



Acceleration Control Pedal Error (ACPE) Cases in South Korea

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C O N T E N T S

1. Pedal Misoperation Accident Statistics

● Status of Traffic Accident Fatalities in South Korea

- The number of traffic accident fatalities in South Korea has been decreasing every year, but the percentage of fatalities aged 65 and older is steadily increasing
- Safety measures taking into account the characteristics of elderly drivers appear to be essential

<Table of Traffic Accident Fatalities by Driver Age Group>

Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Number of fatalities (total)	5,392	5,092	4,762	4,621	4,292	4,185	3,781	3,349	3,081	2,916	2,735	2,551
under 20	175	162	170	154	146	124	97	95	103	85	72	60
21~30 years old	759	696	582	592	522	504	420	376	385	360	335	296
31~40 years old	957	877	757	674	583	586	511	429	383	350	317	260
41~50 years old	1,280	1,147	1,027	967	898	739	636	584	494	494	409	357
51~60 years old	1,178	1,169	1,163	1,090	1,045	1,066	940	790	715	639	570	585
61~64 years old	306	287	291	325	338	317	330	305	281	278	297	248
65 and older	718	737	763	815	759	848	843	769	720	709	735	745
Unclassified	19	17	9	4	1	1	4	1	0	1	0	0
percentage of people aged 65 and older	13.3%	14.5%	16.0%	17.6%	17.7%	20.3%	22.3%	23.0%	23.4%	24.3%	26.9%	29.2%

• Source: taas.koroad.or.kr/

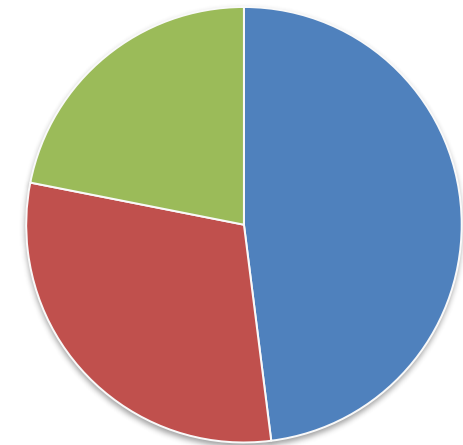
1. Pedal Misoperation Accident Statistics

● Pedal Misoperation Accident Statistics and Locations

- From 2019 to June 2024, approximately 2,000 pedal misoperation accidents occur annually.
- The analysis shows that 48% of pedal misoperation accidents occur in parking areas, 30% occur during road driving or at intersections while turning, and 22% occur during deceleration or stop situations in traffic congestion.

<Table of Pedal Misoperation Accident Statistics and Locations by Insurance company>

Year	2019	2020	2021	2022	2023	2024 ~June	%
Total	1,684	2,028	2,072	2,198	2,078	982	100%
Parking, Parked, Leaving	857	1010	996	1075	737	427	48.0%
Driving, Intersectionturning	513	570	600	635	674	328	30.1%
Traffic congestion, slowing, and s topping	314	448	476	488	467	227	21.9%



- Parking, Parked, Leaving
- Intersection Driving, Turning
- Traffic congestion, slowing, and stopping

• Source: <https://www.samsungfire.com/vh/page/VH.RNBS0003.do?X-SFMI-INTLOG=N41014-005182>

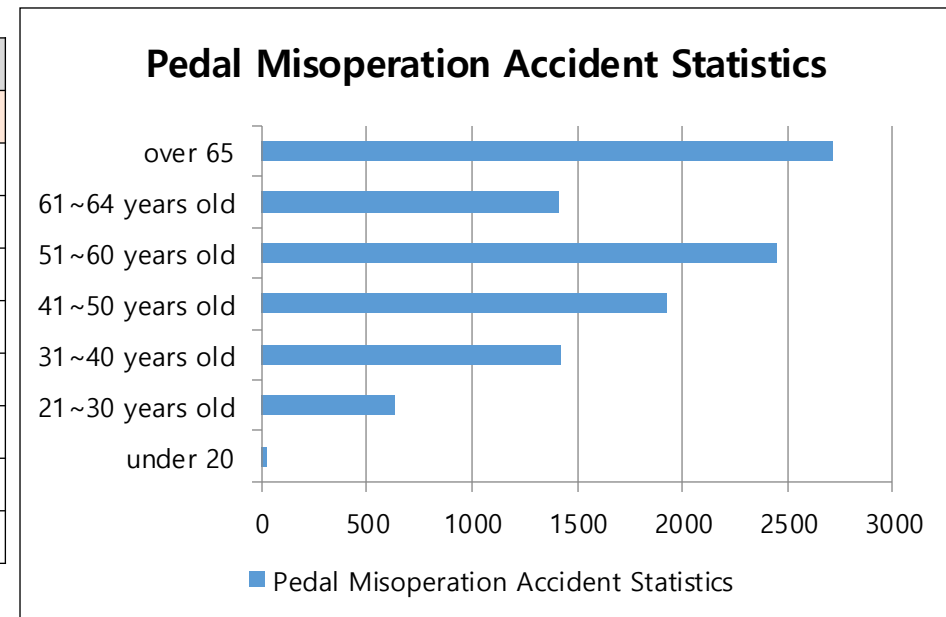
1. Pedal Misoperation Accident Statistics

● Pedal Misoperation Accident Statistics and Locations

- According to the pedal misoperation accident statistics by age group, there is a tendency for pedal misoperation accidents to increase as the driver's age increases.
- While pedal misoperation accidents occur across all age groups, elderly drivers are relatively more vulnerable, highlighting the need for measures to address this issue.

<Table of Pedal Misoperation Accidents by Driver Age Group >

Year	Numbers	Percentage
Pedal Misoperation Accident Statistics	11,042	-
under 20	22	0.2%
21~30 years old	630	6.0%
31~40 years old	1,425	13.5%
41~50 years old	1,927	18.2%
51~60 years old	2,445	23.1%
61~64 years old	1,418	13.4%
over 65	2,718	25.7%
unclassified	457	-





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2. Pedal Misoperation Accident Cases

● News of Pedal Misoperation Accident cases

- **December 16, 2020, Yonhap News, Tongyeong, Gyeongnam:** "Confused the accelerator with the brake'... A sedan driven by a person in their 70s fell into the sea."
- **October 19, 2022, Chosun Ilbo, Yeongdeok Rest Area, Gyeongbuk:** "79-year-old driver's confusion between the accelerator and brake... caused pedestrian's leg amputation accident."
- **September 22, 2022, MBC, Gimhae Parking Lot, Gyeongnam:** "'Bang bang bang' hit 7 vehicles and parked... 80-year-old driver confused the accelerator with the brake."
- **October 21, 2022, Changwon, Gyeongnam:** "Confused the accelerator with the brake'... 60-year-old pushing a handcart crushed by a car, one dead."
- **March 8, 2023, Yonhap News:** "Disaster while waiting in line to vote... Truck crushes, 3 dead and 17 injured, driven by a 70s driver."



<https://youtu.be/L3mlXmh119c>



<https://youtu.be/34z-51wnqq0>



<https://youtu.be/bm8S5CbazKI>



<https://youtu.be/4krjkMi-7Pg>

2. Pedal Misoperation Accident Cases

- **“At least nine killed in Seoul as car ploughs into crowd”, 2 July 2024, BBC News**
 - Accident Date : July 1, 2024
 - Vehicle : 2018MY, Passenger car. Driver : 68 years old, Male
 - Casualties(injuries) : 9 dead, 7 injured (including subject driver)
 - Driver claim : Sudden unintended acceleration occurred, the brake pedal were hard and not manipulated at time of the accident
 - Police investigation : The National Forensic Service (NFS) found no mechanical defects in the accelerator or braking system.
 - According to the analysis of the event data recorder(EDR),
 - the driver didn't press the brake pedal for about five seconds before the accident.
 - the driver repeatedly pressed and released the accelerator pedal.



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<https://youtu.be/957Jm3oSA-k?si=rELIT40GIA4KvpIN>



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● (Voluntary) Return of Driver's License for Elderly Drivers

- Local governments encourage elderly drivers (aged 70 and above) to voluntarily return their driver's licenses.
- Those who voluntarily return their driver's licenses will receive a transportation card (around 100,000 KRW).

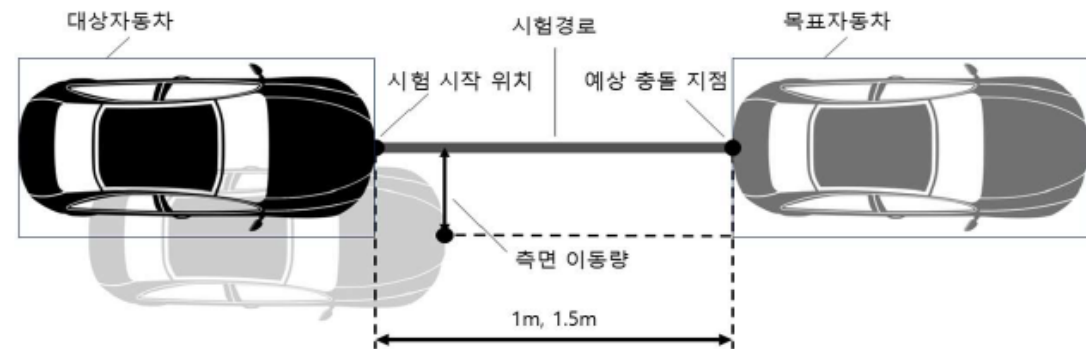
● (Mandatory) Renewal of Driver's License for Elderly Drivers

- Elderly drivers must receive traffic safety education and undergo a fitness test within the driver's license renewal period in order to renew their license.
- For those aged 65 and above, renewal occurs every 5 years;
- for those aged 75 and above, renewal occurs every 3 years;
- Drivers aged 75 and above must complete the following education
 1. Education related to aging and safe driving
 2. Education related to drugs and driving
 3. Education, How to respond based on cognitive abilities, such as memory and judgment
 4. Education, Understanding traffic-related laws and regulations

3. Pedal Misoperation Accident Prevention Measures

● (Voluntary) Korea New Car Assessment Program

- Introduction of Pedal Misoperation Prevention Device Safety Test Methods and Evaluation Criteria (KNCAP TP-SS-10, 2025.2.4)
- Distance from the front vehicle: 1.0 m and 1.5 m (standstill condition test)
- Distance from the rear vehicle: 1.0 m and 1.5 m (standstill condition test)
- Additional points for accident prevention performance (3 points).



● (Mandatory) Korea Motor Vehicle Safety Standard

- UN Regulation No.175(Acceleration Control Pedal Error) Preparation for the Introduction of Korean Automobile Safety Standards
- Stepwise introduction of UN R175 (ACPE) 00 series (standstill condition test).
- Consideration of a preparation period of 2 to 3 years

3. Pedal Misoperation Accident Prevention Measures

● Prevention Measures for Pedal Misoperation

- When purchasing a vehicle, familiarize yourself with the emergency braking procedures outlined in the user manual
- In the case of unintended acceleration caused by pedal misoperation, demonstrate effective countermeasures to consumers and recommend safety measures.
 - How to operate the brake pedal.
 - How to operate and hold down the button of the electronic parking brake (EPB).



- Request to the manufacturer to improve the system so that the electronic parking brake (EPB) automatically cuts off the vehicle's power and activates the emergency braking system in emergency situations, reducing the braking distance.



**Thank you
Q&A**

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