



Department of  
**Safety &  
Homeland Security**



# Rear Passenger Crash Data

by Mara Bloomfield

Tennessee Department of Safety and Homeland Security

TITAN Business Unit, December 2024



# OUTLINE

- ▶ **Rear Passengers in Crashes, 2019 – 2023**
  - ▶ **Definition**
  - ▶ **Restraint Use**
  - ▶ **Ejection**
  - ▶ **County Rankings**
  - ▶ **Demographics**
  - ▶ **Impairment**

# REAR PASSENGERS

- From 2019 to 2023 there were **218,098** rear vehicle occupants in crashes.
- This includes passengers marked as sitting in the 2<sup>nd</sup>, 3<sup>rd</sup>, or 4<sup>th</sup> row of seats.
- About **14%** of these passengers were injured or killed in crashes.

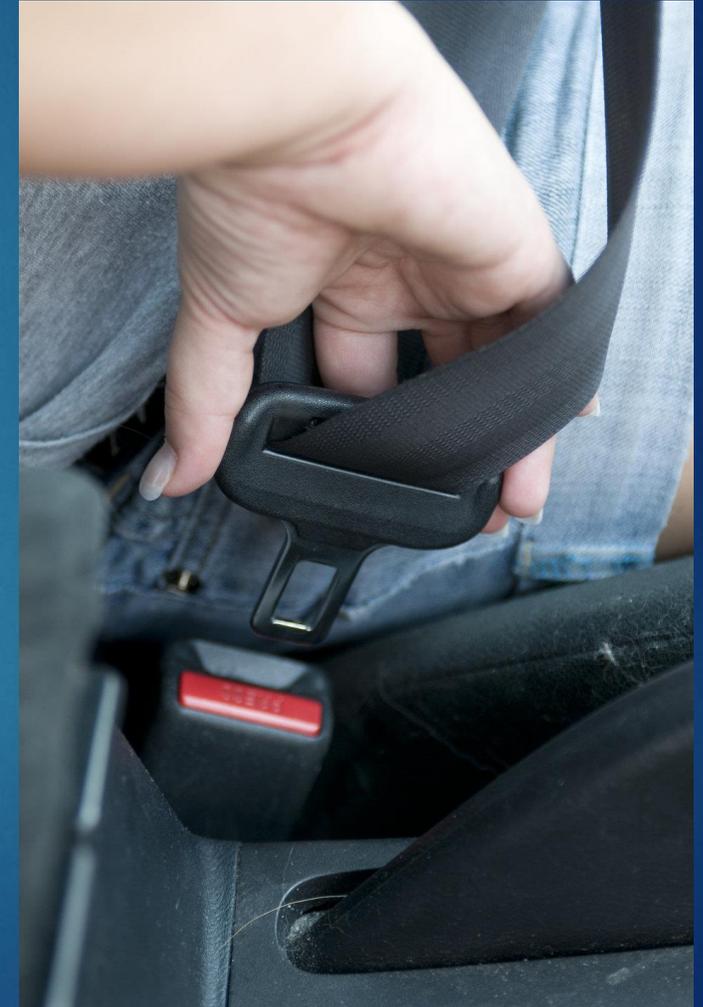
# WHO ARE THEY?

➤ **3 out of 4** rear occupants in crashes from 2019 – 2023 were under age **19**.



# RESTRAINT USE

- TN rear passengers aged 18 and over are NOT required by law to wear seatbelts.
- Rear passengers were nearly **twice as likely** to be unbelted as front passengers.
- Nearly **38%** of unbelted rear passengers were injured or killed in crashes.
- Unbelted rear passengers were about **18 times more likely** to be injured or killed in a crash than belted rear passengers.
- About **55%** of fatally injured rear passengers were unbelted.



# EJECTION

- Unbelted rear occupants were about **180 times more likely** to be ejected than belted rear occupants.
- Ejected occupants were **163 times more likely** to be killed in a crash than non-ejected occupants.
- **3 out of 4** partially and totally ejected unbelted rear occupants were **seriously** or **fatally** injured.

# BELTED REAR OCCUPANTS: TOP 10 COUNTIES

1. Trousdale (97.8%)
2. Williamson
3. Blount
4. Cumberland
5. Putnam
6. Monroe
7. Hardin
8. Henry
9. Giles
10. McMinn

# UNBELTED REAR OCCUPANTS: TOP 10 COUNTIES

1. Perry (31.6%)
2. Meigs
3. Wayne
4. Lewis
5. Tipton
6. Clay
7. Carroll
8. Johnson
9. Fayette
10. Henderson

# DEMOGRAPHICS

- **Male** rear occupants were **12.4% more likely** to be unbelted than **female** rear occupants.
- **Over half** of unbelted rear occupants were under 16.
- **62%** of unbelted rear occupants were age 18 or under.
- Rear occupants over age 18 were nearly **twice as likely** to be unbelted as rear occupants 18 and under.
- Black or African American rear occupants were **47% more likely** to be unrestrained in crashes than other rear passengers.

Age	Restrained	Unrestrained	Unknown	Total
Under 1	11,466	74	423	11,963
1	11,921	87	236	12,244
2	11,632	123	264	12,019
3	11,561	121	304	11,986
4	11,489	162	352	12,003
5	10,776	226	404	11,406
6	9,862	259	414	10,535
7	9,259	249	465	9,973
8	8,776	209	455	9,440
9	8,059	206	436	8,701
10	7,237	209	444	7,890
11	6,470	200	382	7,052
12	5,831	212	321	6,364
13	5,394	251	358	6,003
14	5,304	229	346	5,879
15	5,198	274	421	5,893
16	5,010	248	400	5,658
17	4,693	231	439	5,363
18	4,279	219	345	4,843

# YOUNG REAR OCCUPANTS BY AGE AND RESTRAINT USE

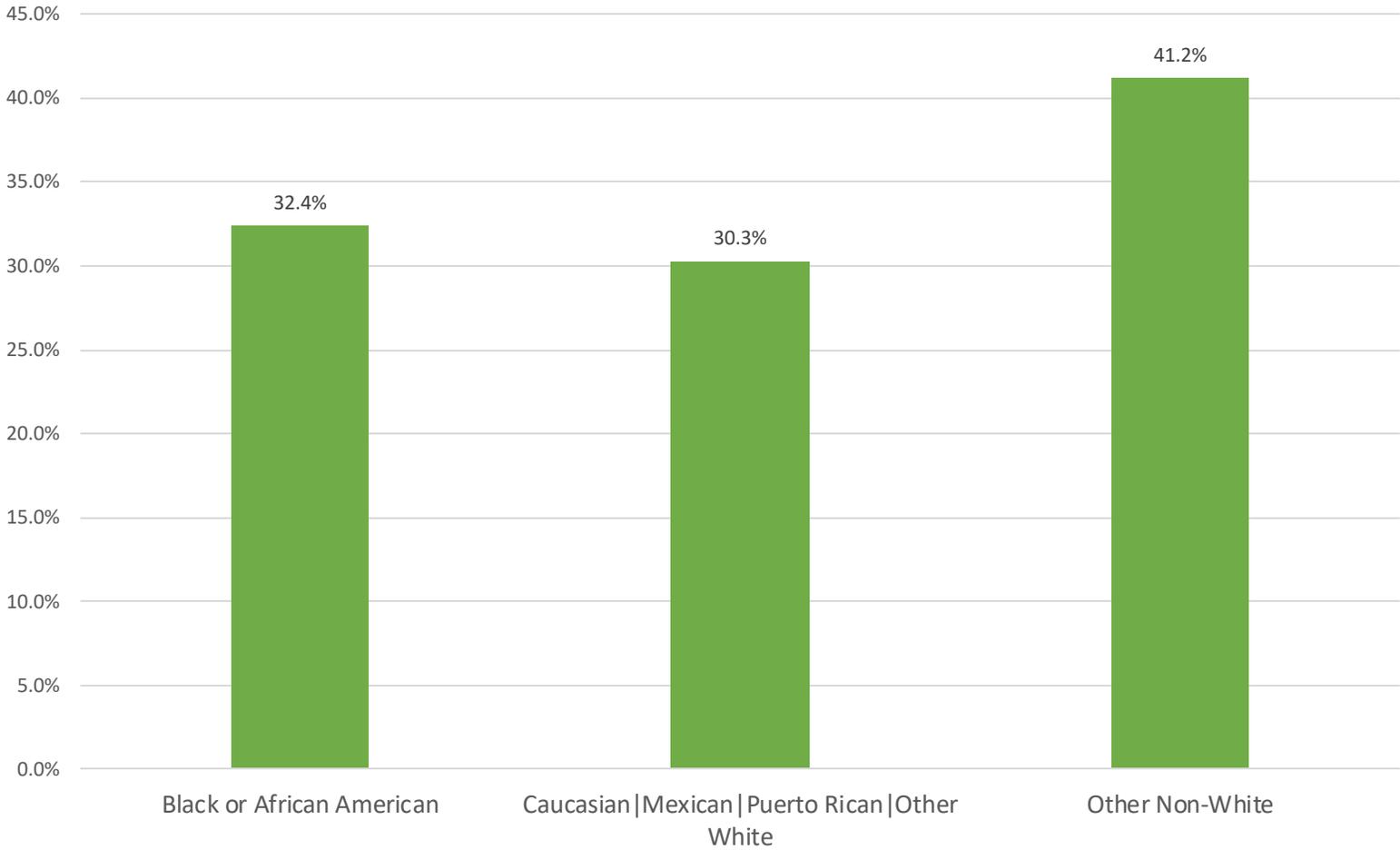
SOURCE: TN DEPT. OF SAFETY AND HOMELAND SECURITY, TITAN BUSINESS UNIT, 18 SEPT 2024. (TITAN)

Age	Restrained	Unrestrained	Unknown
Under 1	95.8%	0.6%	3.5%
1	97.4%	0.7%	1.9%
2	96.8%	1.0%	2.2%
3	96.5%	1.0%	2.5%
4	95.7%	1.3%	2.9%
5	94.5%	2.0%	3.5%
6	93.6%	2.5%	3.9%
7	92.8%	2.5%	4.7%
8	93.0%	2.2%	4.8%
9	92.6%	2.4%	5.0%
10	91.7%	2.6%	5.6%
11	91.7%	2.8%	5.4%
12	91.6%	3.3%	5.0%
13	89.9%	4.2%	6.0%
14	90.2%	3.9%	5.9%
15	88.2%	4.6%	7.1%
16	88.5%	4.4%	7.1%
17	87.5%	4.3%	8.2%
18	88.4%	4.5%	7.1%

# PERCENT OF YOUNG REAR OCCUPANTS BY RESTRAINT USE PER AGE

SOURCE: TN DEPT. OF SAFETY AND HOMELAND SECURITY, TITAN BUSINESS UNIT, 18 SEPT 2024. (TITAN)

### Percent of Seriously or Fatally Injured Rear Occupants of Each Race Who Were Unbelted, CY 2019 - 2023



# REAR OCCUPANTS BY RACE

SOURCE: TN DEPT. OF SAFETY AND HOMELAND SECURITY, TITAN BUSINESS UNIT, 18 SEPT 2024. (TITAN)

Example: 32.4% of seriously or fatally injured Black or African American rear occupants were unbelted.

# IMPAIRMENT

- **One in every four** impaired rear passengers in crashes were unbelted.
- Impaired rear occupants were **9.2 times as likely** to be unbelted than other rear occupants.



# CONTACT INFORMATION

Tennessee Highway Patrol - TITAN Division

Titan Statistics Office, Menzler-Nix Bldg

1144 Foster Avenue, Nashville, TN 37243

[Stats.Safety@tn.gov](mailto:Stats.Safety@tn.gov)

Mara Bloomfield | Statistical Analyst IV

[margaret.bloomfield@tn.gov](mailto:margaret.bloomfield@tn.gov)

Dashboards, Crash Data, and Maps for TN can be found under Statistics & Research on our website:

[tn.gov/safety](https://tn.gov/safety)