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# Abdominal Injuries in Car Crashes

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GIDAS Data Analysis

29.01.2026 | Britta Schnottale | BAST

# Abdomen Injuries in Car Accidents

## Case Selection Criteria

- Accident in 2005 – 2025
- Passenger car, registered 2005 – 2025
- Single collision
- Occupant age > 11 Years (no CRS usage)
- Belted and unbelted
- At least AIS 1 in AIS15REG5 ( maximum injury level for the abdomen, excluding lumbar spine, AIS Revision 2015, localization covers AIS body region 5)

# Abdomen Injuries in Car Accidents

**Case Selection Criteria**

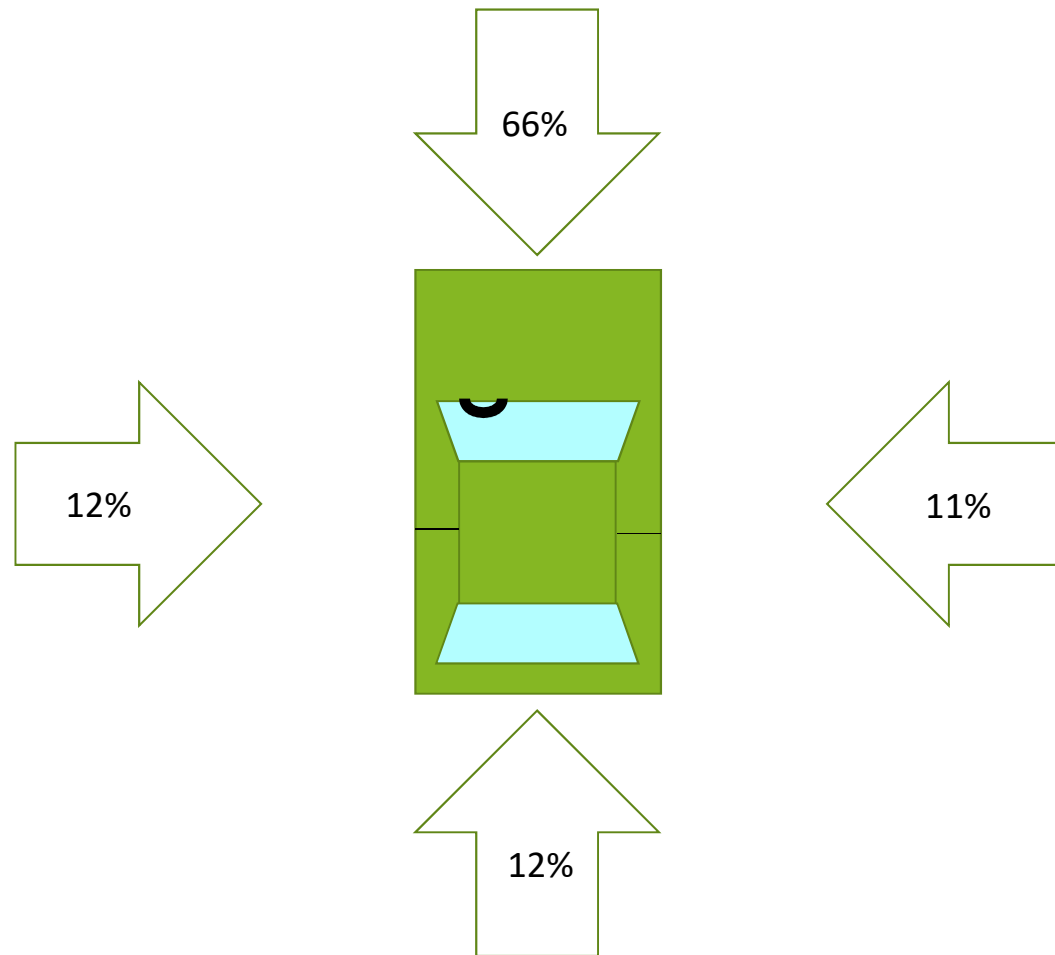
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Number of cars	Number of occupants with abdominal injuries
384 (378 cases)	408
<b>Of these in</b>	
<b>Frontal impact</b>	
252 (66%)	272 (67%)
<b>Rear Impact</b>	
46 (12%)	46 (11%)
<b>Left Side Impact</b>	
45 (12%)	48 (12%)
<b>Right Side Impact</b>	
41 (11%)	42 (10%)

# Direction of impact

## Case Selection Criteria

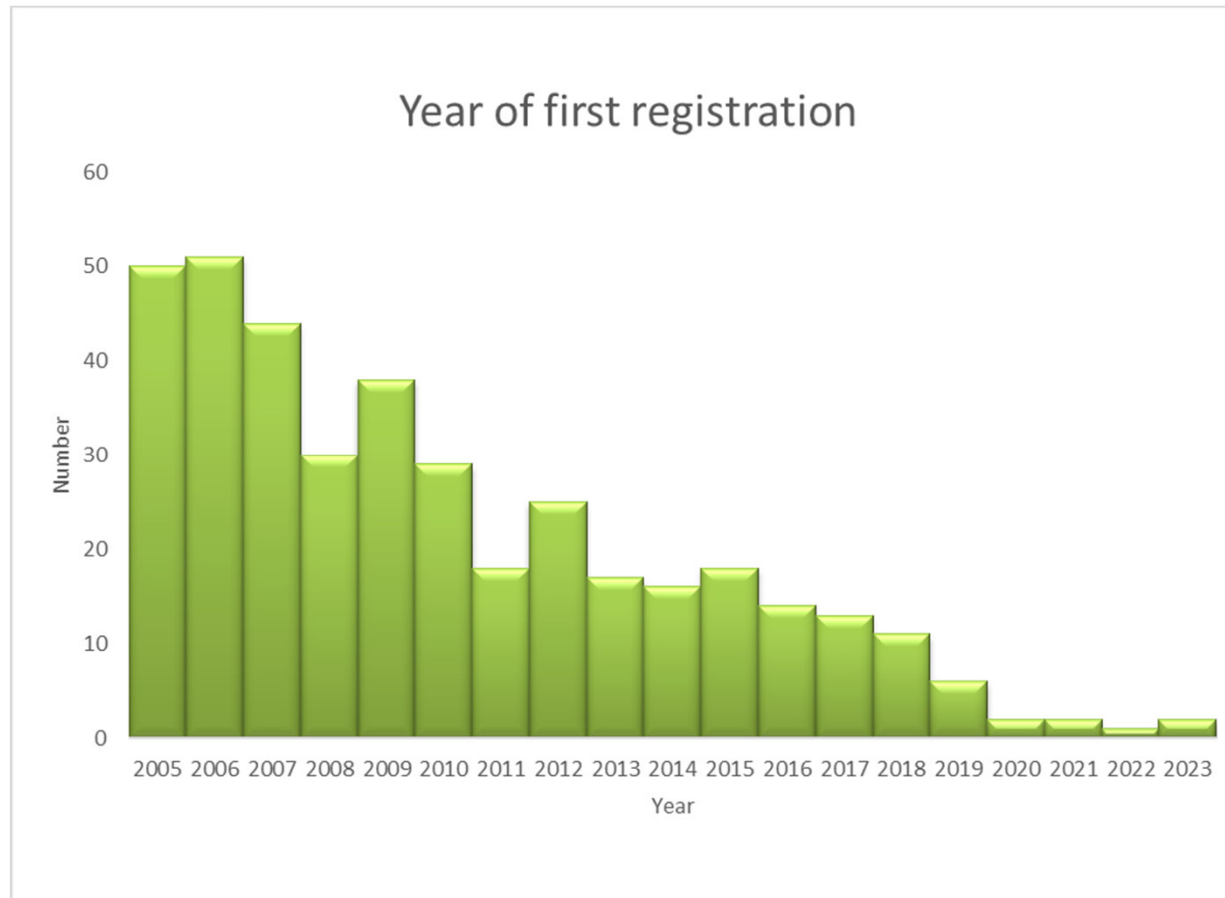
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# Year of first registration

## Case Selection Criteria

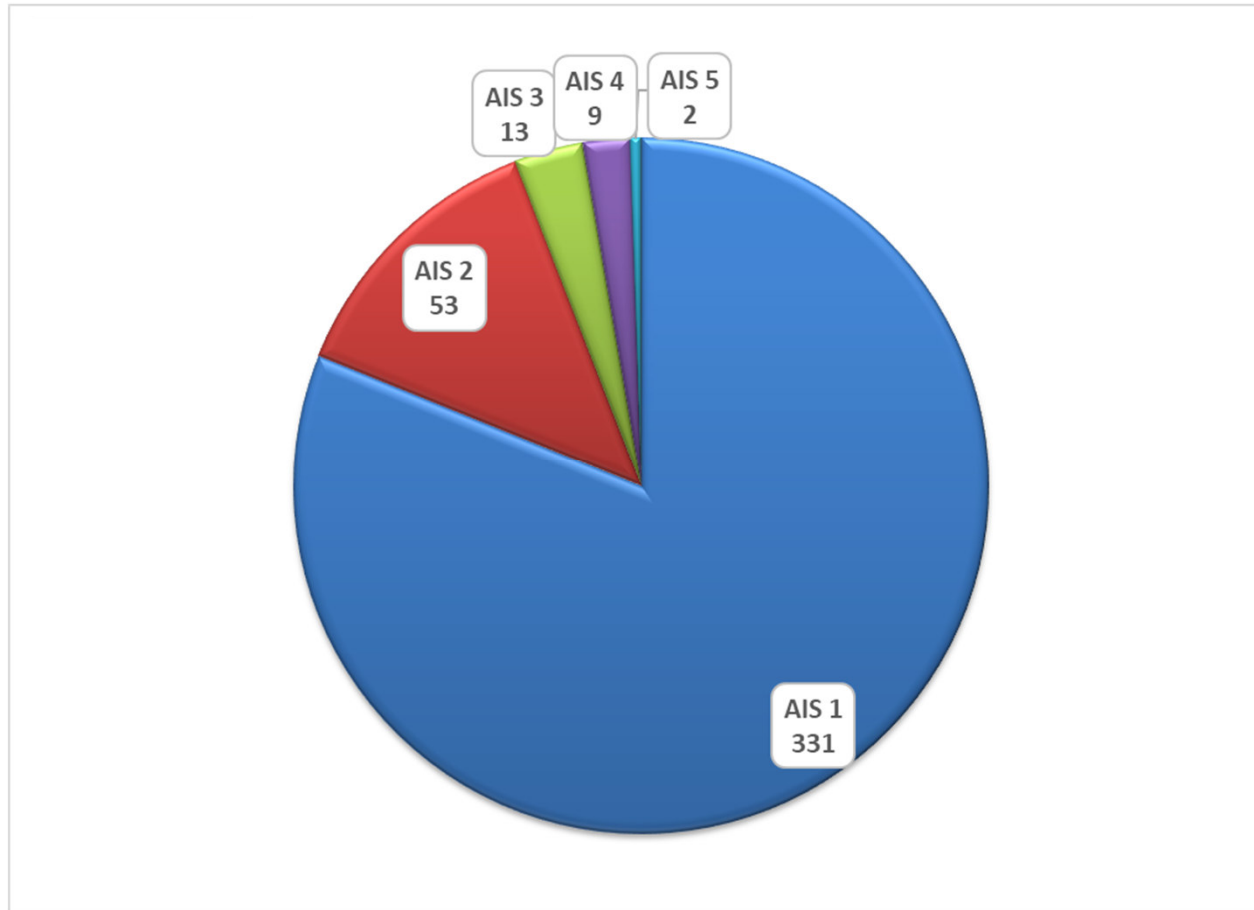
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# AIS distribution in AIS15REG5 (408 Occupants)

## Case Selection Criteria

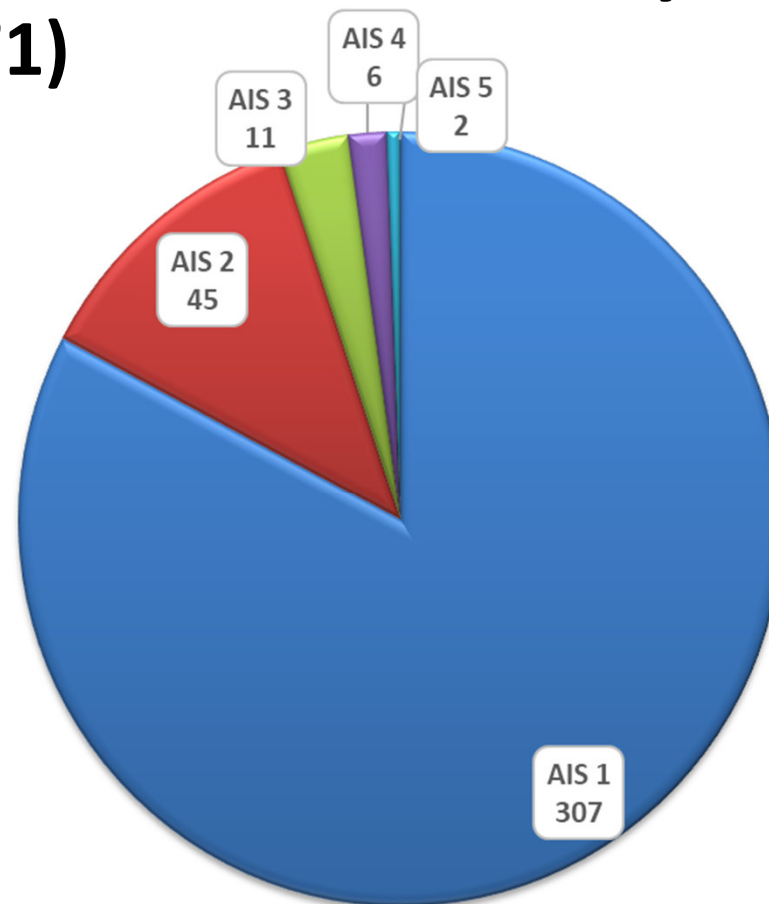
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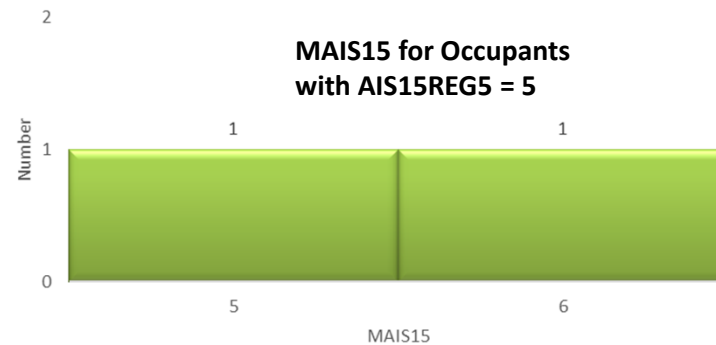
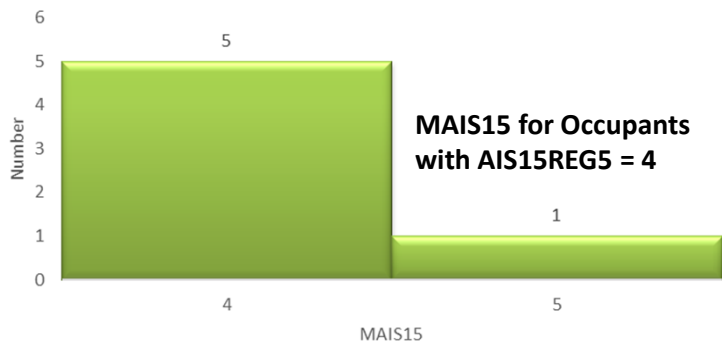
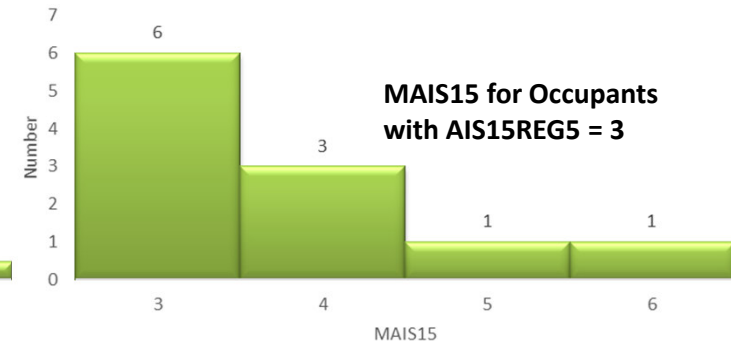
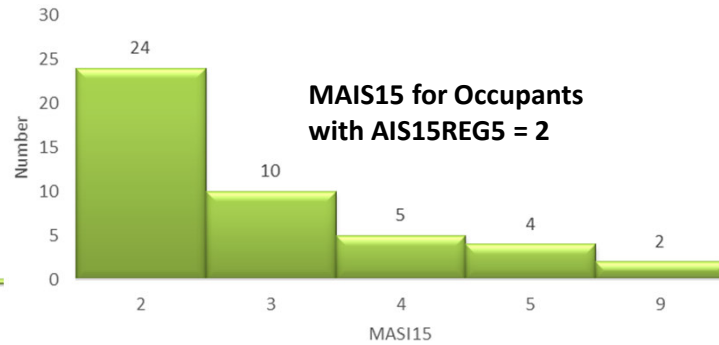
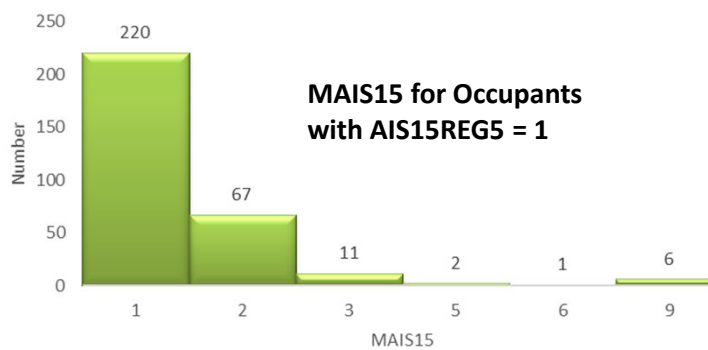
# AIS distribution in AIS15REG5 only belted occupants (371)

## Case Selection Criteria

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# AIS15REG15 vs MAIS (belted occupants)

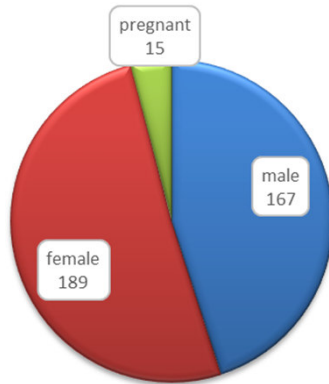


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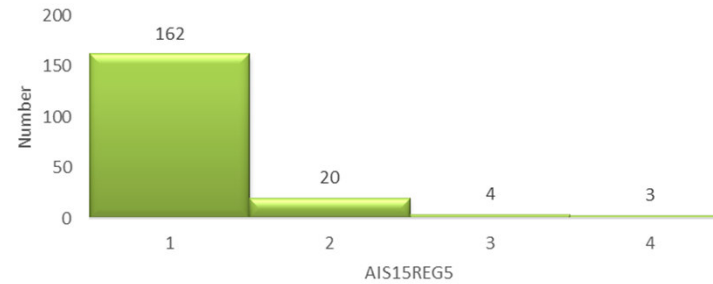
# AIS15REG15 vs gender

## Case Selection Criteria

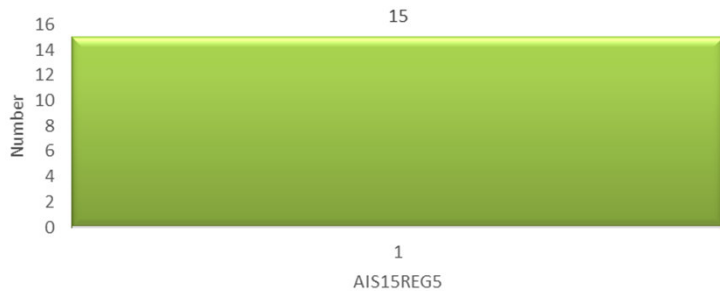
- Accident in 2005 – 2025
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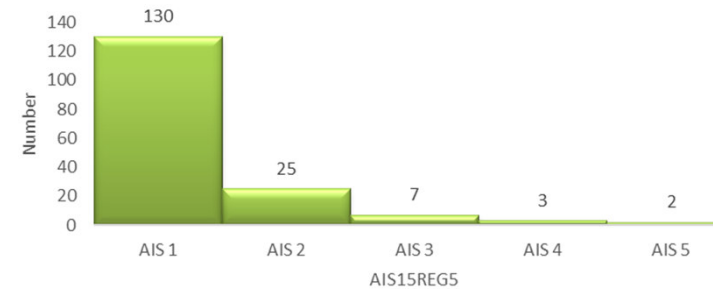
AIS15REG5 for female occupants



AIS15REG5 for pregnant occupants

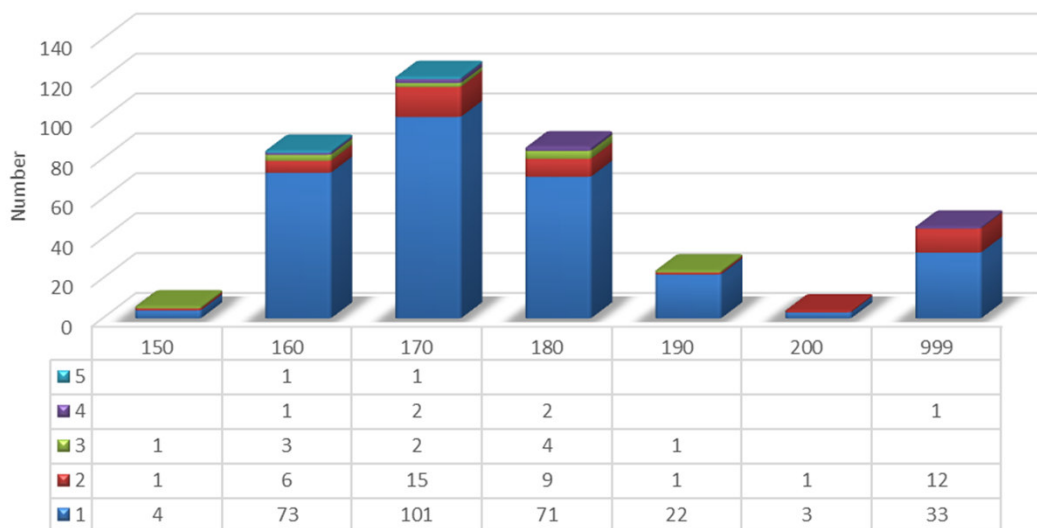


AIS15REG5 for male occupants

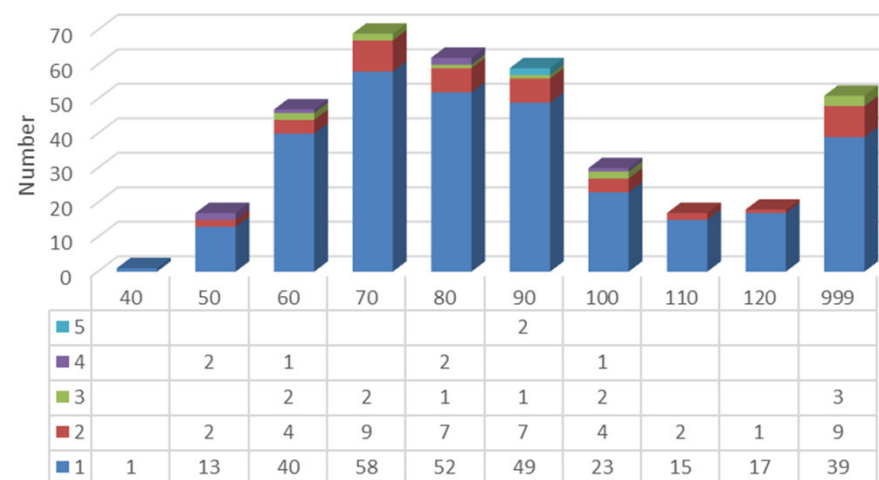


# AIS15REG15 vs height, weight

## AIS15REG5 vs occupant height group [cm]



## AIS15REG5 vs occupant weight group [kg]

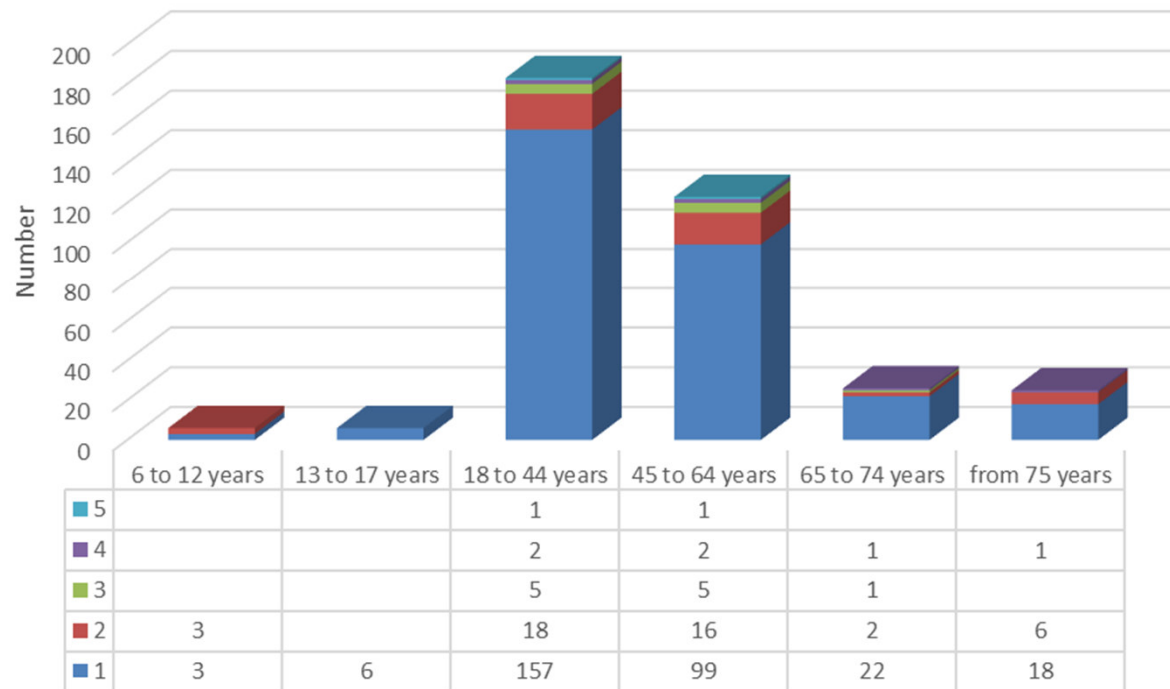


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# AIS15REG15 vs age

## AIS15REG5 vs occupant age group



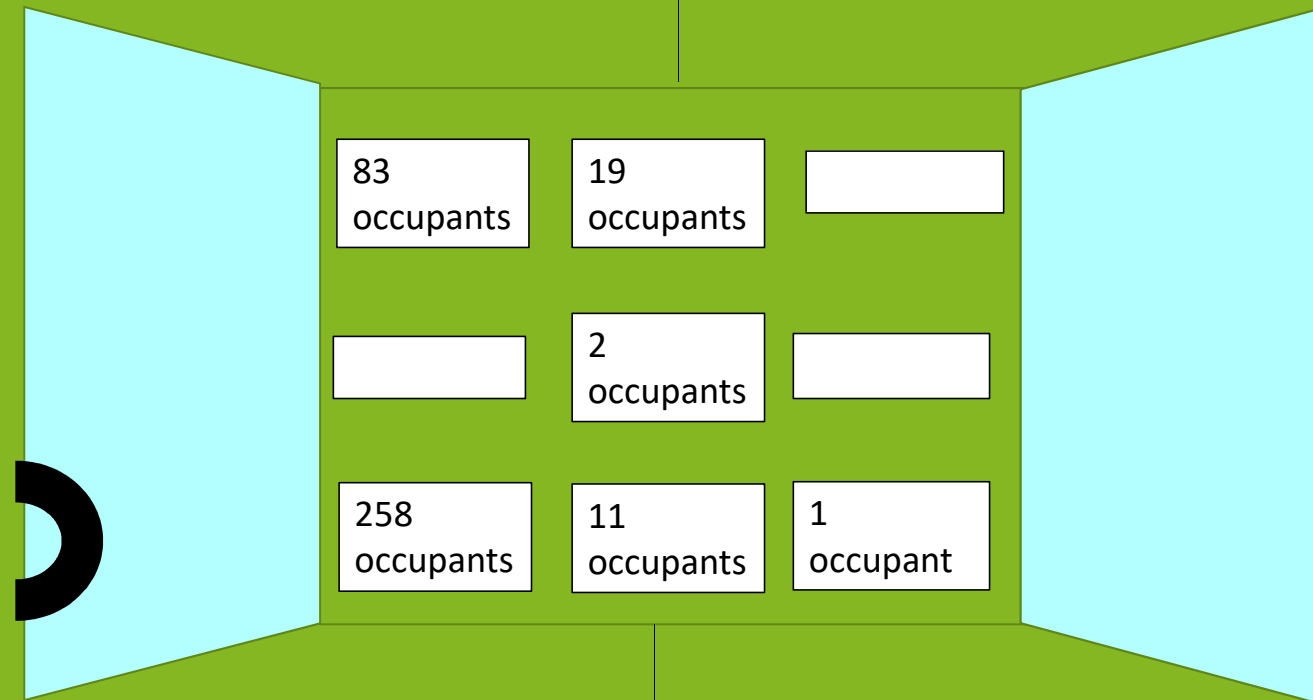
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# AIS15REG15 vs seating position

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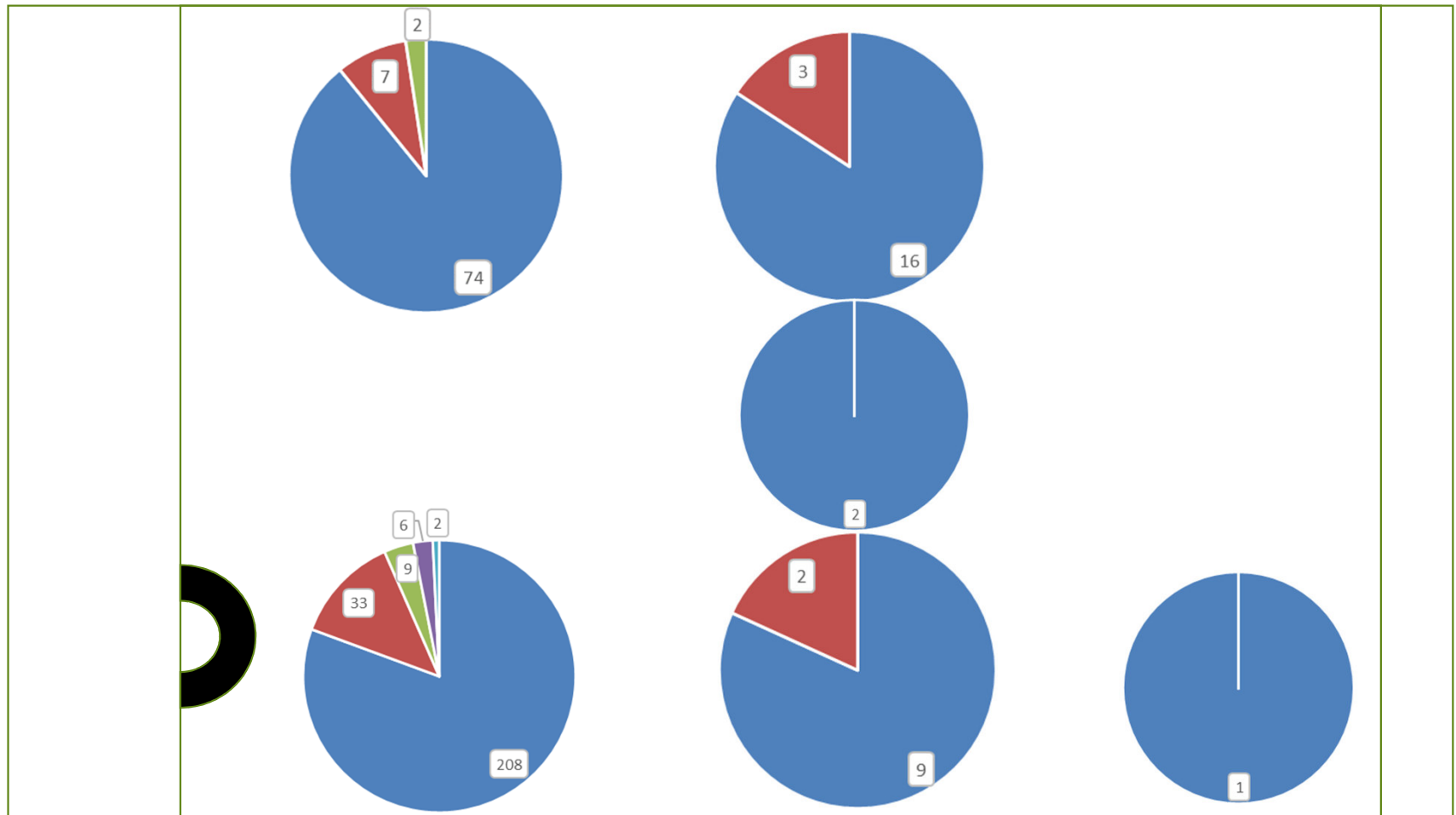


# AIS15REG15 vs seating position

- AIS 1
- AIS 2
- AIS 3
- AIS 4
- AIS 5

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**Vielen Dank!**

**Ich freue mich auf die  
gemeinsame Diskussion.**

