kanto traffic information	050-3369-6600
● Hokkaido expressway information	050-3369-6760
● Tohoku expressway information	050-3369-6761
● Tohoku/Joban/Kan-Etsu expressway information	050-3369-6762
● Tomei/Shin-Tomei expressway information	050-3369-6763
● Chuo/Nagano expressway information	050-3369-6764
● Niigata region expressway information	050-3369-6765
● Tokai region expressway information	050-3369-6766
● Hokuriku/Tokai-Hokuriku expressway information	050-3369-6767
● Kinki region expressway information	050-3369-6768
● Chugoku region expressway information	050-3369-6769
● Shikoku region expressway information	050-3369-6770
● Kyushu region expressway information	050-3369-6771
● Okinawa traffic information	050-3369-6647
● From anywhere in Japan	050-3369-6666
● From your cell phone	#8011

*Connects to the nearest call center. (local toll call)

**East Nippon Expressway Company / Central Nippon Expressway Company /
West Nippon Expressway Company / Road Public Welfare Association**