



Ministry of Land, Infrastructure, Transport and Tourism

Transmitted by the expert from Japan



National Traffic Safety and Environment Laboratory

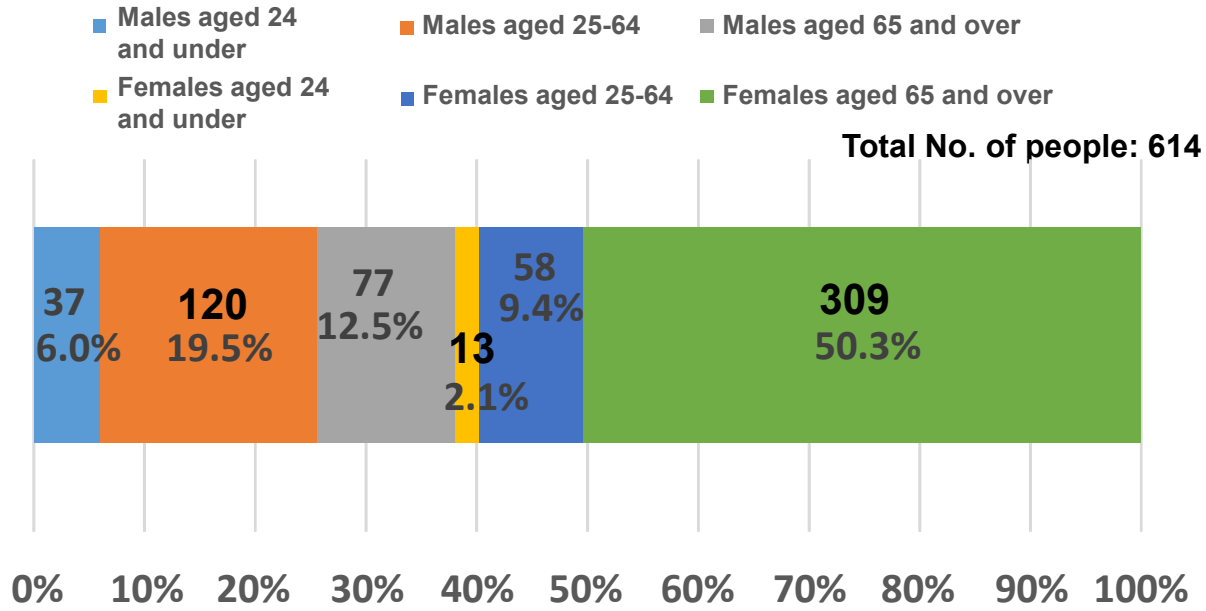
Informal document **GRSP-73-27**
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agenda item 16)

Frontal Collision Accident Study in Japan (Category N1)

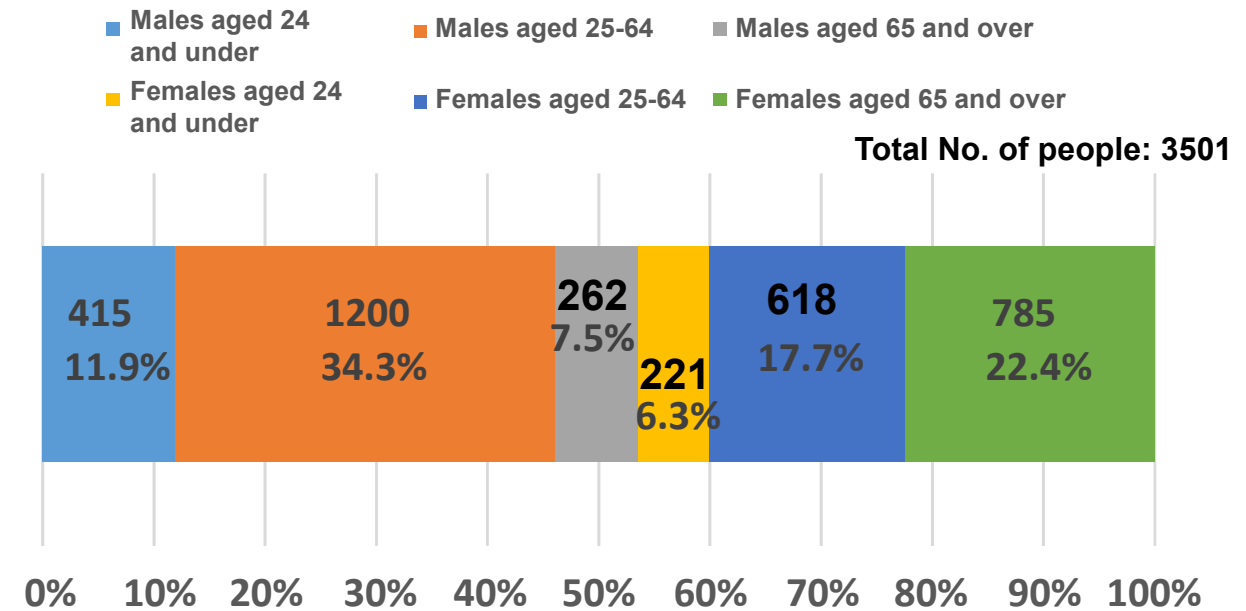
**Japan
MLIT/ NTSEL**

Accidents in Japan by Age and Sex of Passenger Seat Occupants in Category N1

Ratio of fatal and serious accidents by age and sex



Ratio of minor accidents by age and sex



* Number of casualties in accidents for the 10-year period from 2012 to 2021

* Frontal collisions of vehicles in Category N1 weighing 2.8 tons or less

* Actual number of seat belt wearers

* Data compiled by the Institute for Traffic Accident Research and Data Analysis

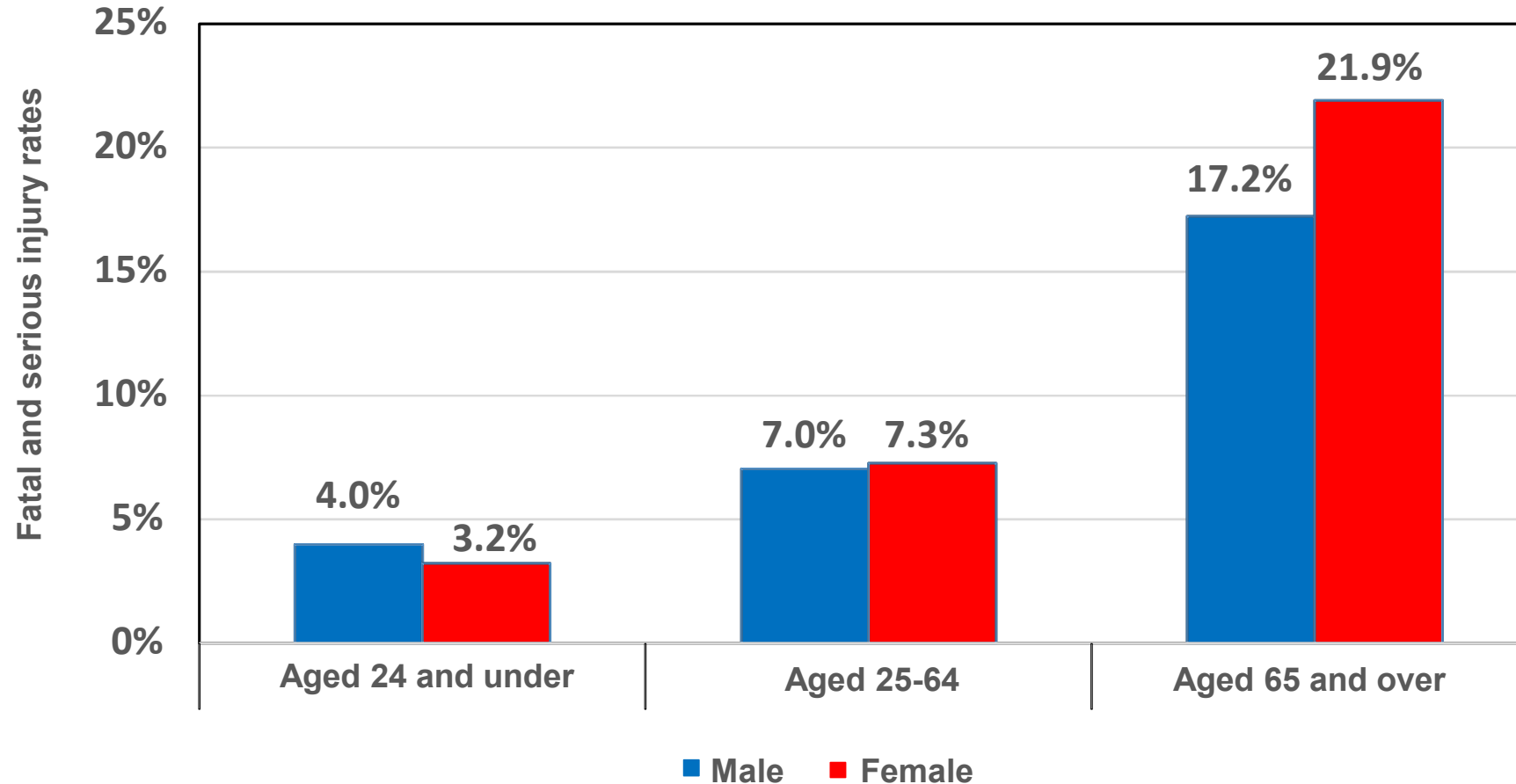
* Accident statistics do not include children seated in CRS.

Number of people with minor injuries Males aged 25-64 > Females aged 65 and over > Females aged 25-64 > Males aged 24 and under > Males aged 65 and over > Females aged 24 and under

Number of deaths + serious injuries Females aged 65 and over > Males aged 25-64 > Males aged 65 and over > Females aged 25-64 > Males aged 24 and under > Females aged 24 and under

Fatal and Serious Injury Rates for Passenger Seat Occupants in Category N1 in Japan by Age and Sex

Fatal and serious injury rates for occupants in the front seat of N1 category vehicles



- Fatal and serious injury rates are higher among the elderly than among the young.
- The rate is higher for women than for men among the elderly.

Summary

- A 10-year accident study was conducted from 2012 to 2021 for passenger seat occupants of N1 category vehicles weighing 2.8 tons or less.
 - Of the data on accidents resulting in minor injuries to front seat passengers in N1 category vehicles, female passengers aged 65 and over accounted for the second highest percentage of injuries (22%). The high incidence of minor injury accidents suggests that the percentage of elderly female passengers in the front passenger seat of N1 vehicles is high in Japan.
 - Among the data on accidents resulting in the fatal or serious injury of front seat passengers in N1 category vehicles, female passengers aged 65 and over accounted for the highest percentage of injuries (50%), accounting for about half of the total.
 - The fatality and serious injury rate for front seat passengers of N1 category vehicles was higher for females than for males amongst the elderly. It is possible that elderly female front seat passengers are more likely to be involved in fatal and serious injury accidents than elderly male front seat passengers.
- => Based on the above data, when protecting front seat passengers of N1 category vehicles, elderly female passengers need to be protected in Japan, and therefore, the chest injury value of the front seat dummy specified under UN R137 should be revised to take elderly passengers into account.