TEXAS
Health and Human Services

Texas Department of State Health Services

Injury Prevention and Public Education Fall and Firearm Data Request

March 6, 2024

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Injury Prevention Unit Director

Texas EMS and Trauma Registries

- The Emergency Medical Services and Trauma Registries (EMSTR) collects data from EMS providers, hospitals, justices of the peace, medical examiners, and rehabilitation facilities.

- EMS providers and trauma facilities must report all runs and trauma activations to EMSTR under Texas Administrative Code, Title 25, Chapter 103.
  - An EMS run is a resulting action from a call for assistance where an EMS provider is dispatched to, responds to, provides care to, or transports a person.

Methodology Notes

- EMSTR is a passive surveillance system, and each hospital is required to independently submit a patient's record.
- Patients transferred between hospitals will result in more than one record.
- Per epidemiology best practice, EMSTR suppressed data when there were less than 5 records to protect identifiable data, noted with an asterisk (*).
- This presentation includes data from 2018-2022.
- Age groups – when age is broken down into pediatric, adult, and geriatric, the age breakdowns are:
  - Pediatric – Children 15 and younger;
  - Adult – Ages 16-64; and
  - Geriatric – Ages 65+.

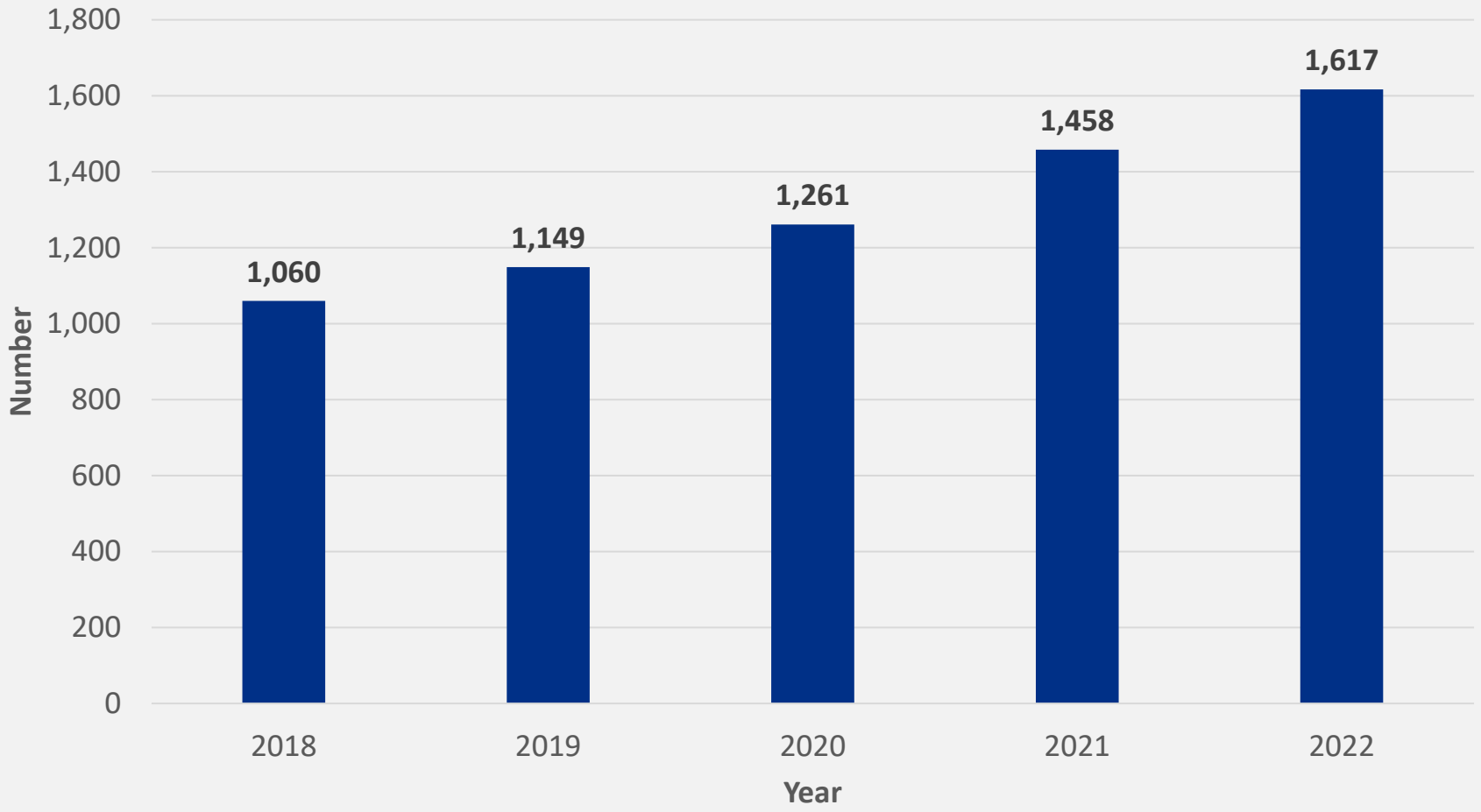
Data Definitions

- Injury Severity Score – The Injury Severity Score (ISS) is an anatomical scoring system providing an overall score for patients with multiple injuries. The ISS scoring categories are:
    - ISS 1-8 = mild;
    - ISS 9-15 = moderate;
    - ISS 16-24 = severe; or
    - ISS $\geq$ 25 = profound.
- Missing – Providers did not fill in the section.
- Unintentional – A type of injury that is not deliberate or done with purpose.

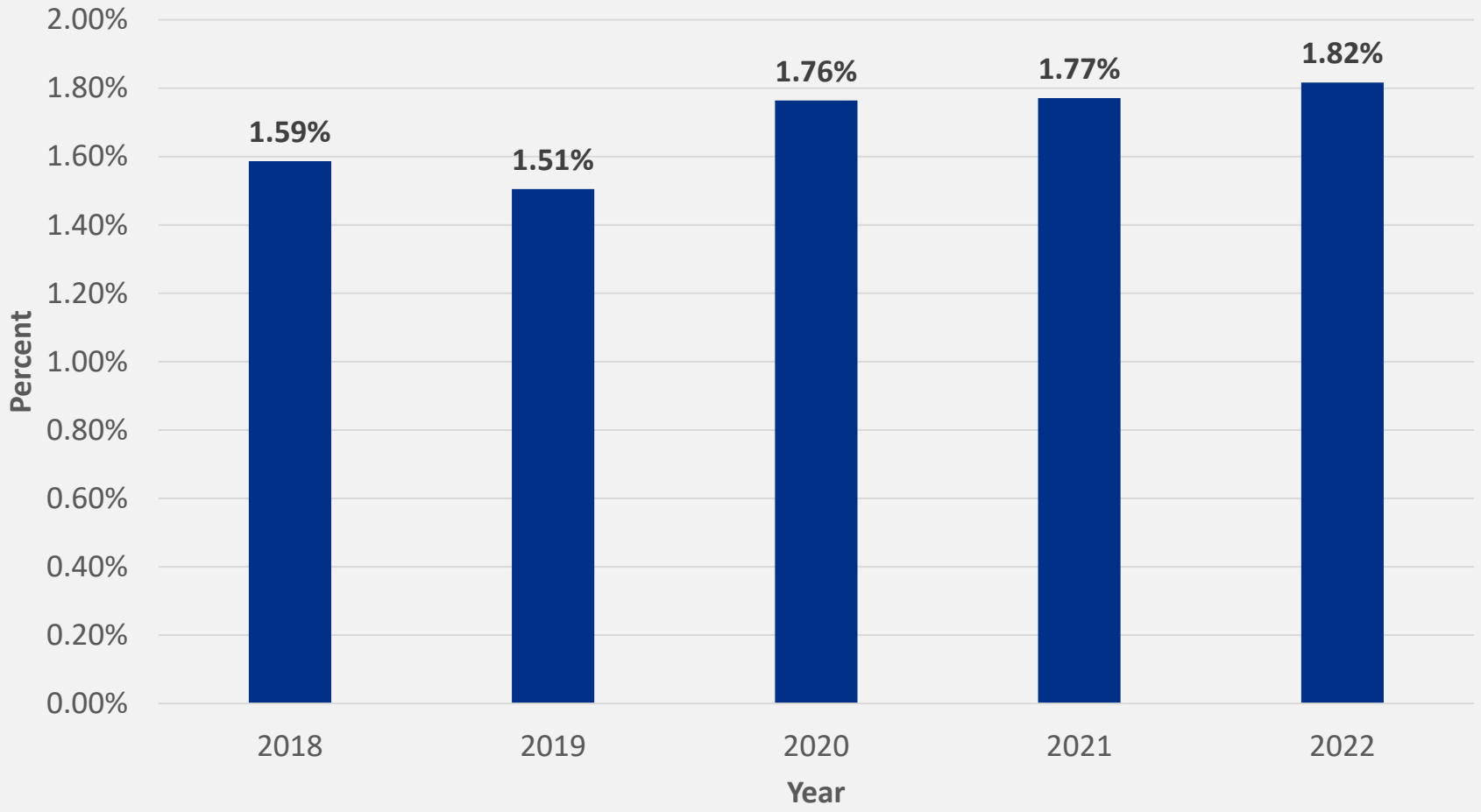
2018-2022
Fatal Fall Data

Falls seen in a trauma facility where the patient's hospital disposition is deceased.

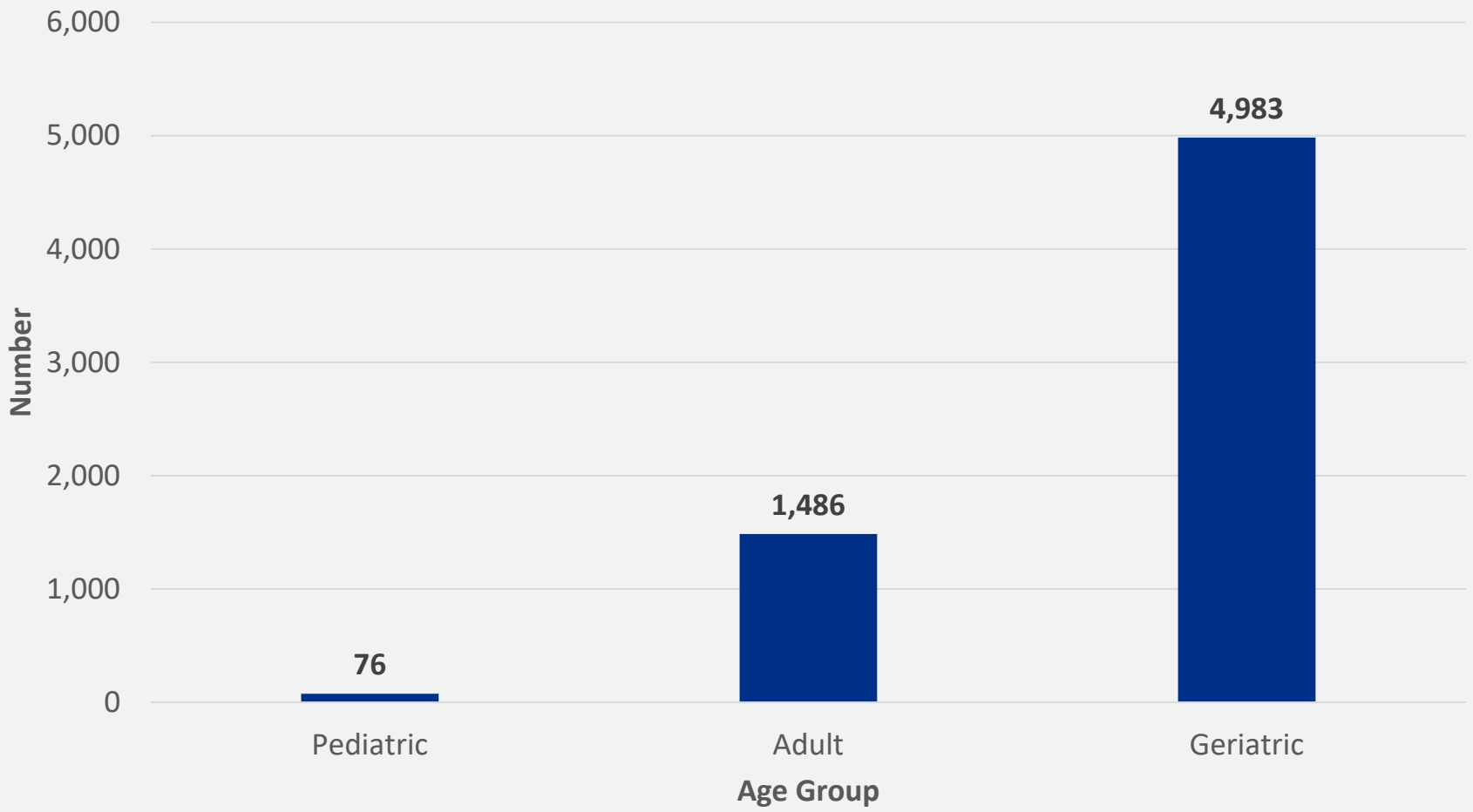
Fatal Falls by Year



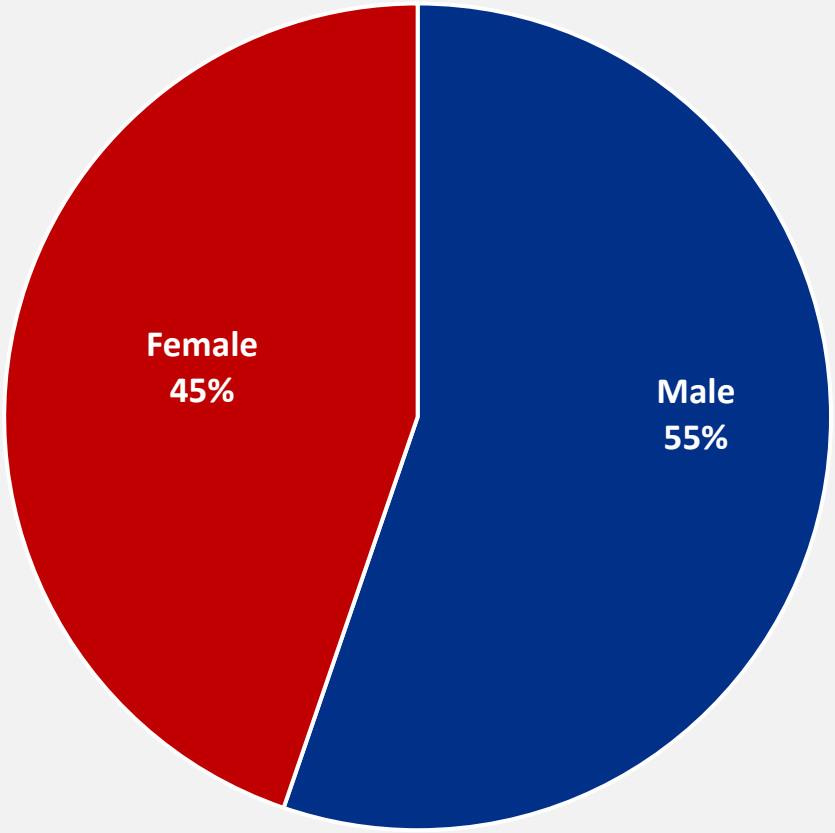
Fatal Fall Percent by Year



Fatal Falls by Age



Fatal Falls by Sex

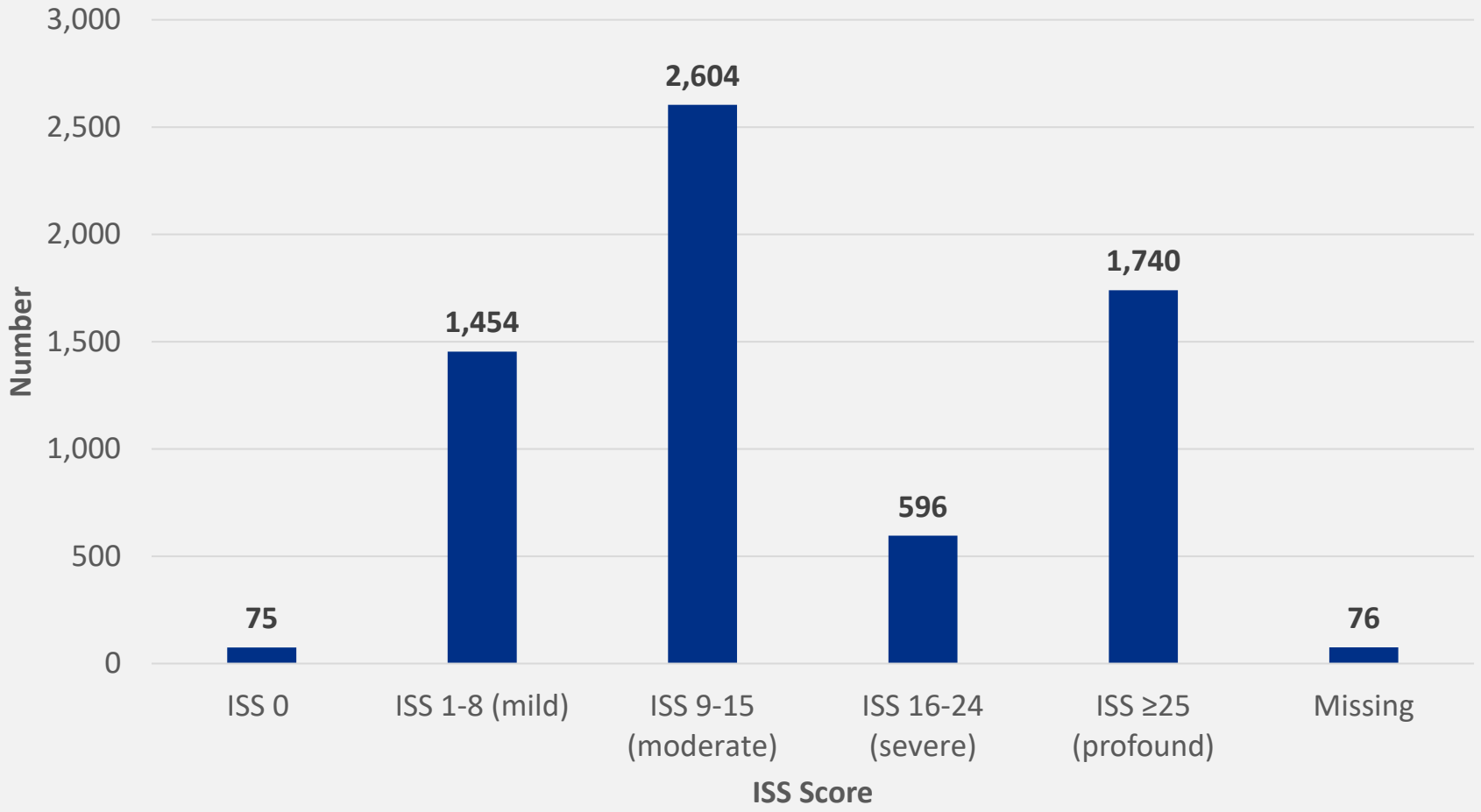


Fatal Falls Injury Descriptions

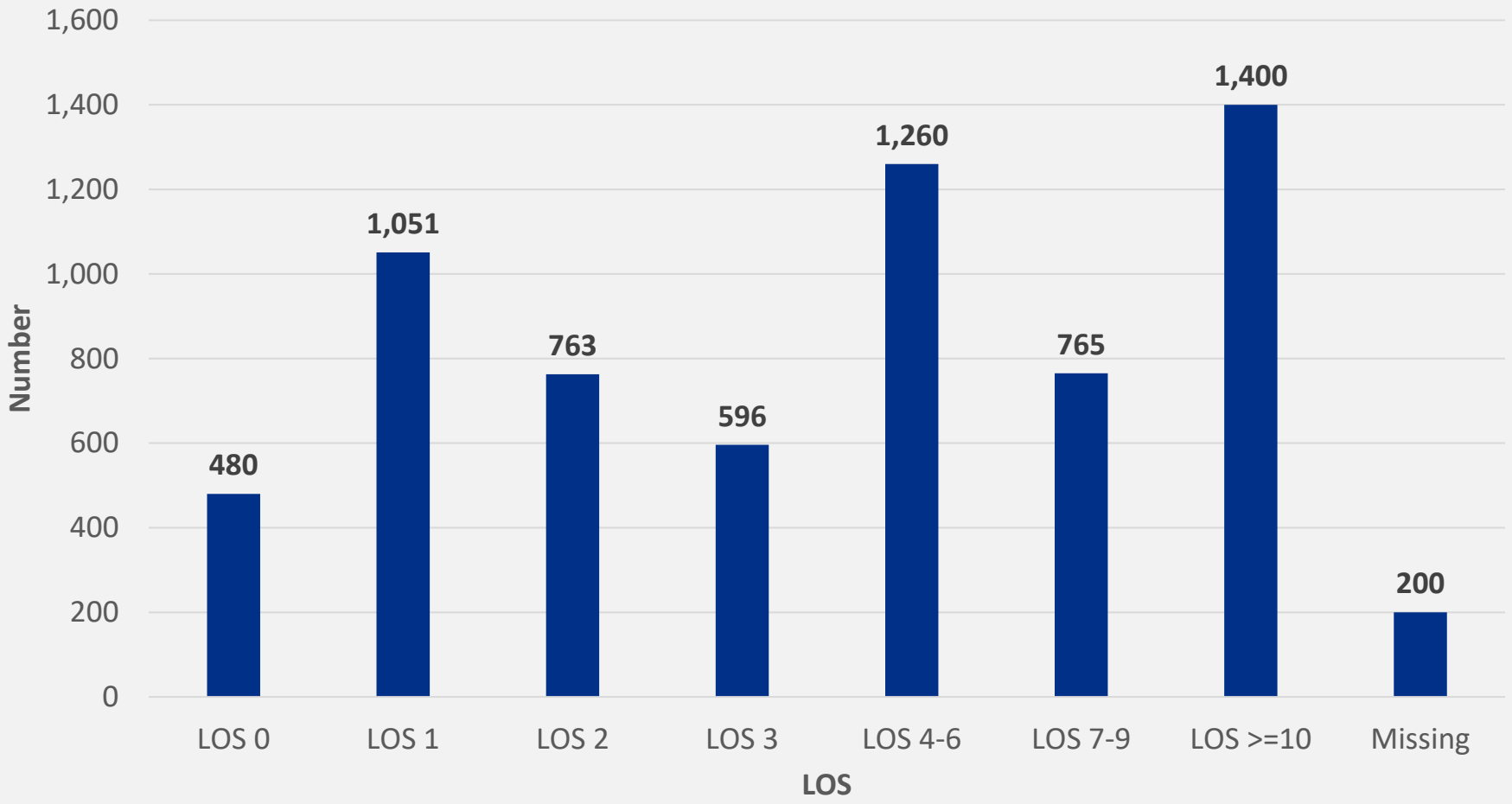
Injury Description	Number	Percent
Fall on same level from slipping, tripping, and stumbling **without** subsequent striking against object	1,957	29.90%
Unspecified fall	1,104	16.87%
Other fall on same level	855	13.06%
Fall on same level from slipping, tripping and stumbling **with** subsequent striking against other object	528	8.07%
Fall from bed	367	5.61%
Fall from stairs and steps	192	2.93%
Fall on and from ladder	167	2.55%
Other fall from one level to another	161	2.46%
Fall from non-moving wheelchair	128	1.96%
Fall from chair	124	1.89%

Note – this only shows the top 10 injury descriptions.

Fatal Falls by ISS Score

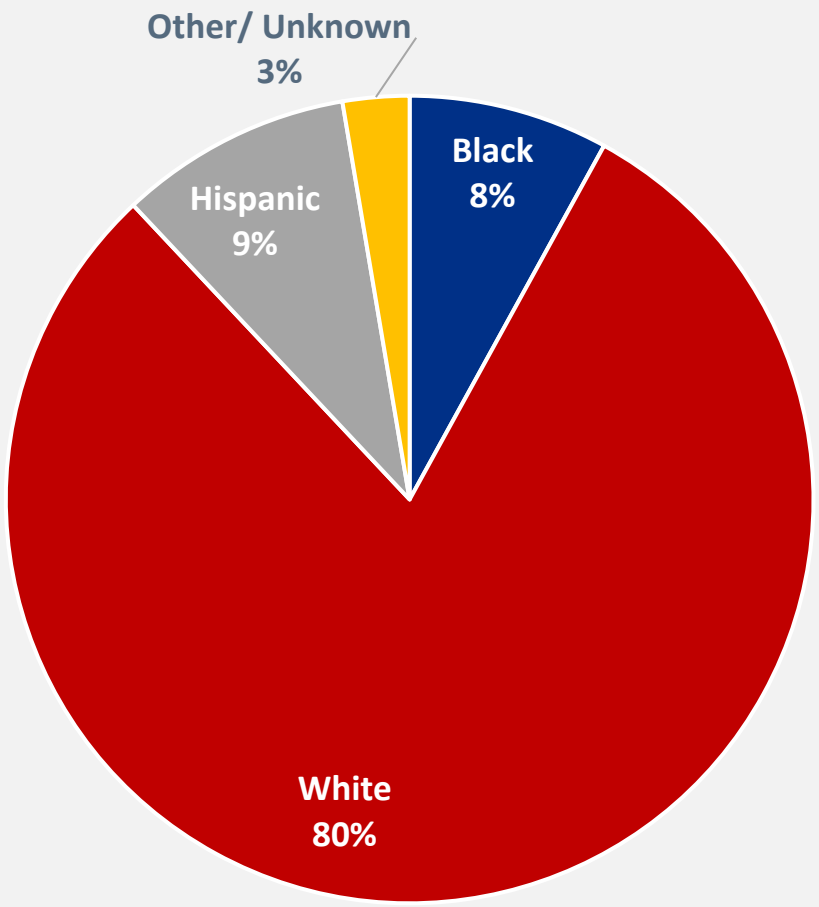


Fatal Falls by Length of Hospital Stay (LOS)

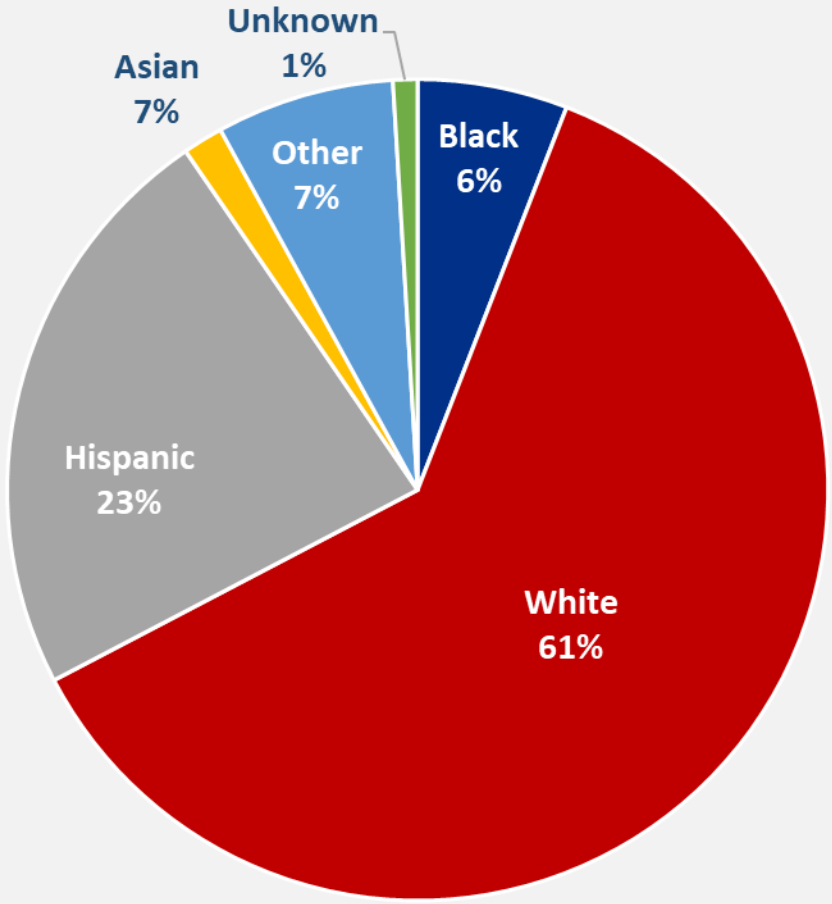


Fatal Fall Demographics by ISS score

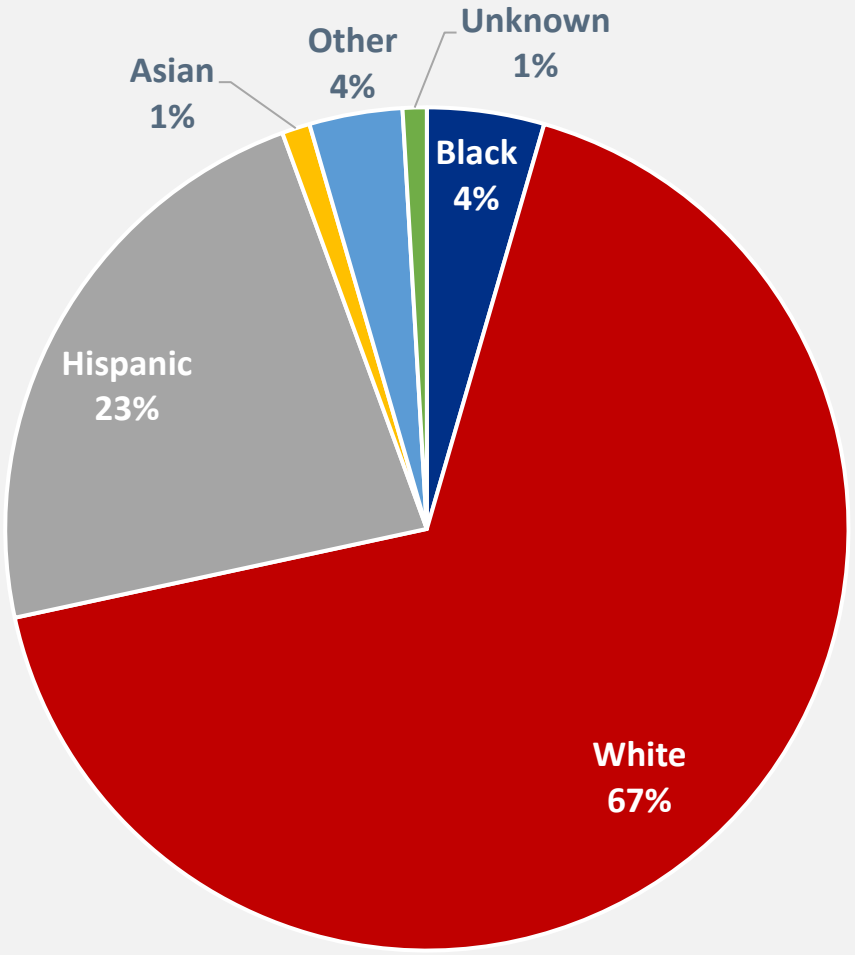
ISS Score 0 by Race and Ethnicity



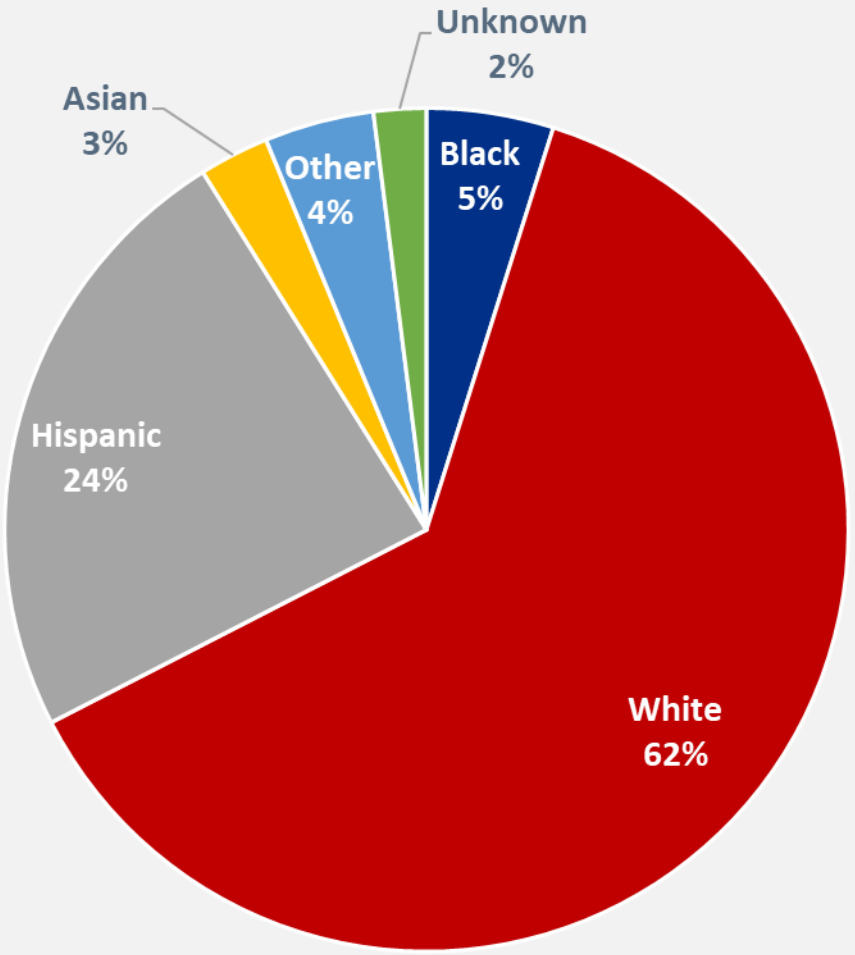
ISS Score 1-8 by Race and Ethnicity



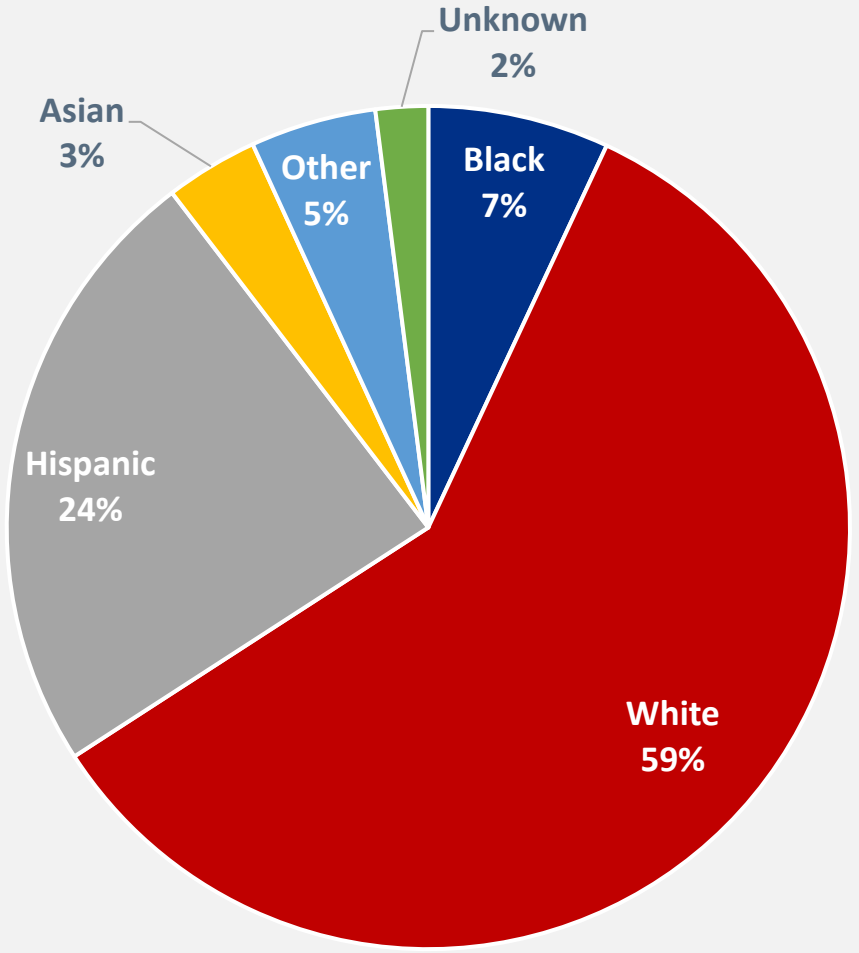
ISS Score 9-15 by Race and Ethnicity



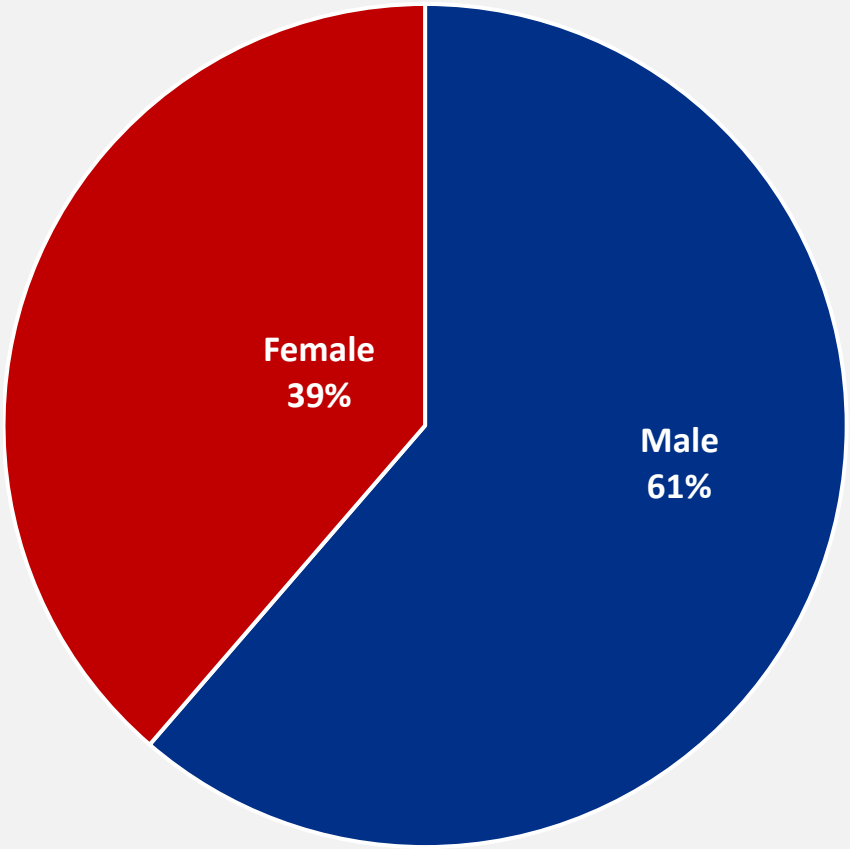
ISS Score 16-24 by Race and Ethnicity



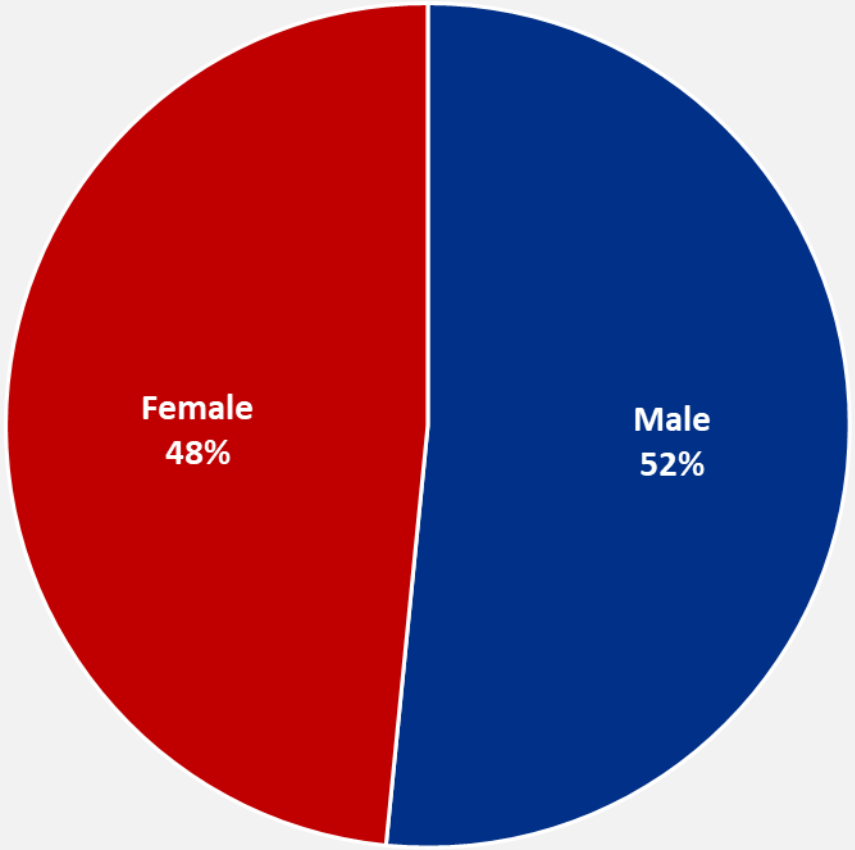
ISS Score ≥ 25 by Race and Ethnicity



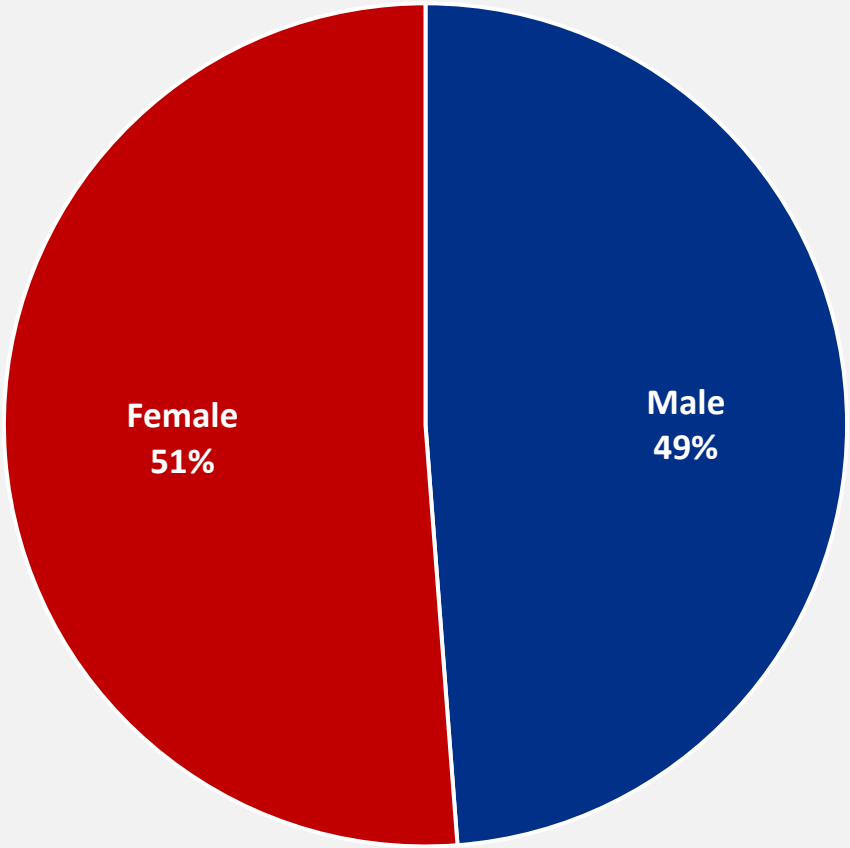
ISS Score 0 by Sex



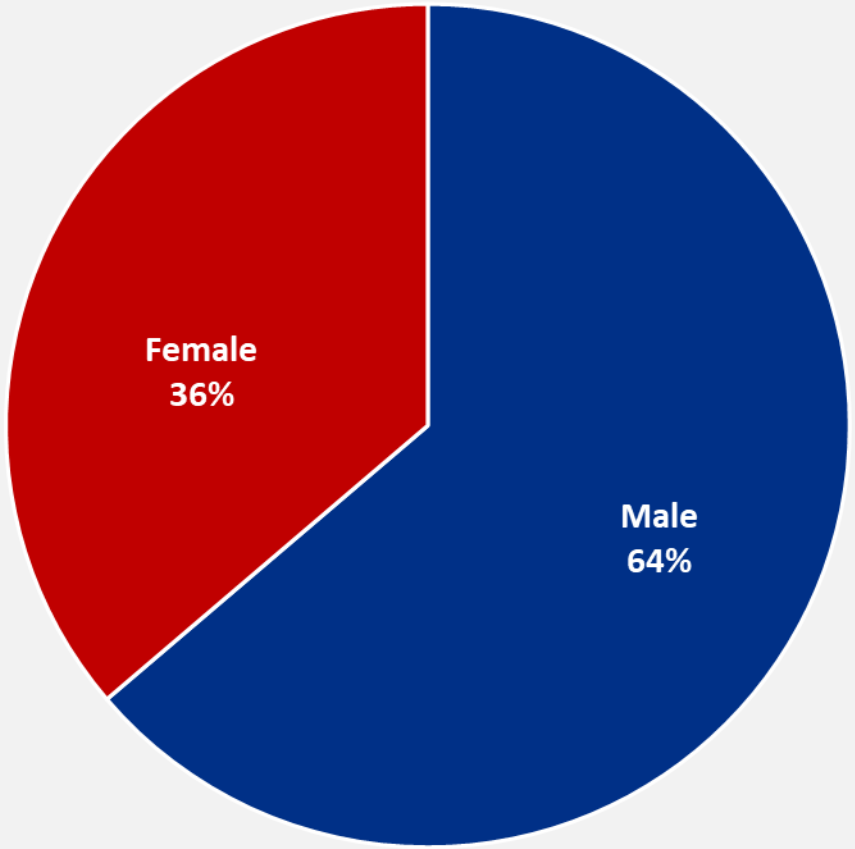
ISS Score 1-8 by Sex



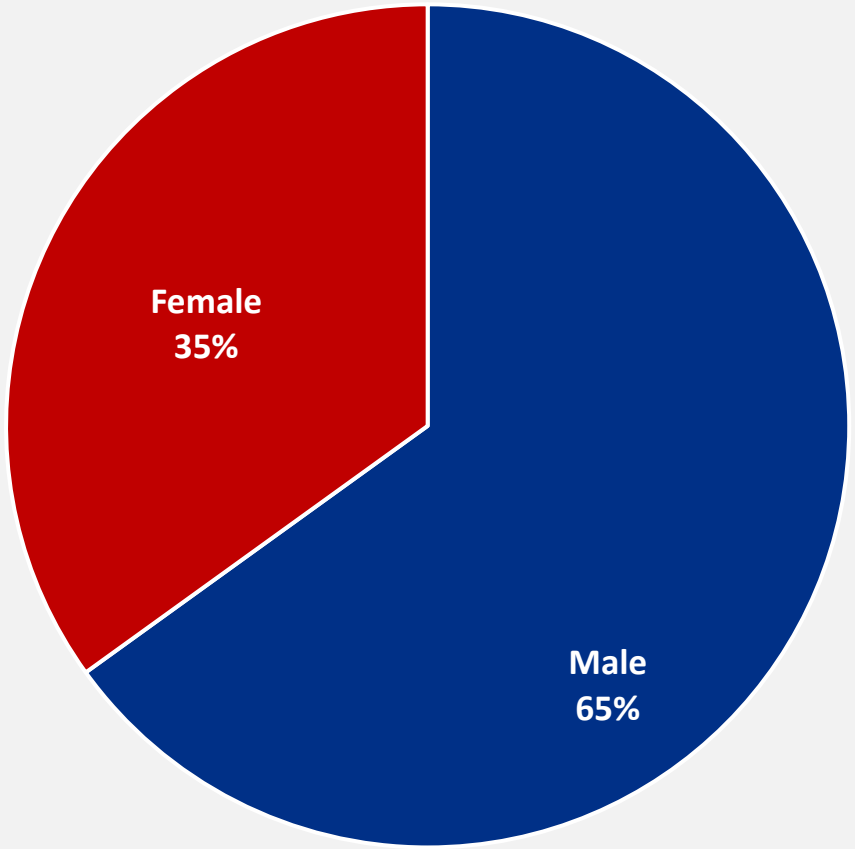
ISS Score 9-15 by Sex



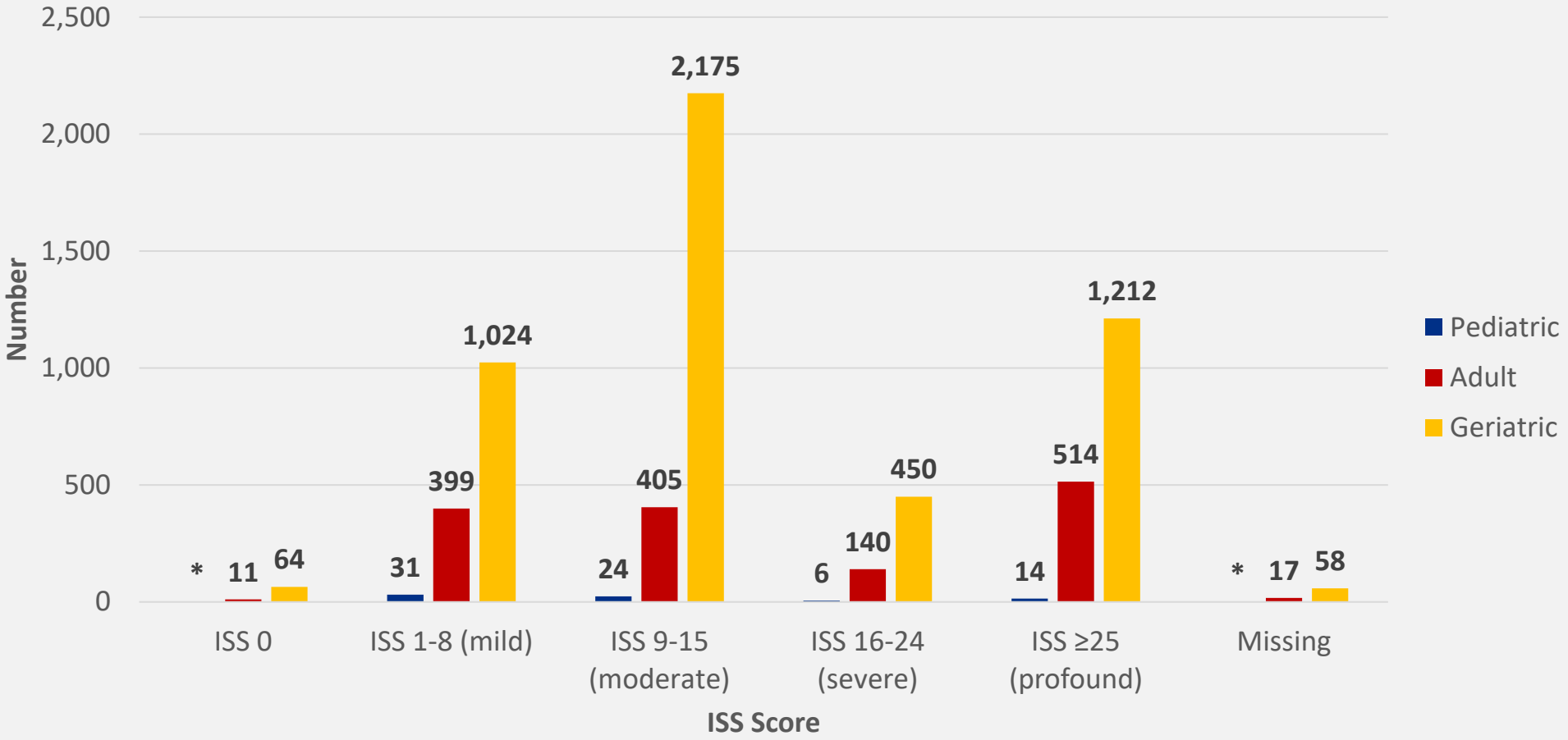
ISS Score 16-24 by Sex



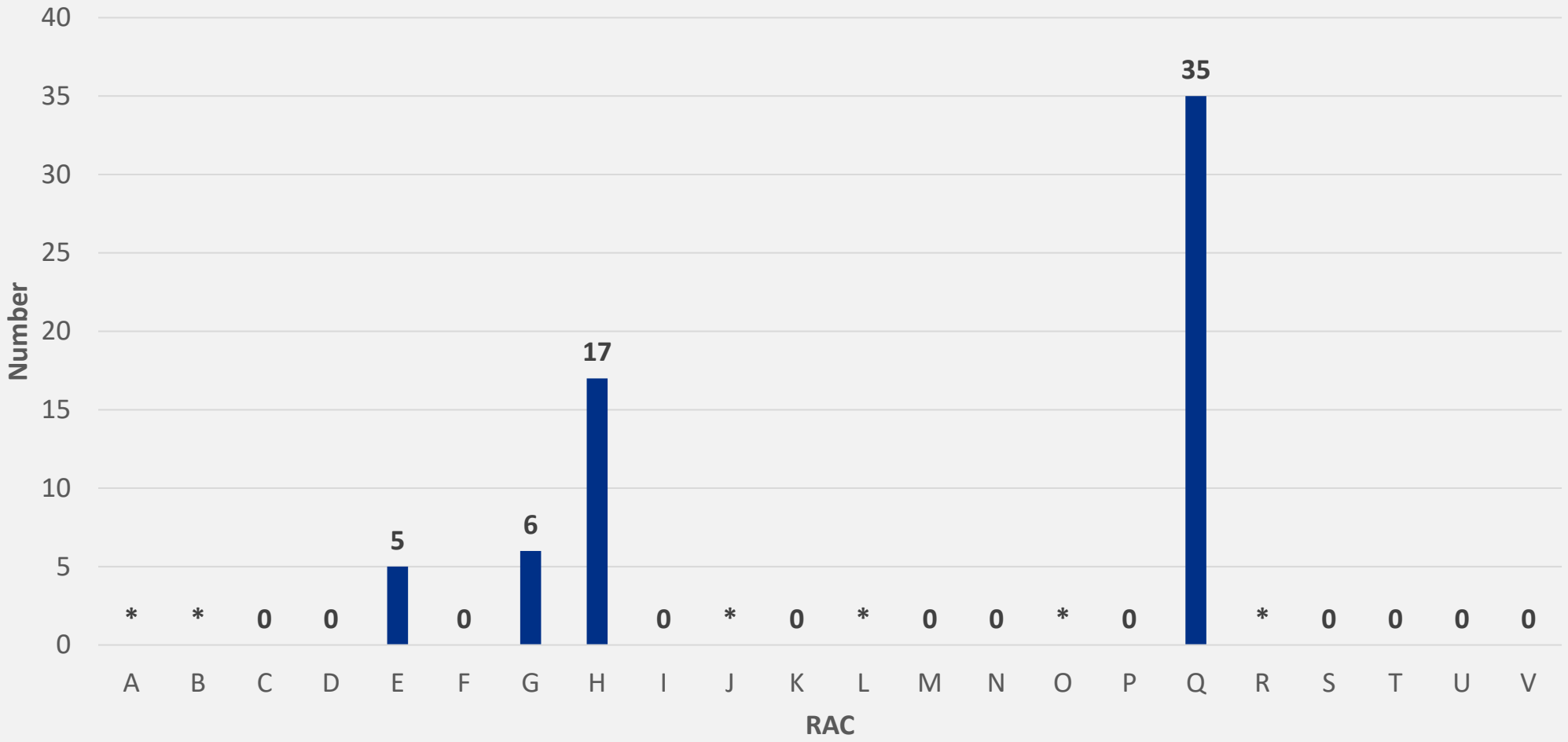
ISS Score ≥ 25 by Sex



ISS Score by Age

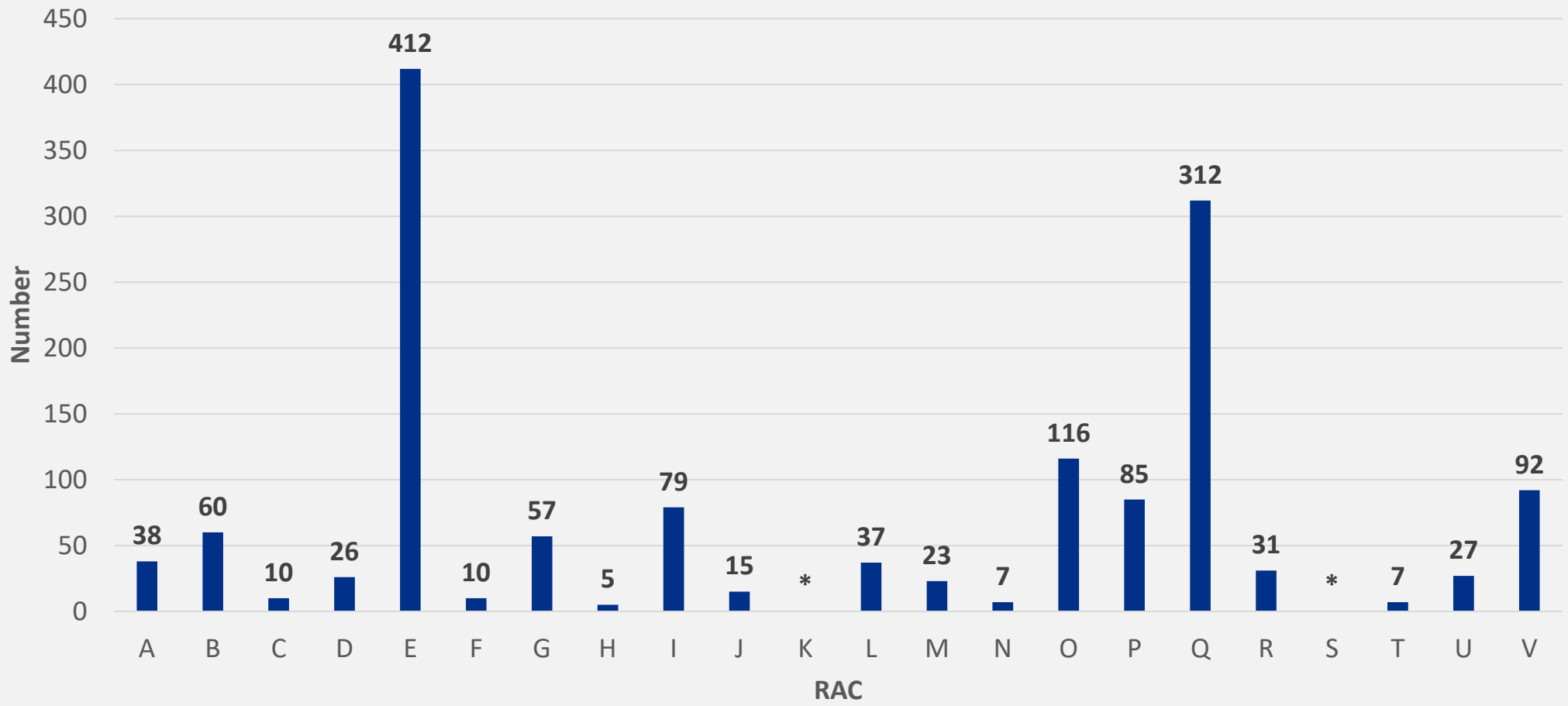


ISS Score 0 by Regional Advisory Council (RAC)



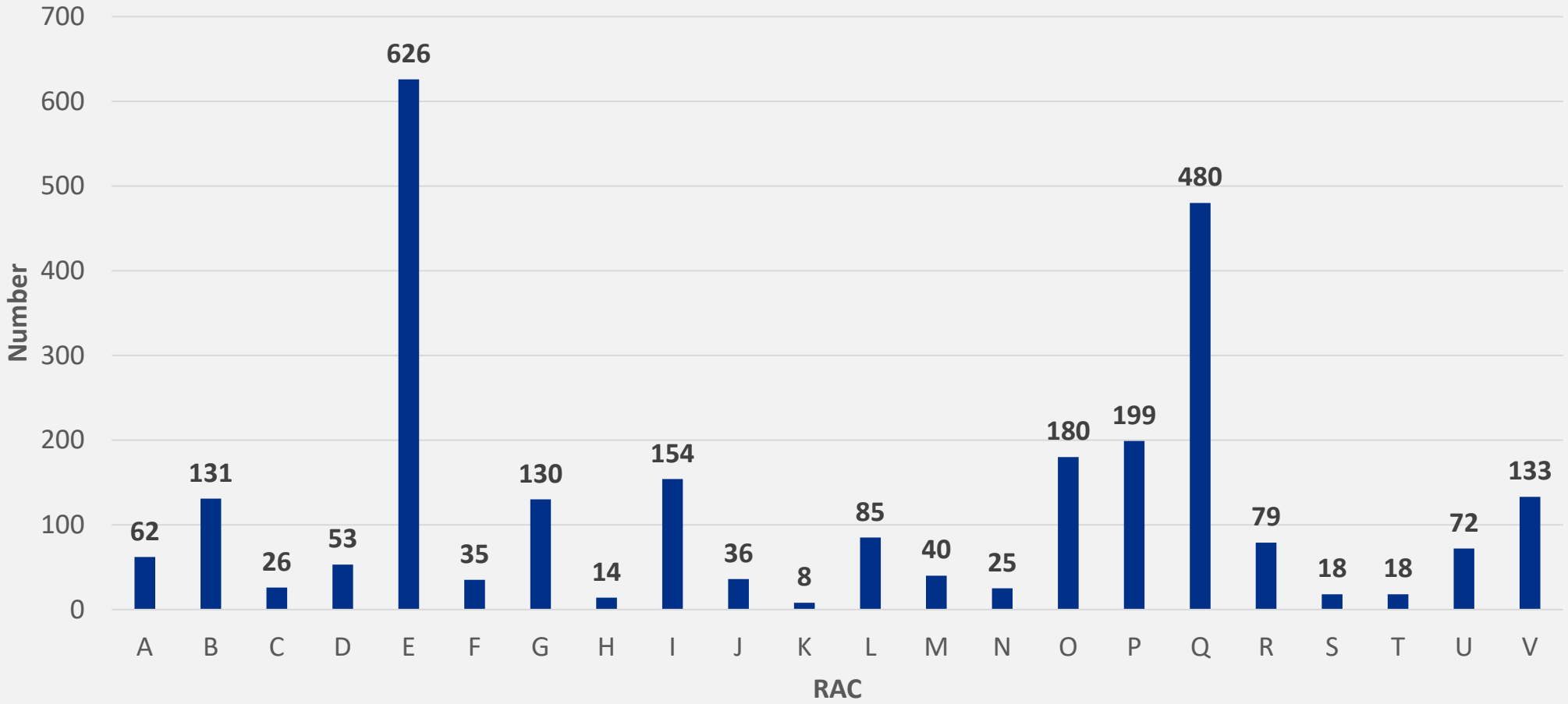
* = less than 5

ISS Score 1-8 (Mild) by RAC

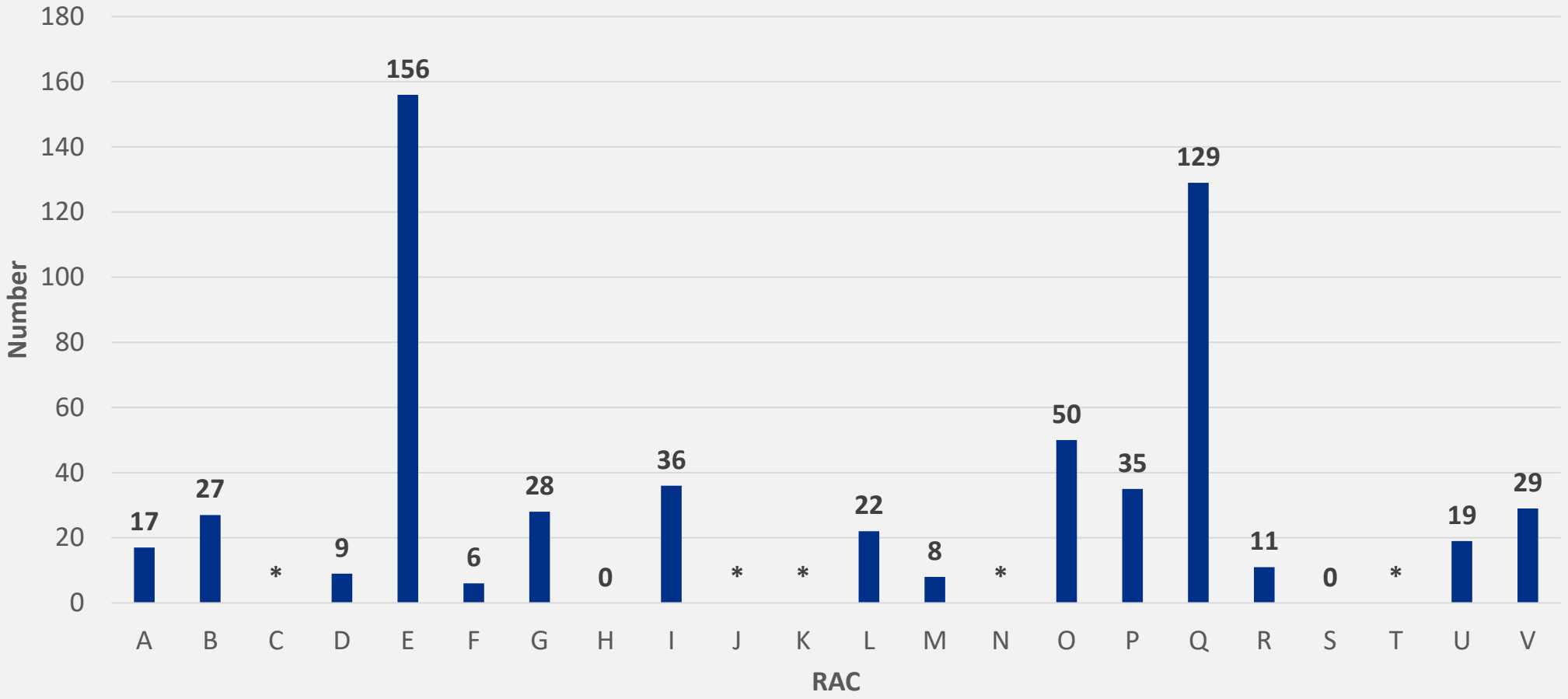


* = less than 5

ISS Score 9-15 (Moderate) by RAC

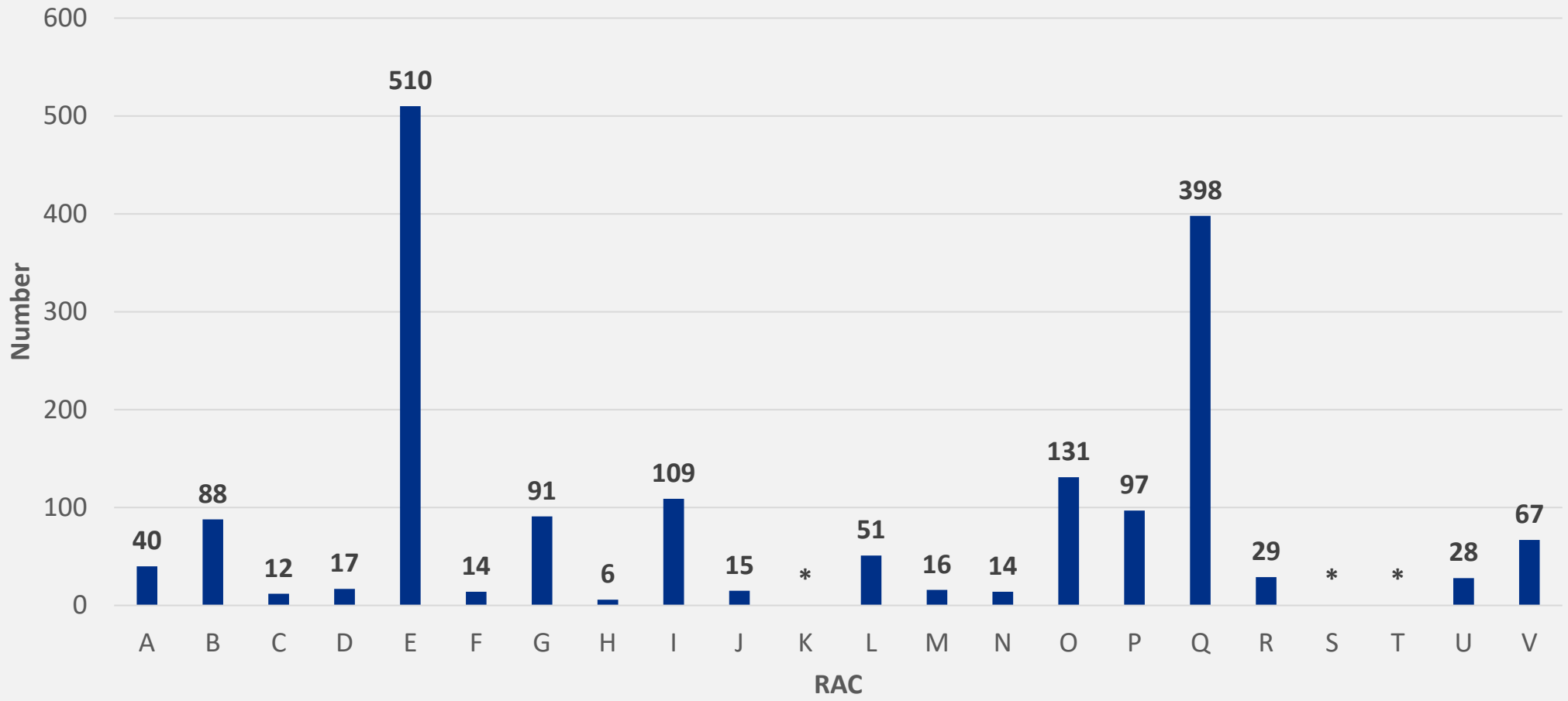


ISS Score 16-24 (Severe) by RAC



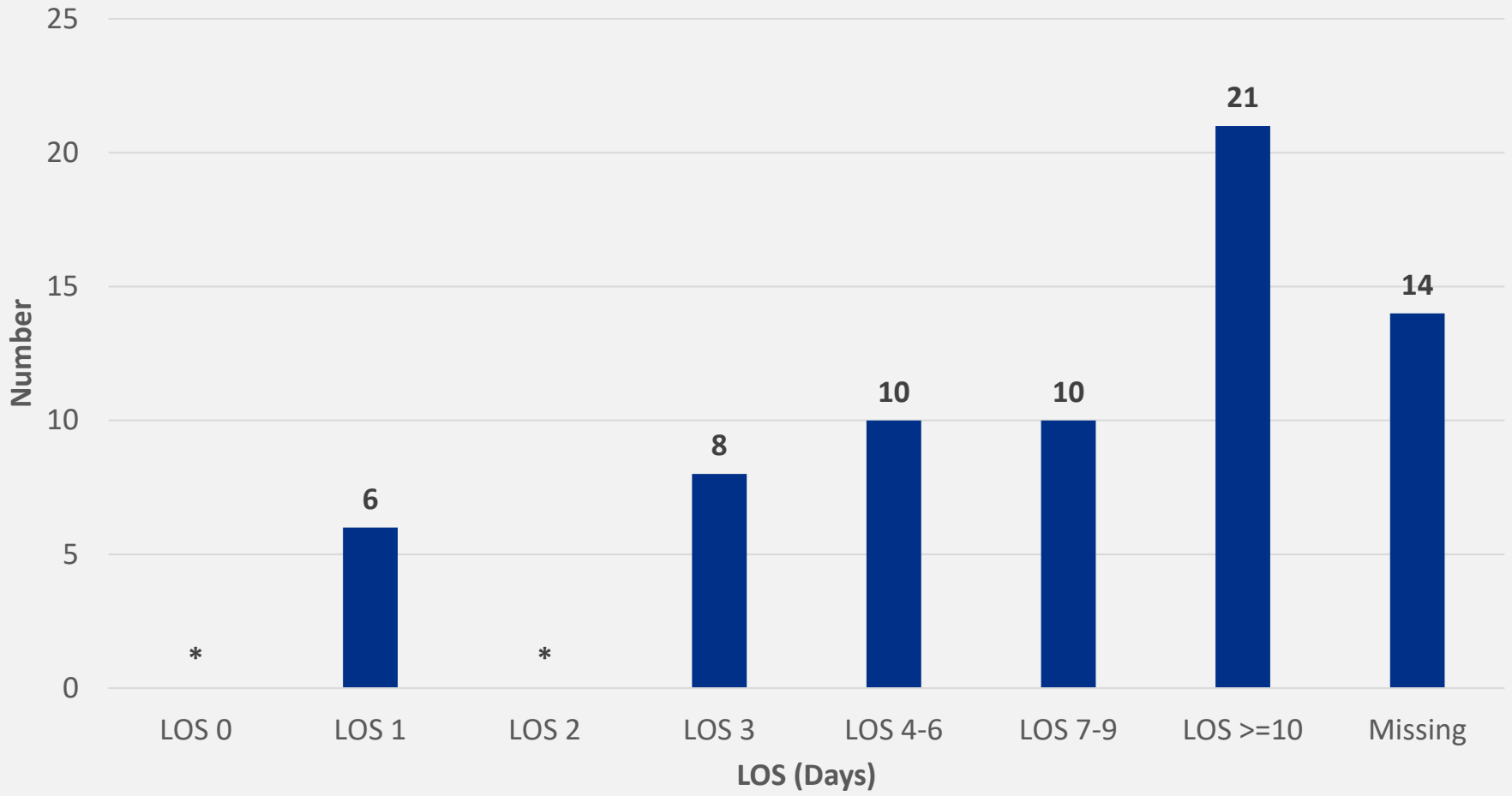
* = less than 5

ISS Score ≥ 25 (Profound) by RAC



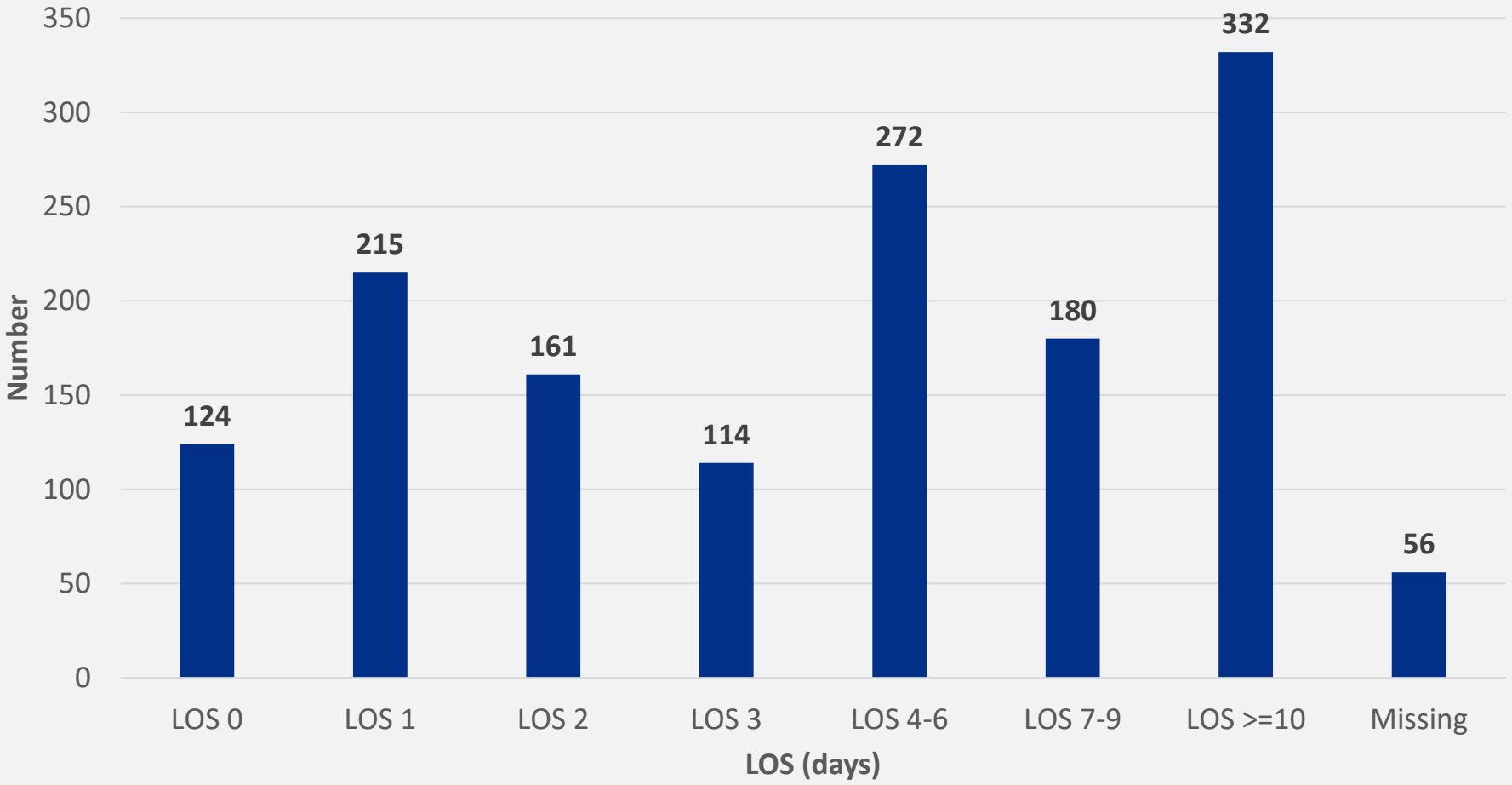
* = less than 5

ISS Score 0 by Length of Hospital Stay (LOS)



* = less than 5

ISS Score 1-8 (Mild) by LOS



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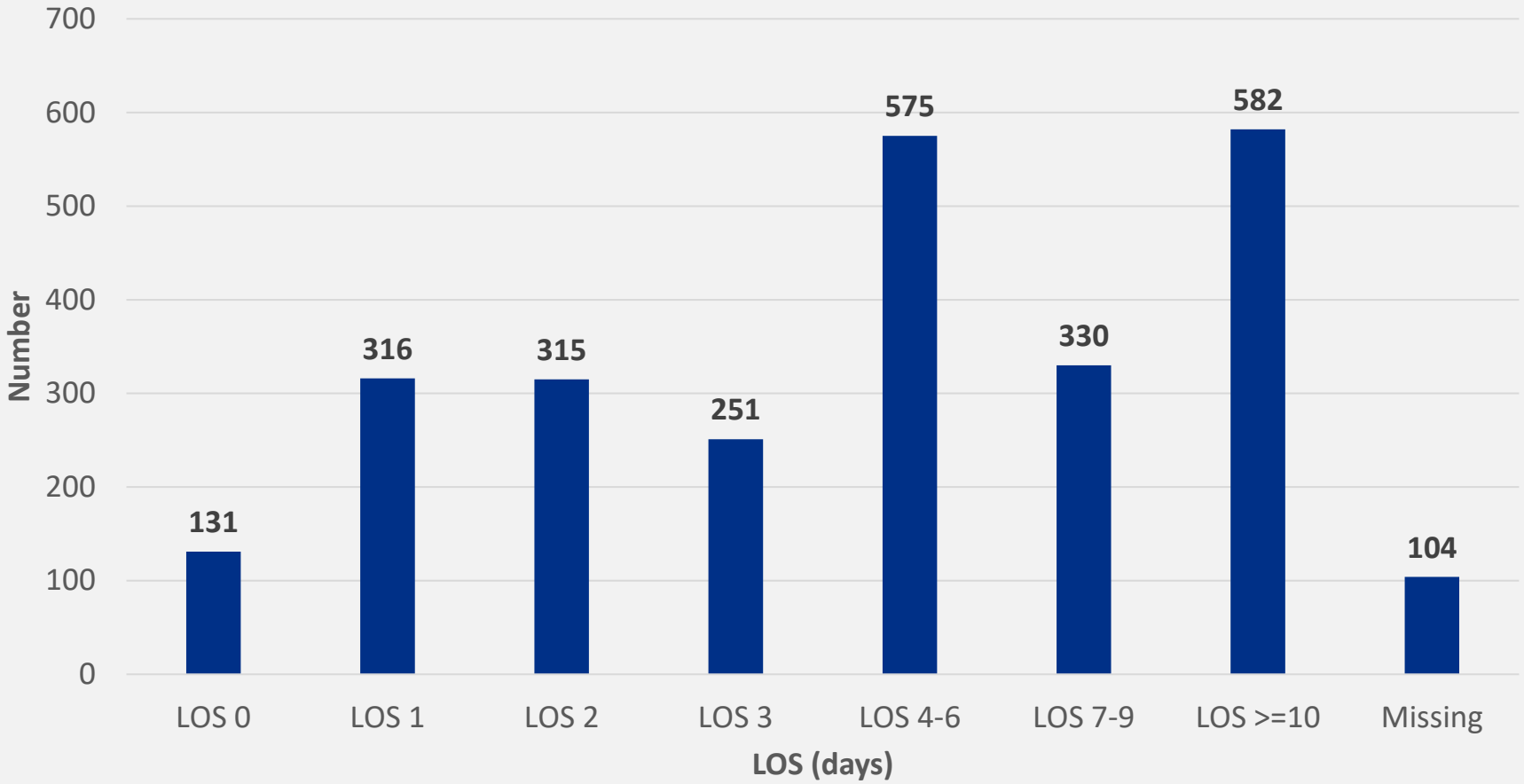
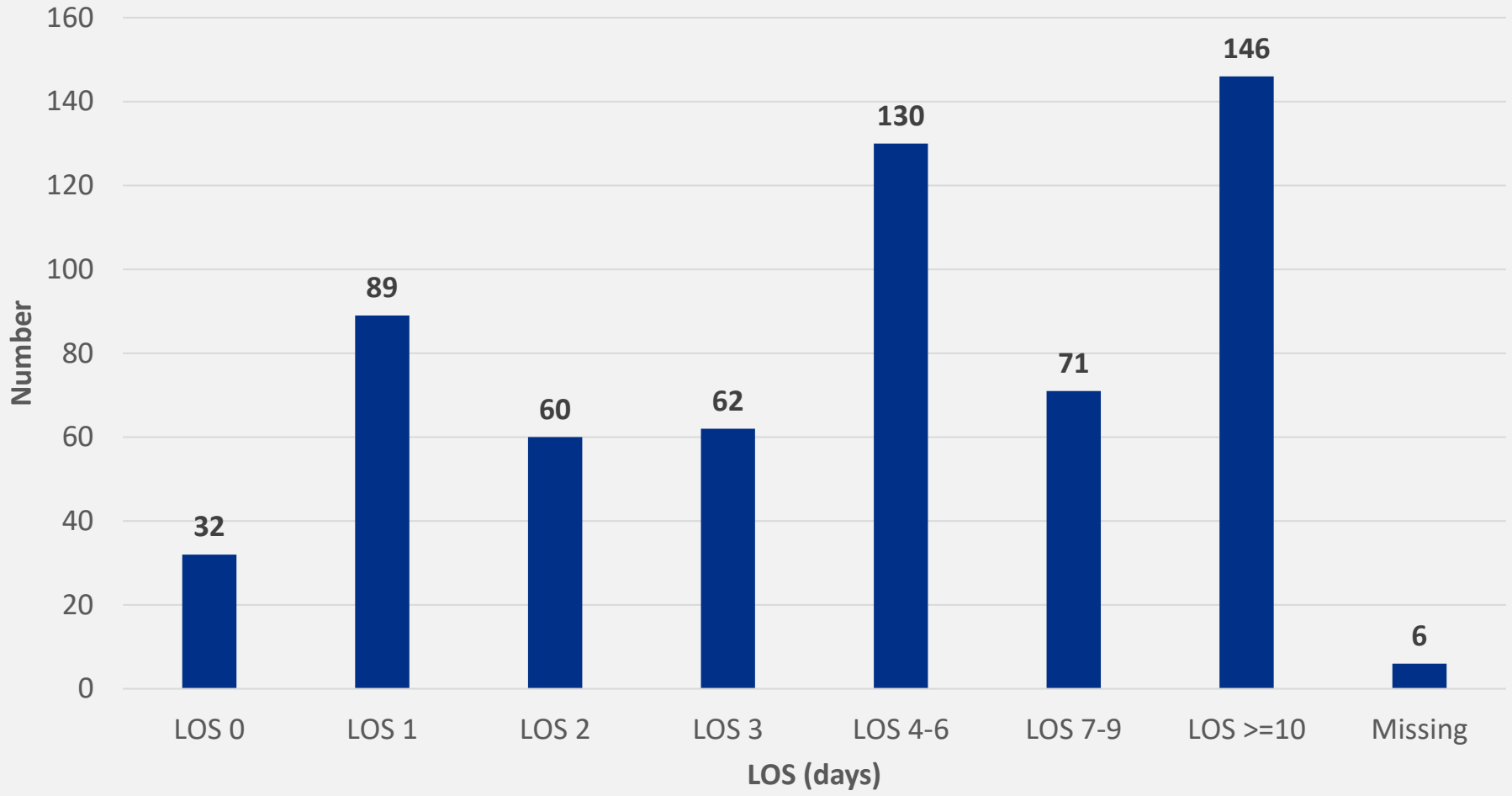
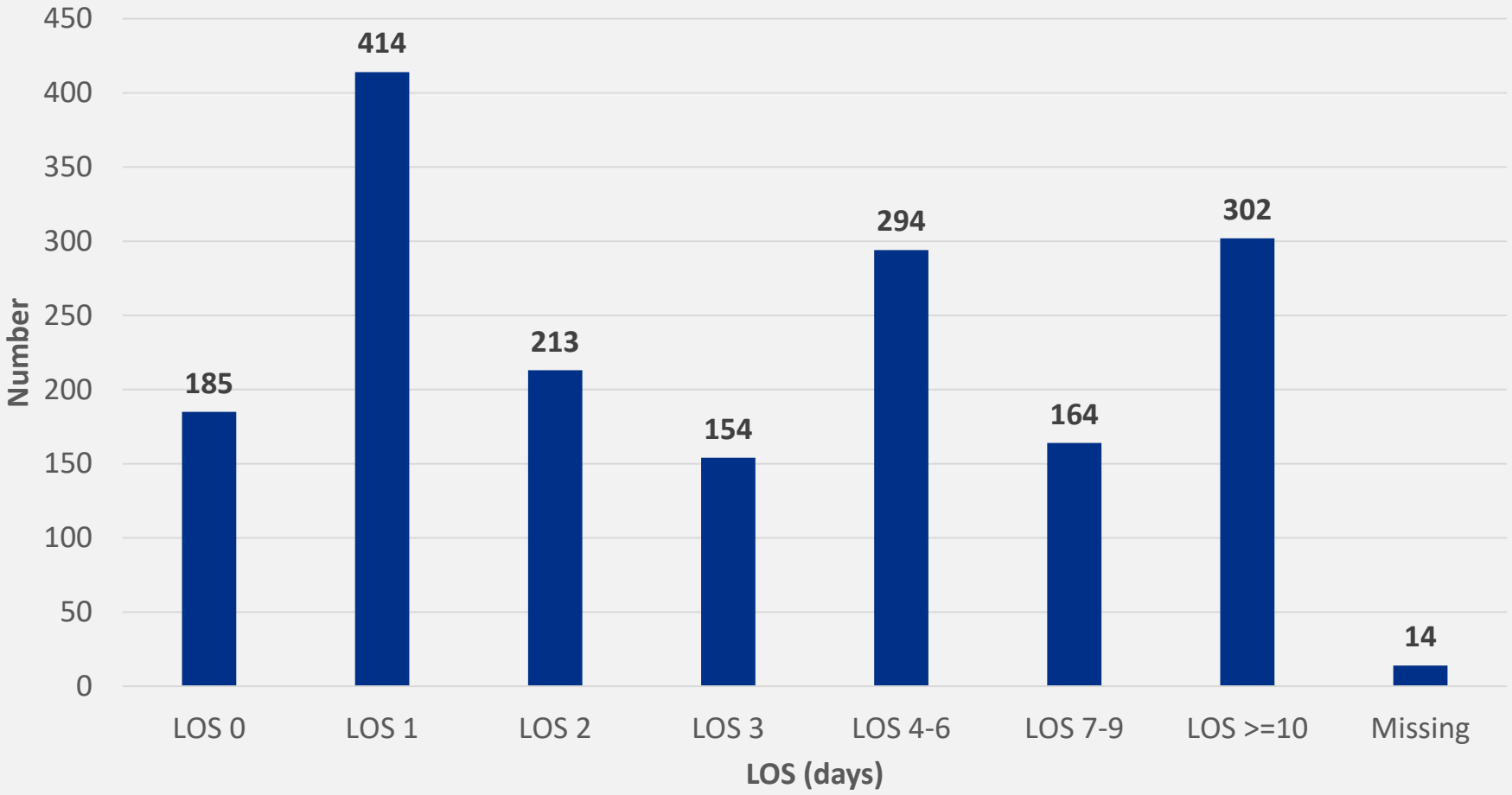
ISS Score 9-15 (Moderate) by LOS



ISS Score 16-24 (Severe) by LOS

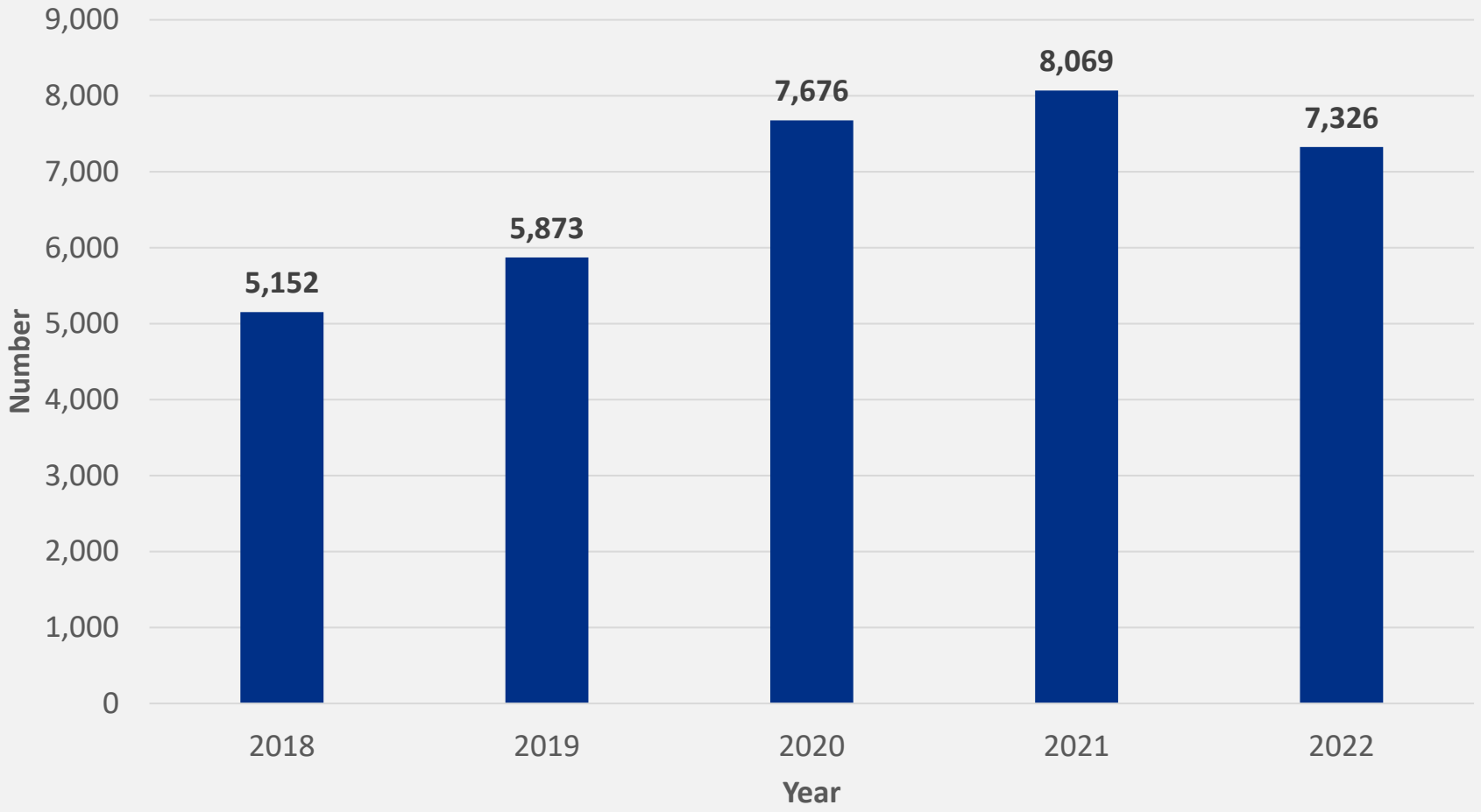


ISS ≥ 25 (Profound) by LOS

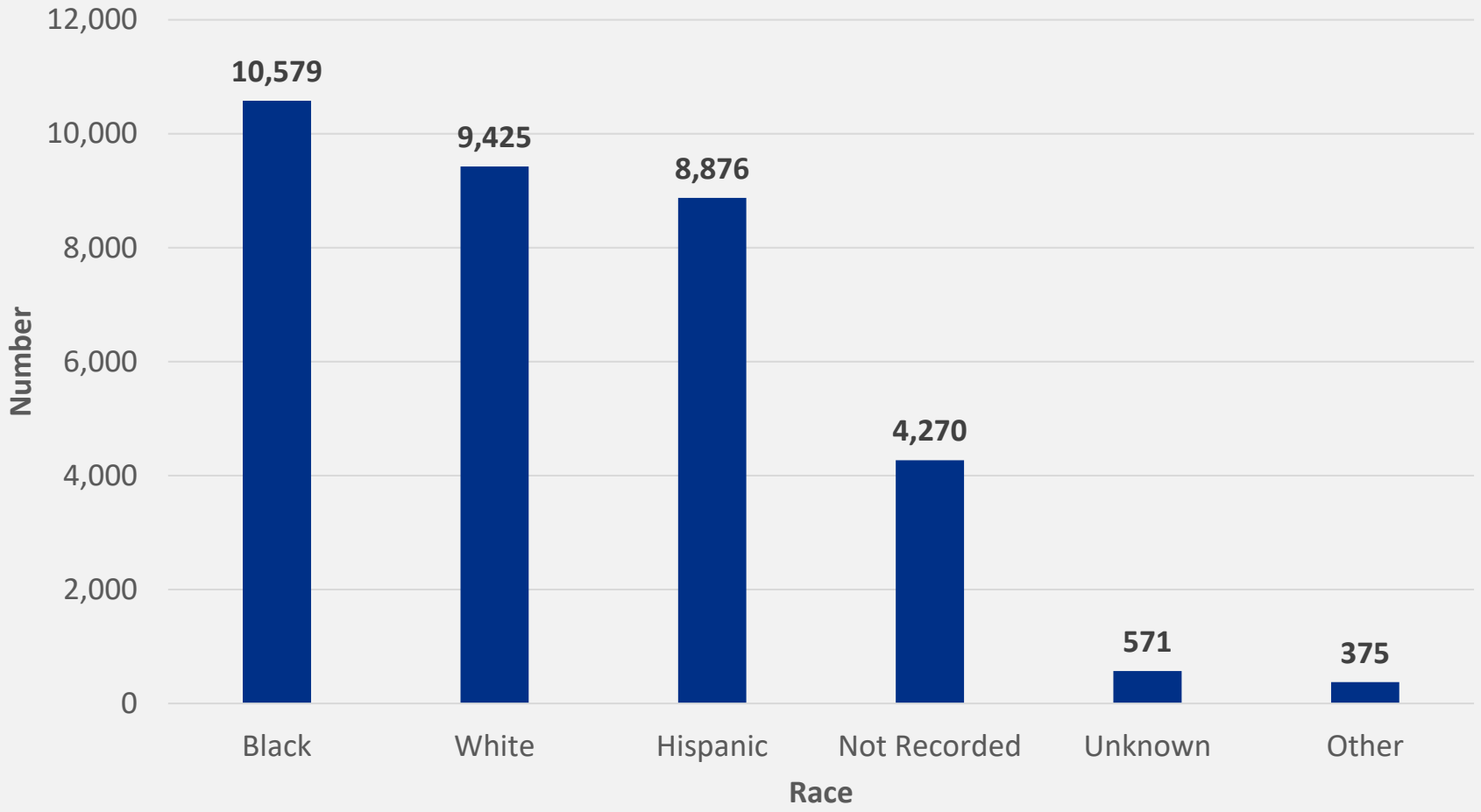


2018-2022
Firearm EMS data

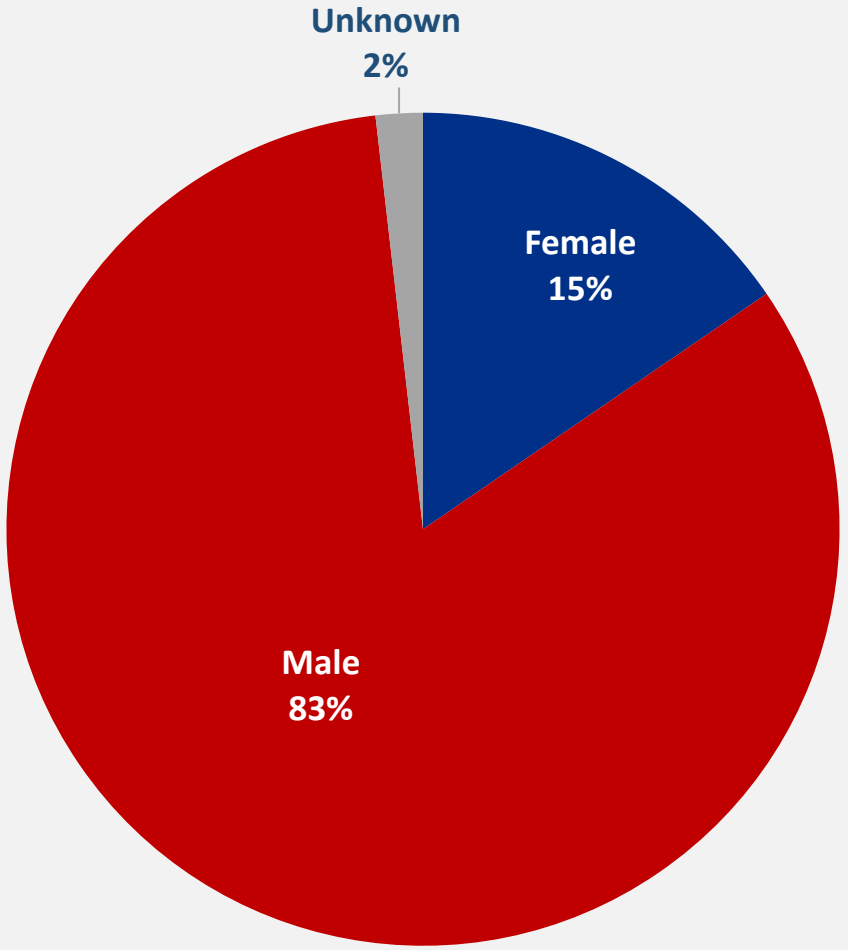
Firearm EMS Responses by Year



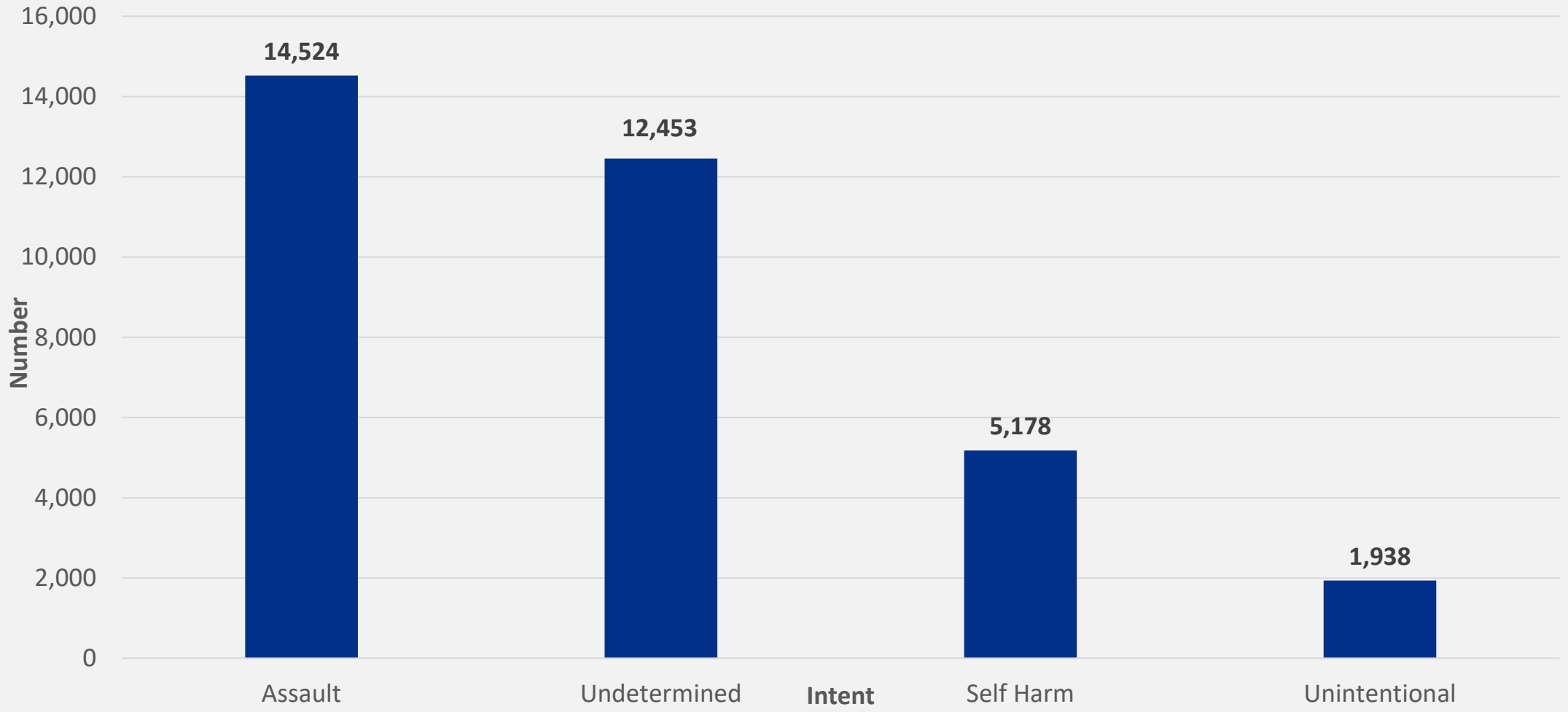
Firearm EMS Responses by Race



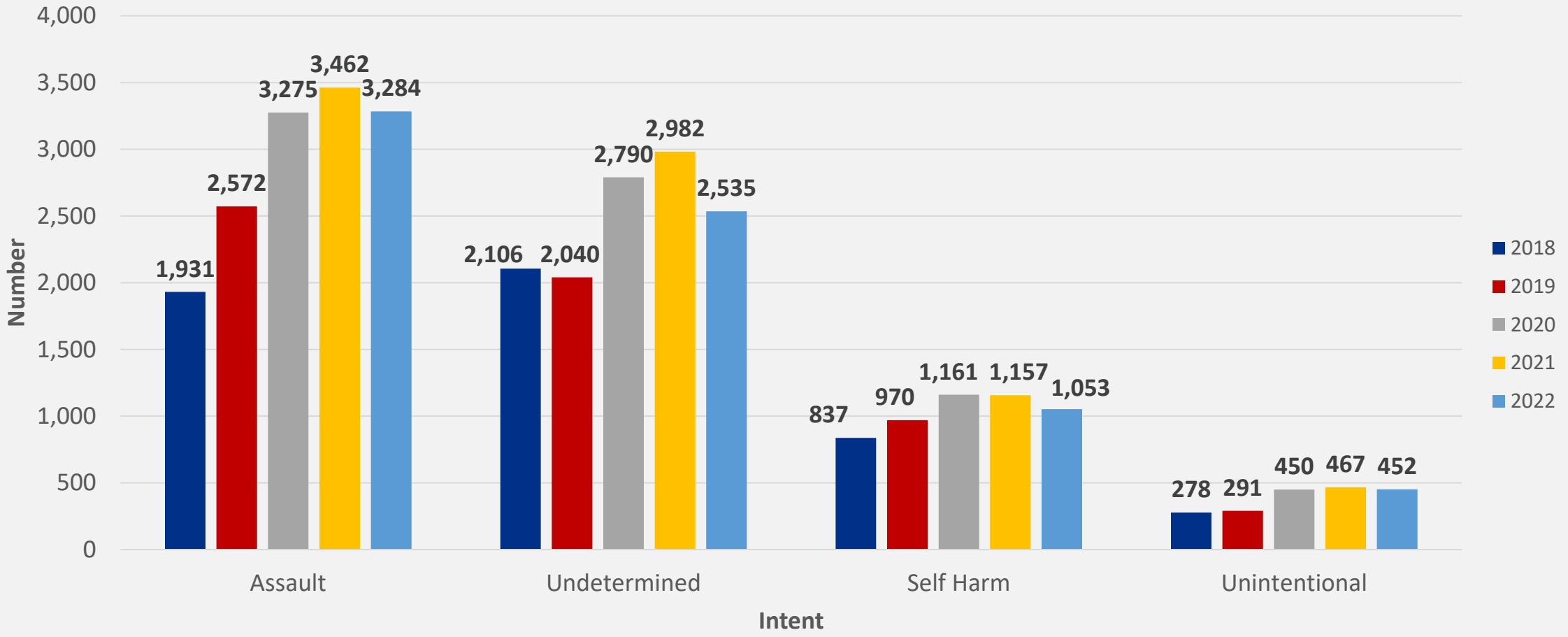
Firearm EMS Responses by Sex



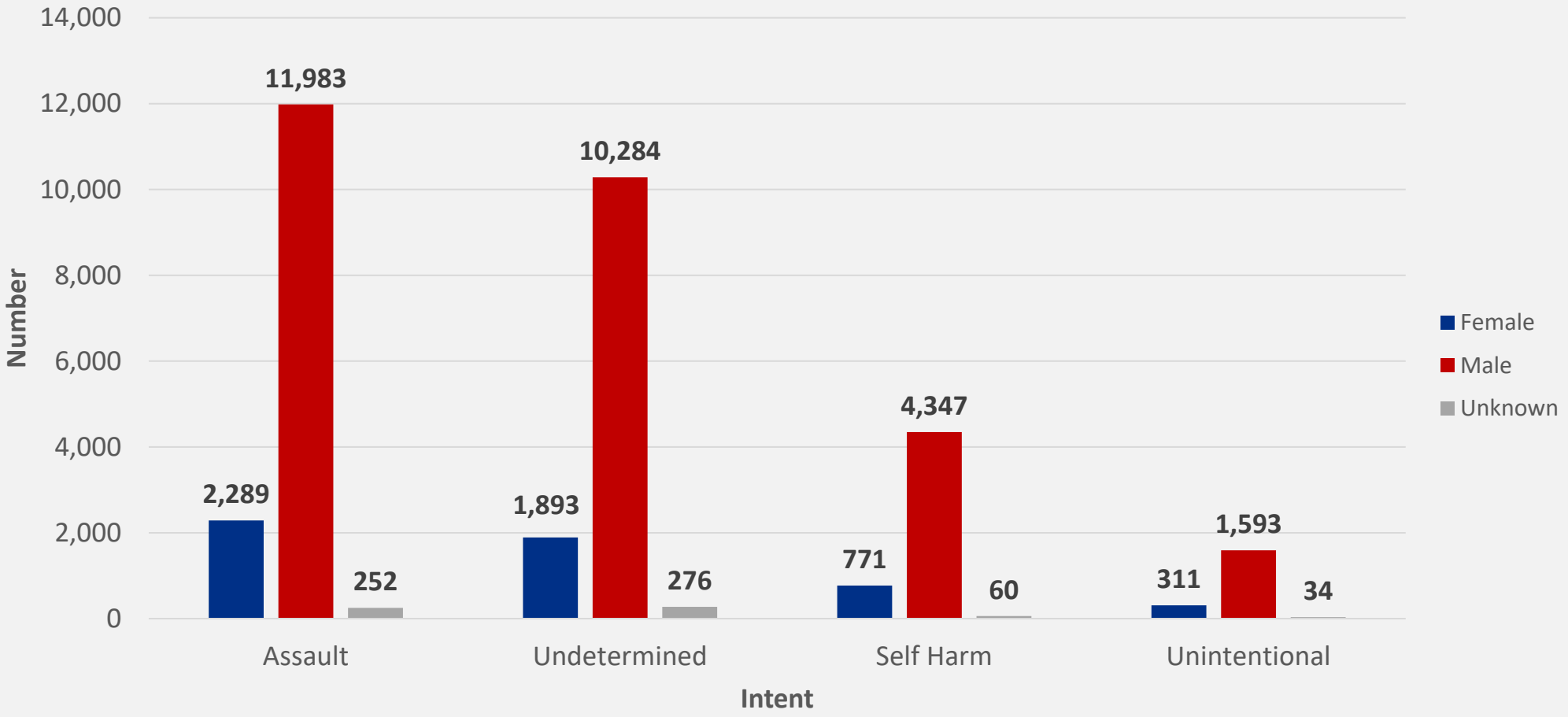
Firearm EMS Responses by Intent



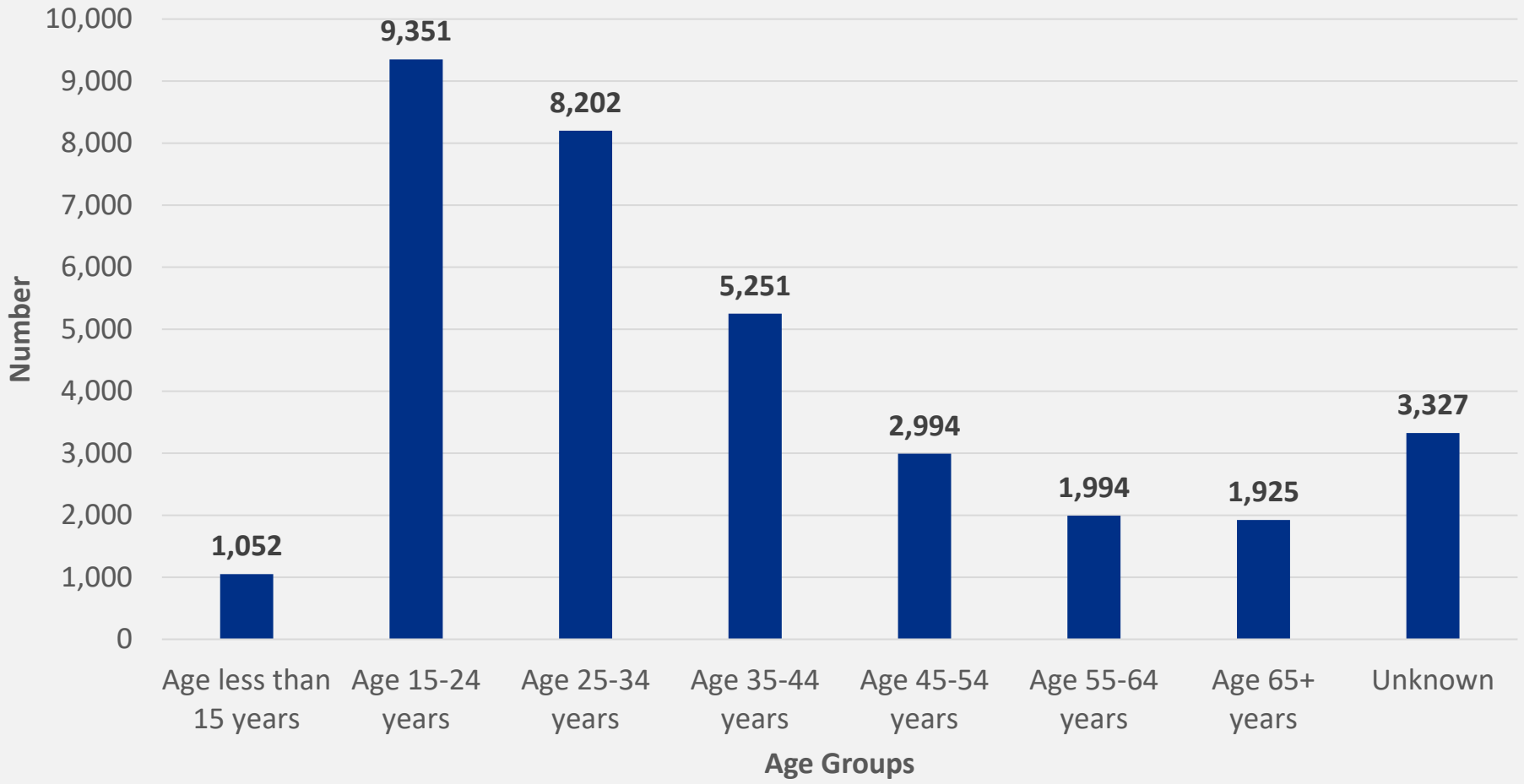
Firearm EMS Responses by Intent and Year



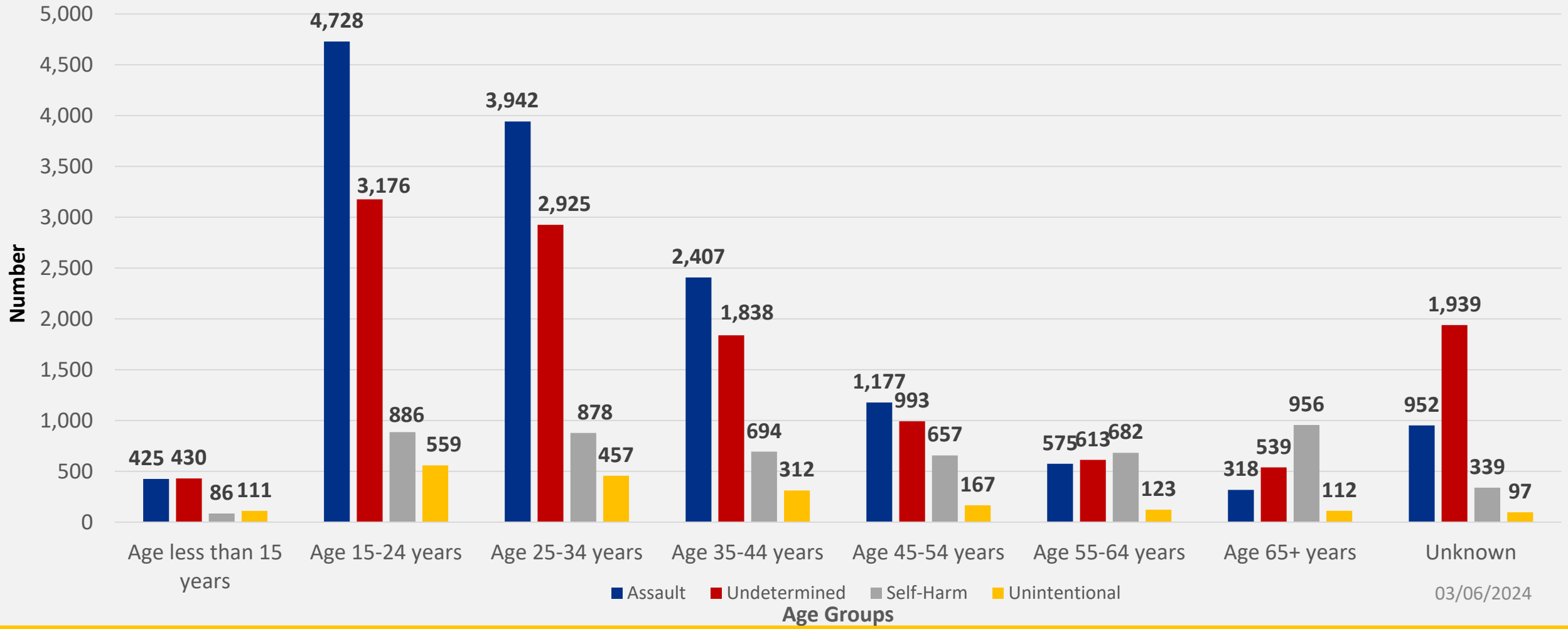
Firearm EMS Responses by Intent and Sex



Firearm EMS Responses by Age

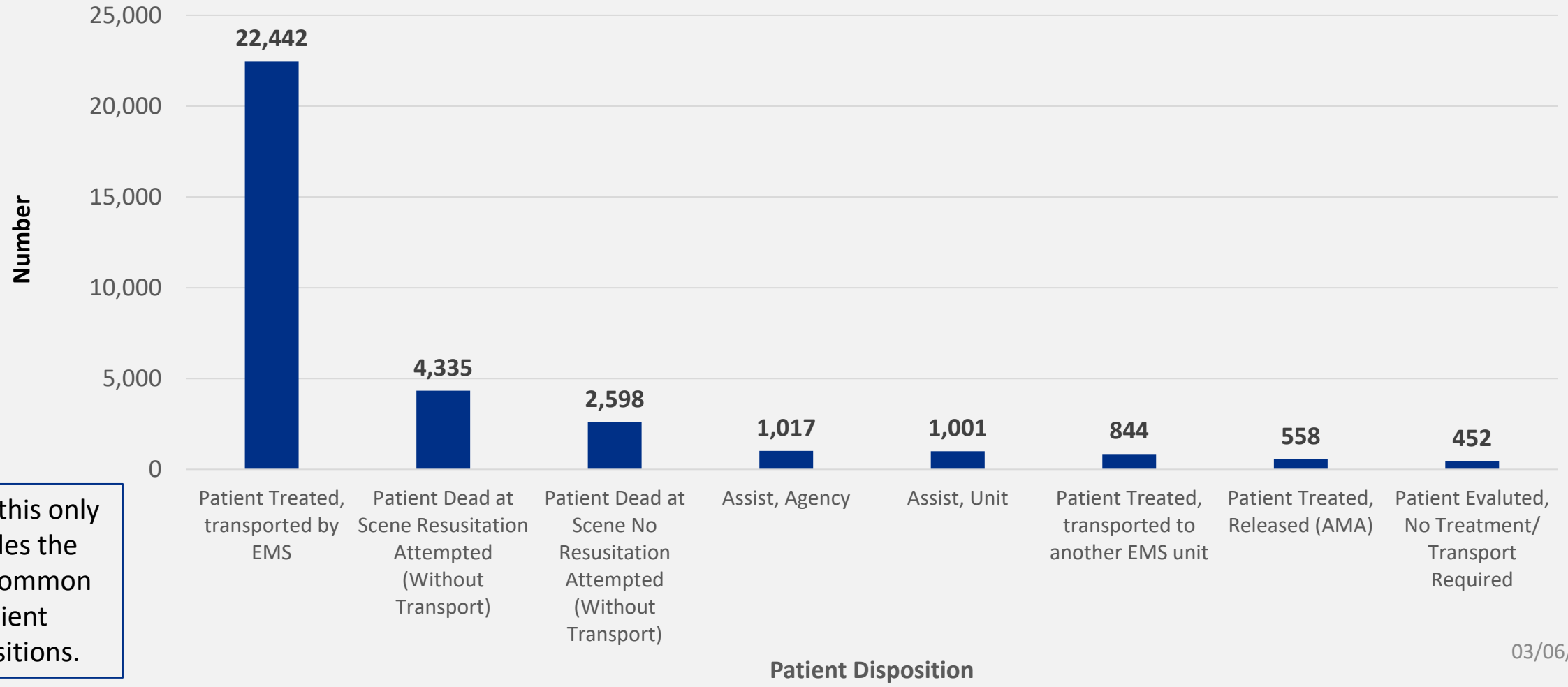


Firearm EMS Responses by Age and Intent



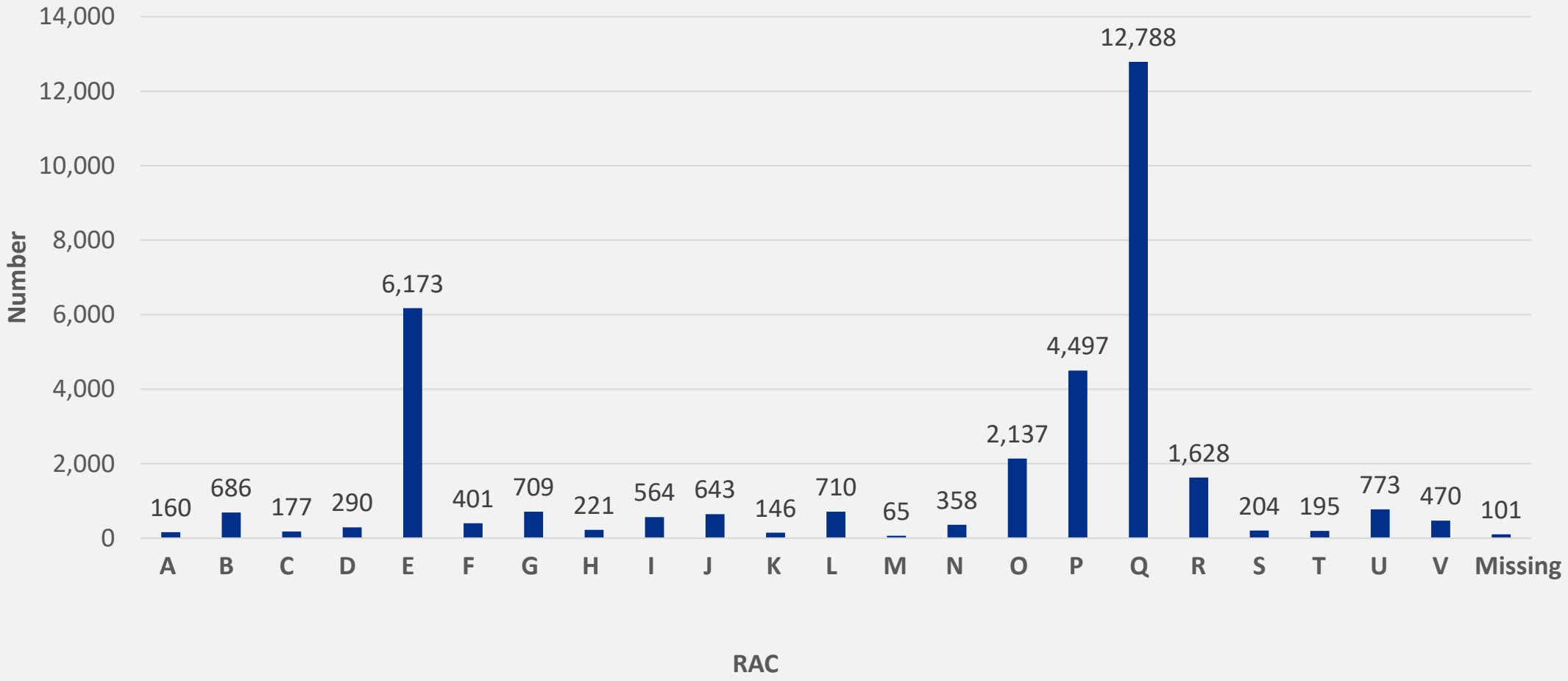
03/06/2024

Firearm EMS Responses Patient Disposition

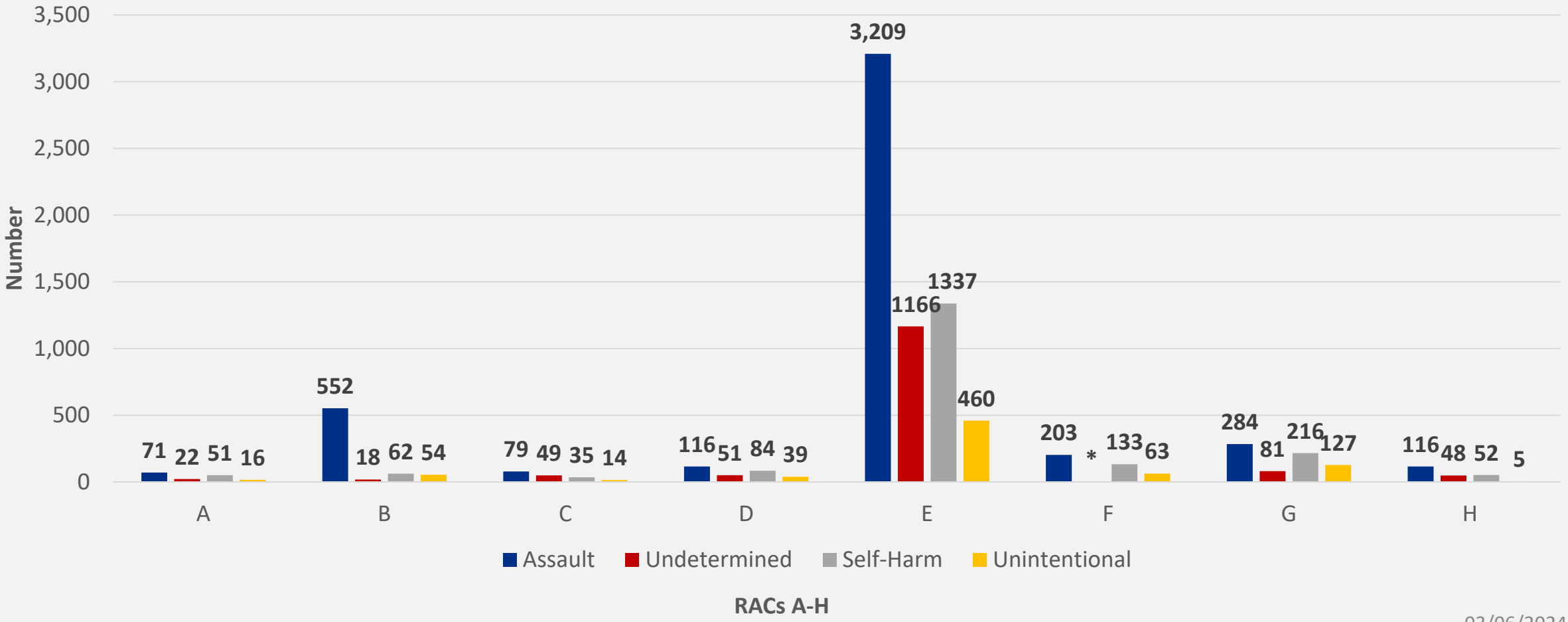


Note – this only includes the most common patient dispositions.

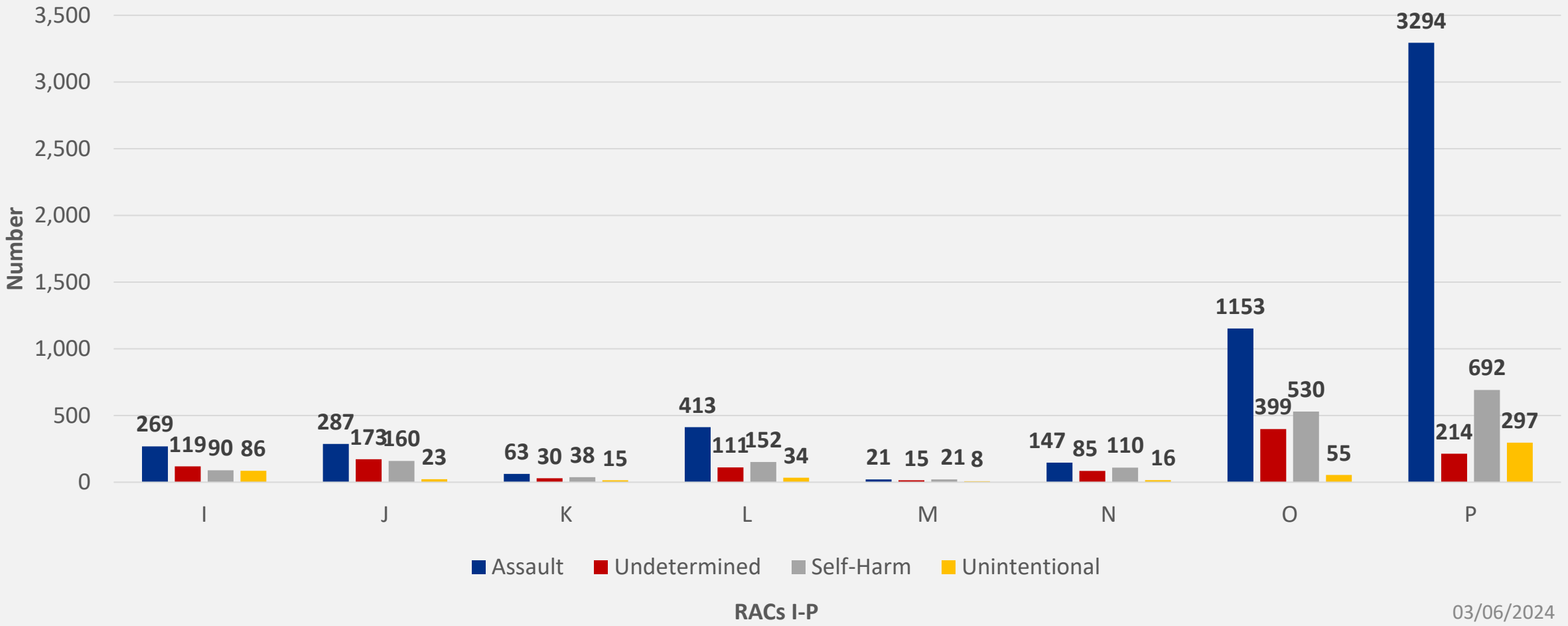
Firearm EMS Responses by RAC



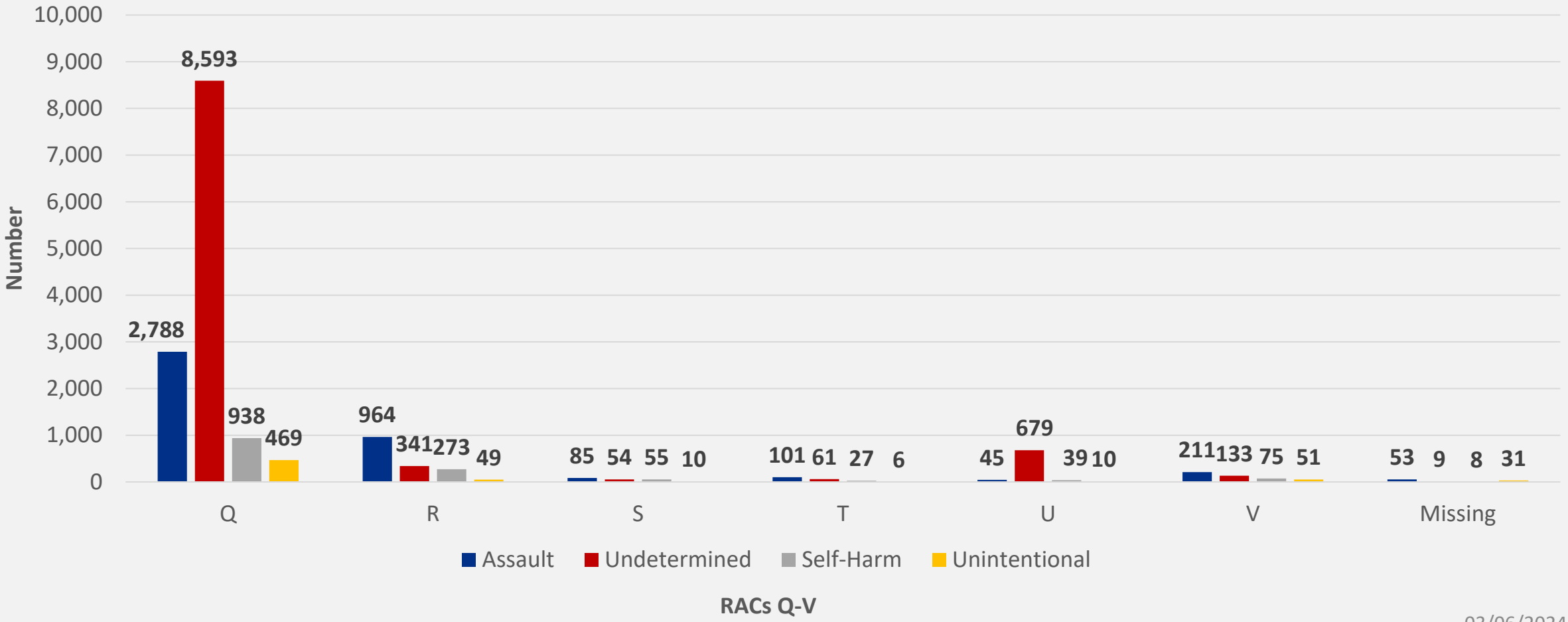
Firearm EMS Responses by RAC and Intent (A-H)



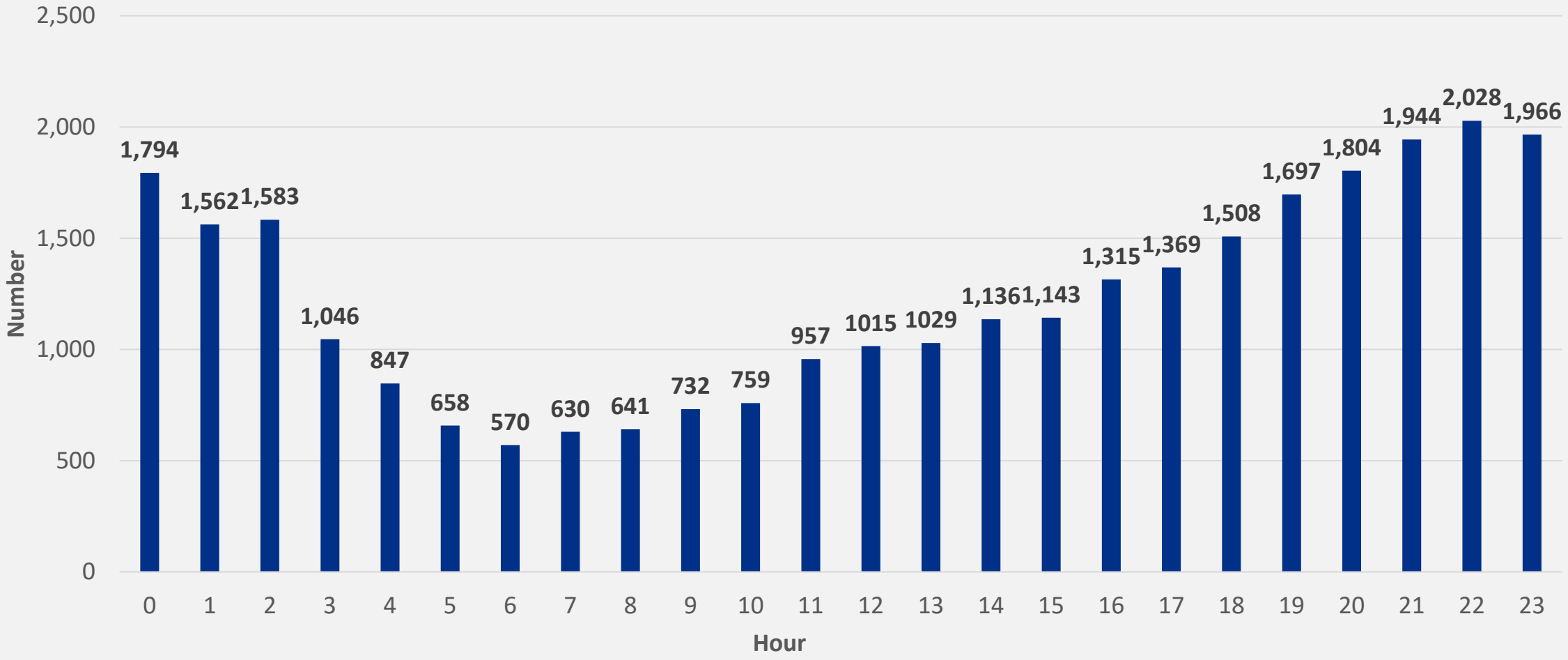
Firearm EMS Responses by RAC and Intent (I-P)



Firearm EMS Responses by RAC and Intent (Q-V)

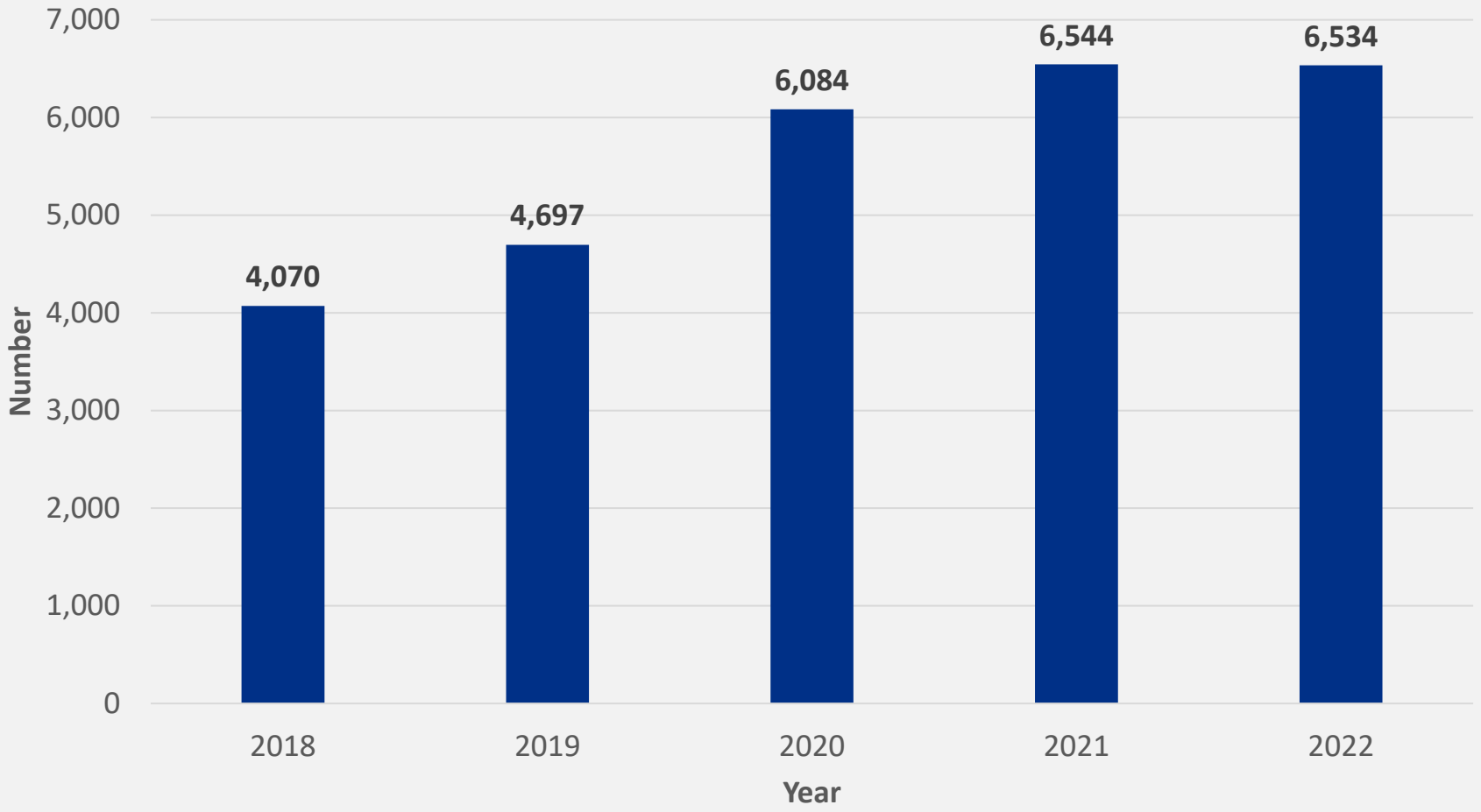


Firearm EMS Responses by Hour

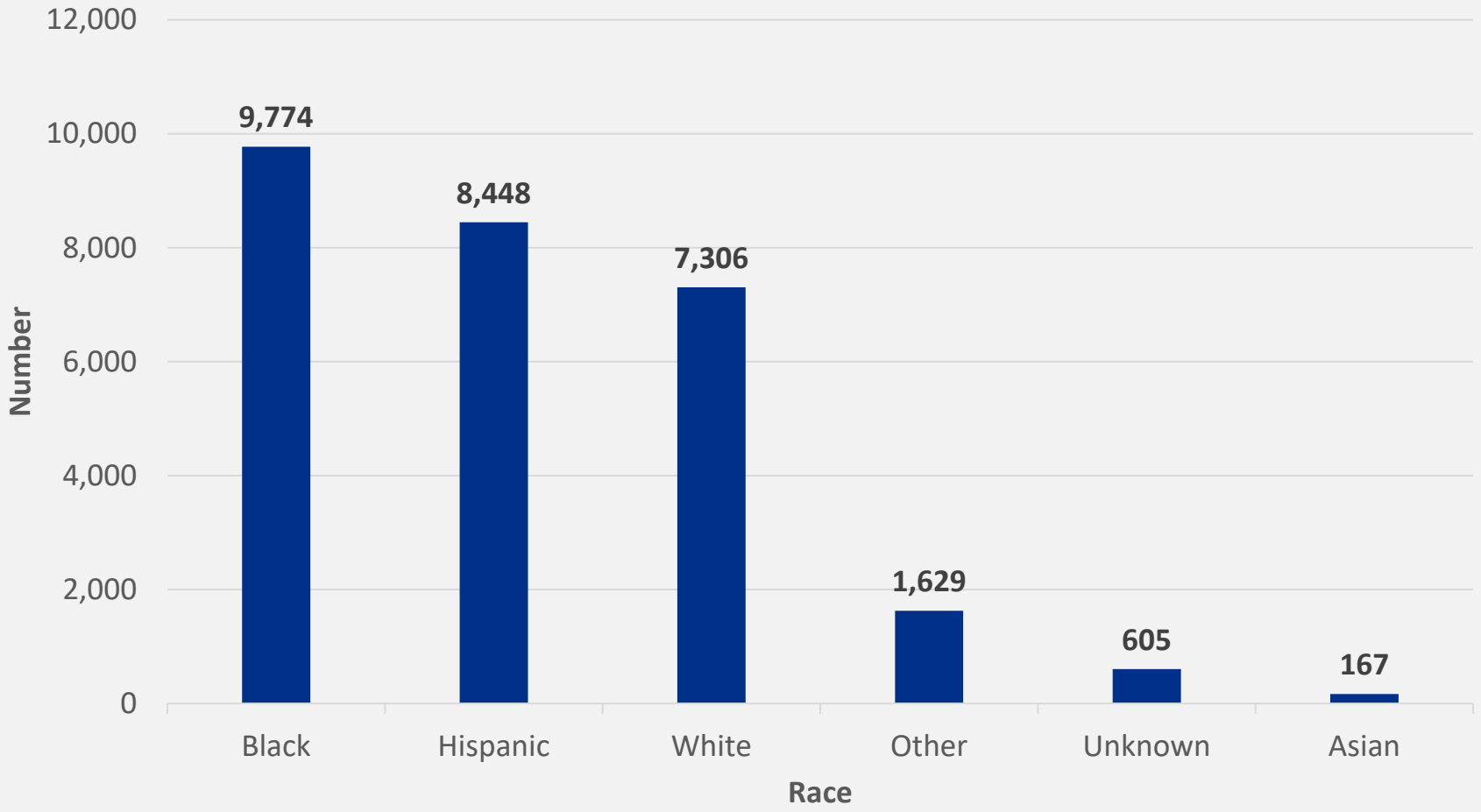


2018-2022
Firearm Trauma data

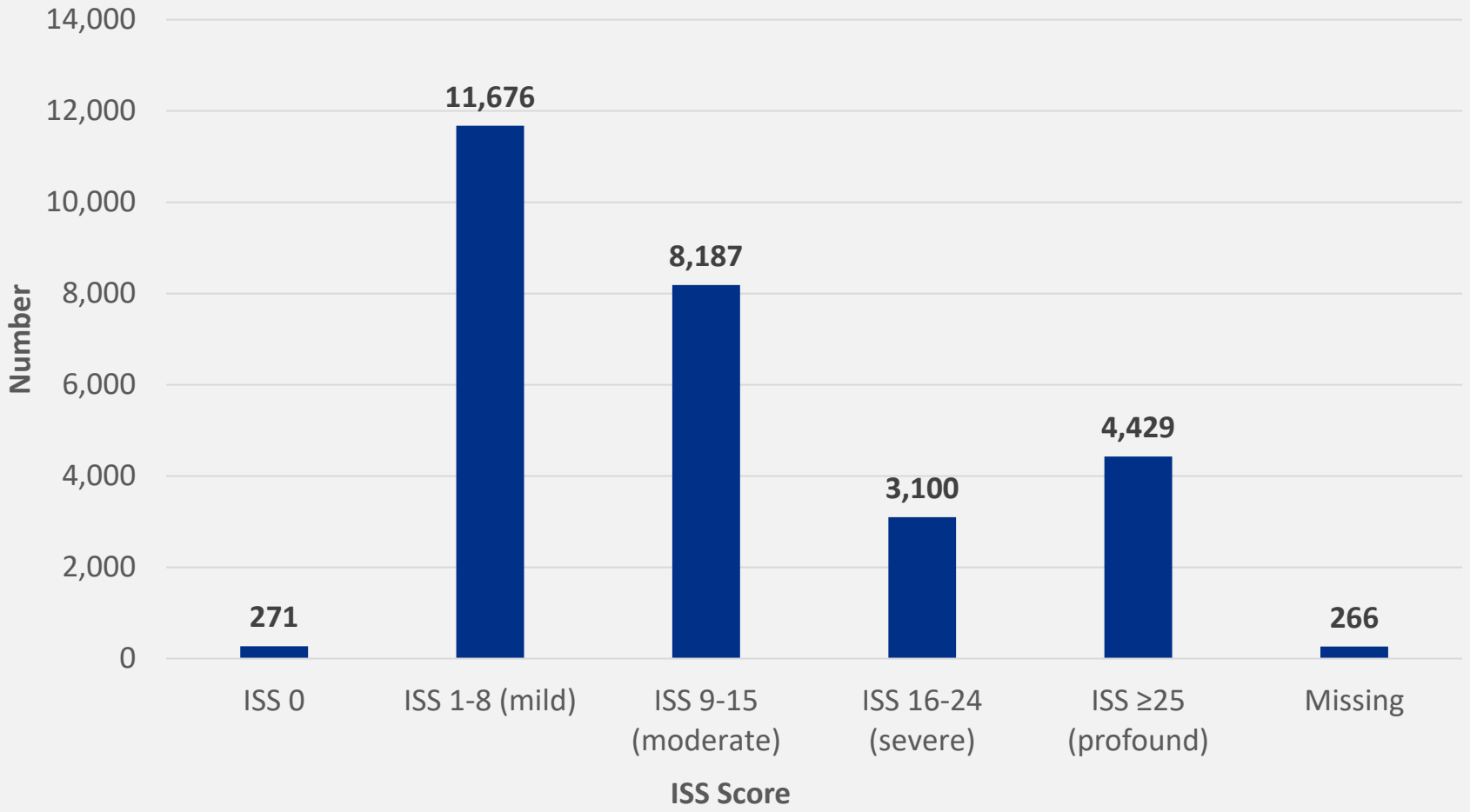
Firearm Trauma Injuries by Year



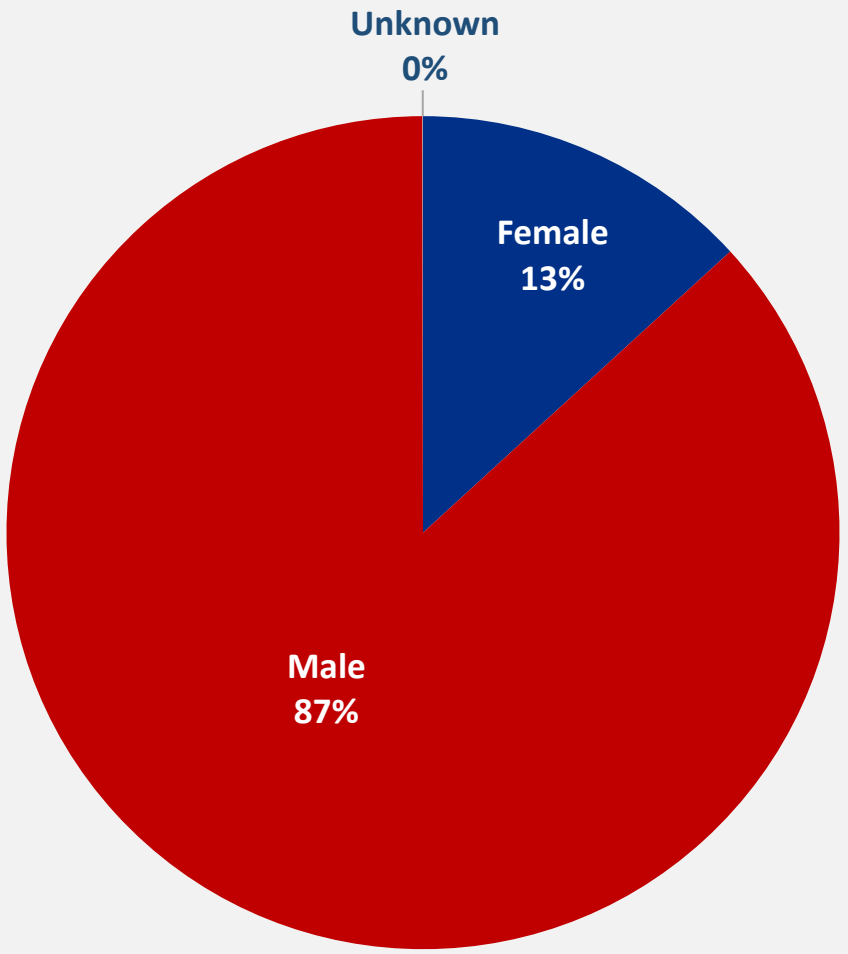
Firearm Trauma Injuries by Race



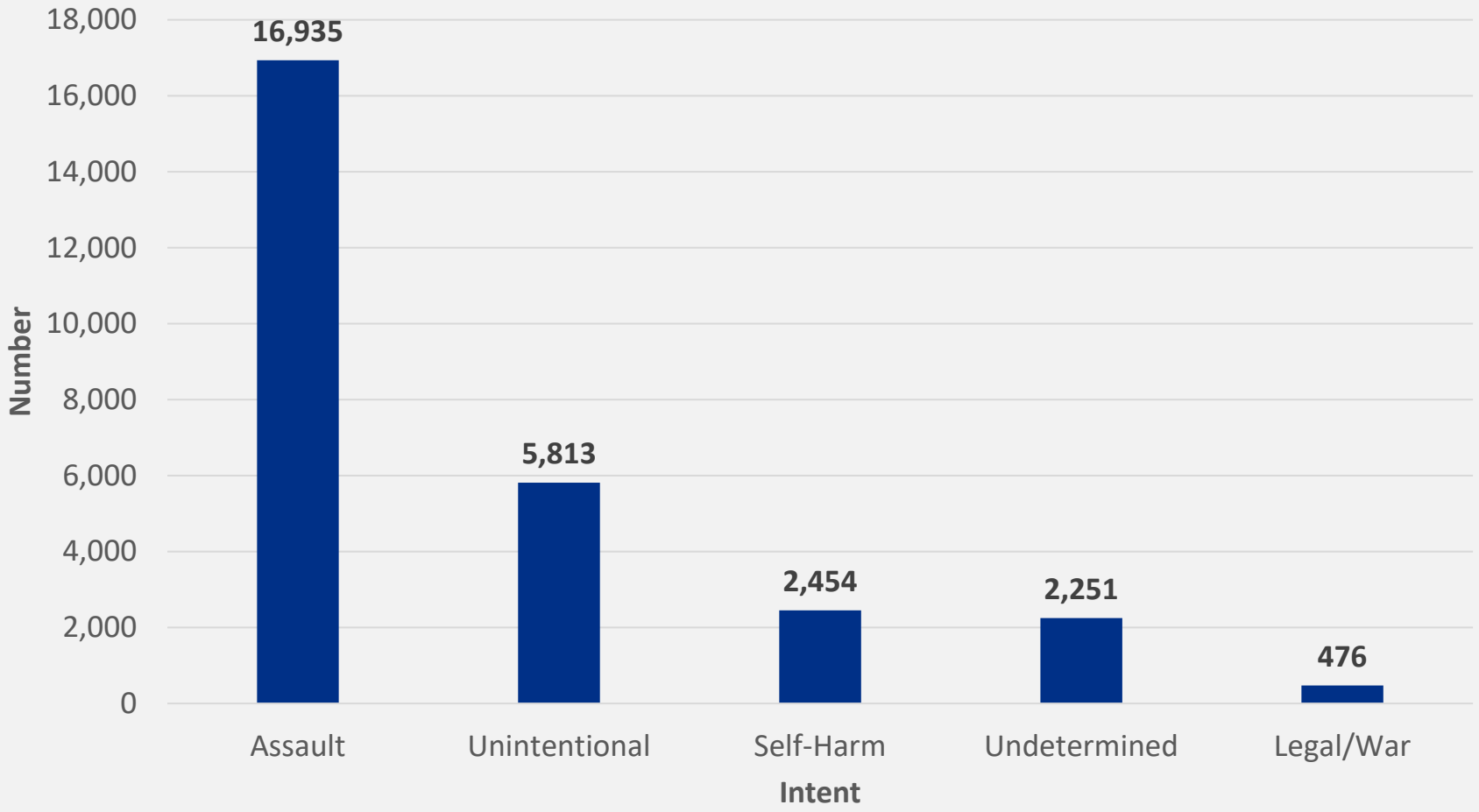
Firearm Trauma Injuries by ISS Score



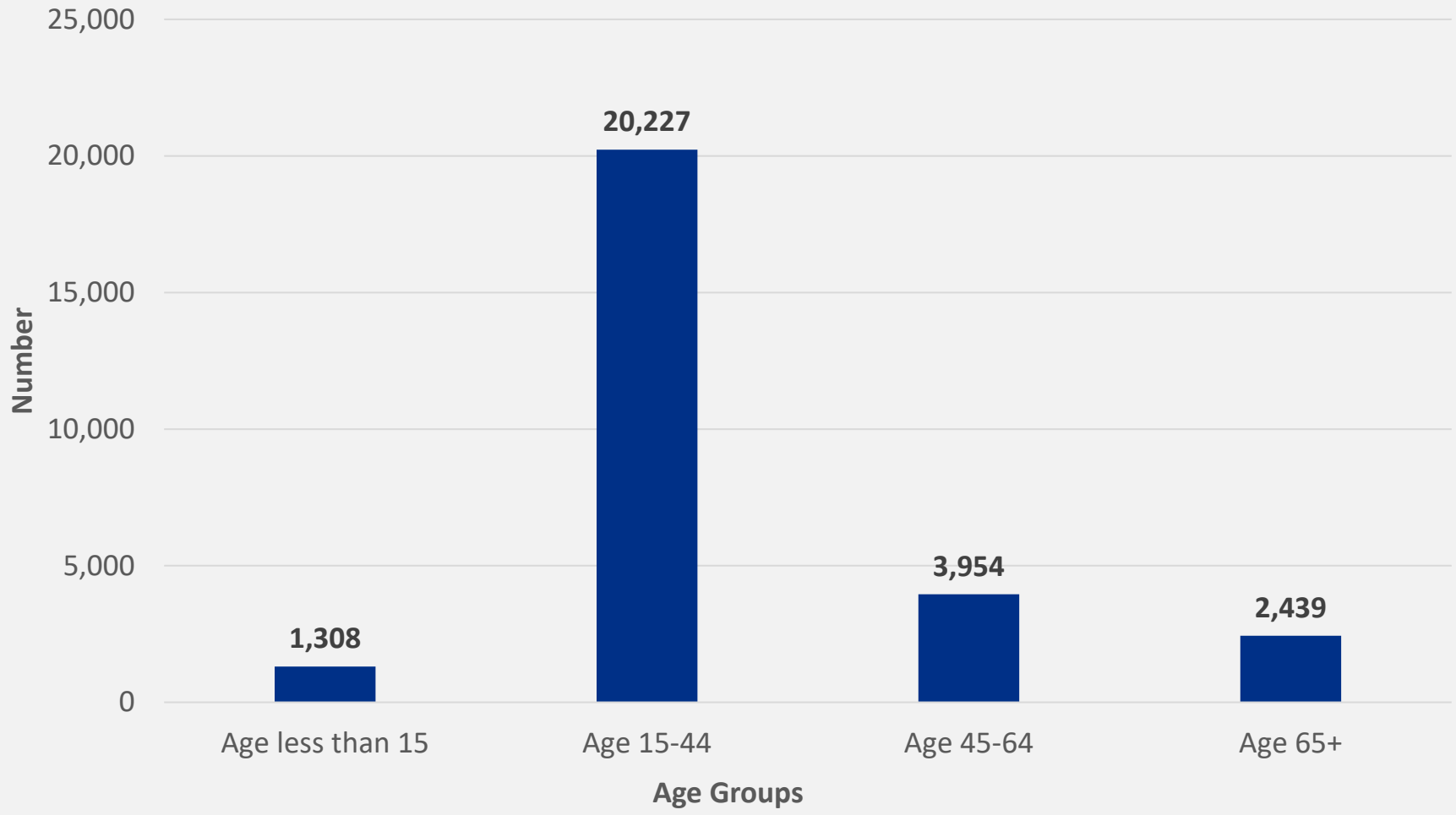
Firearm Trauma Injuries by Sex



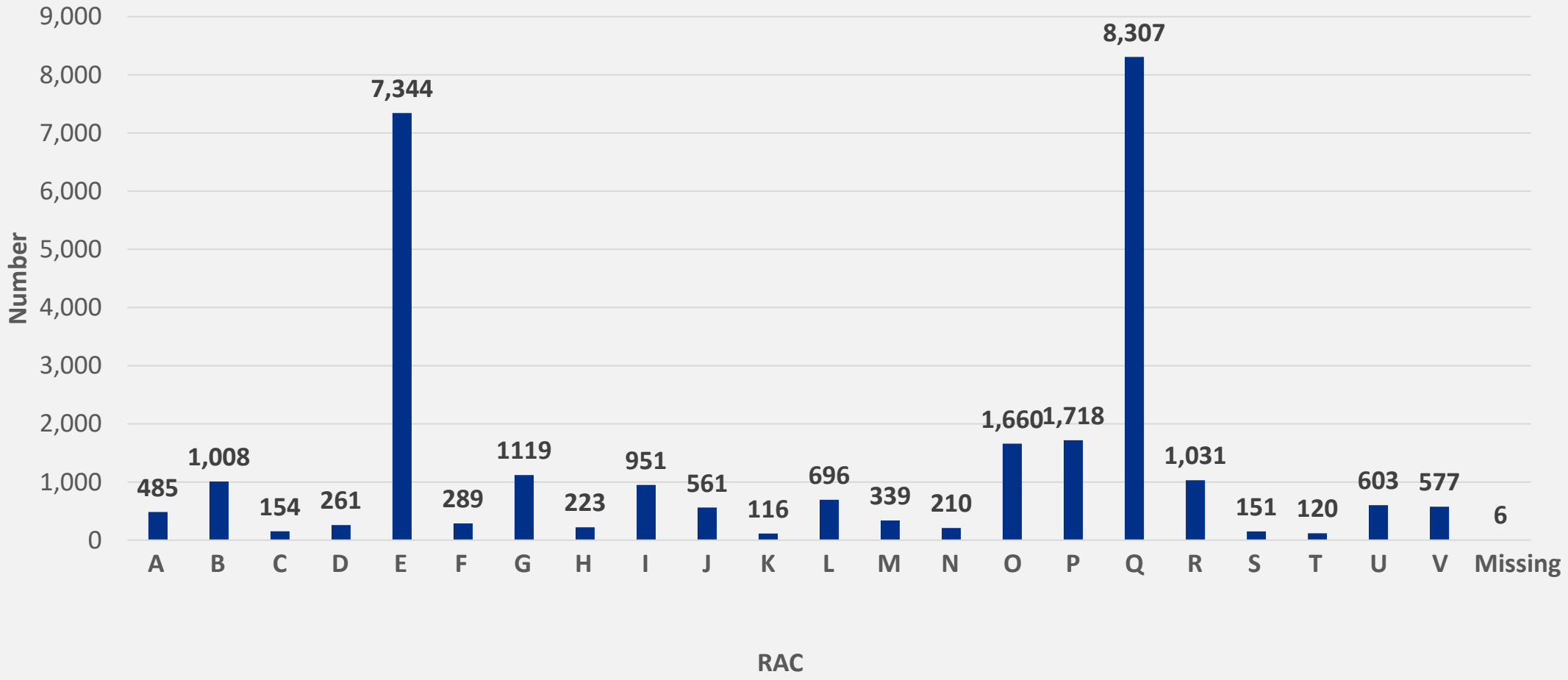
Firearm Trauma Injuries by Intent



Firearm Trauma Injuries by Age



Firearm Trauma Injuries by RAC



Firearm Trauma Injuries by Emergency Department (ED) Disposition

ED Disposition	Number	Percent
Operating Room	6,828	24.45%
Floor bed (general admission, non specialty unit)	6,674	23.90%
Intensive Care Unit (ICU)	4,046	14.49%
Transferred to Another Hospital	3,606	12.91%
Home without services	2,315	8.29%
Deceased/ Expired	2,121	7.59%
Observation unit (unit that provides <24 hour stays)	738	2.64%

Note – Only included the top ED dispositions

Firearm Trauma Injuries by Length of Stay

Year	Number of Days
2018	4.61 Days
2019	6.79 Days
2020	6.49 Days
2021	5.97 Days
2022	6.08 Days

Resources

- NEMSIS Technical Resources and Data Dictionaries - nemsis.org/technical-resources/version-3/version-3-data-dictionaries/.
- National Trauma Data Bank (NTDB) data dictionary - facs.org/quality-programs/trauma/tqp/center-programs/ntdb/ntds.
- Coding is based on the International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM).

Thank you!

Injury Prevention and Public Education Fall and Firearm Data Request

March 7, 2024

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