



TEXAS
Health and Human
Services

**Texas Department of State
Health Services**

Trauma Injury Severity Score and Length of Stay by Trauma Service Area (Texas 2020)

Prepared by the Office of Injury Prevention
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Introduction

- The data used are traumatic injuries reported by hospitals, which must report spinal cord injuries, traumatic brain injuries, and other traumatic injuries specified in Texas Administrative Code, Title 25, Chapter 103.
- This data report includes only records submitted into the registries through a passive surveillance system.
- Patients transferred between hospitals will result in more than one record in the registries since each hospital must independently submit a record to the registries.

Methodology Notes

- Trauma variables were pulled and cleaned in June 2021.
- Total number of unique patient records received in the EMS/Trauma Registries = 137,826.
- Per epidemiology best practice, data is suppressed when there are less than 5 records to protect identifiable data.

Trauma Variables

- Traumatic Service Area (TSA)
- Length of Stay (LOS)
- Injury Severity Score (ISS) Ranges used:
 - 0 (less severe);
 - 1-8;
 - 9-15;
 - 16-24; and
 - ≥ 25 .



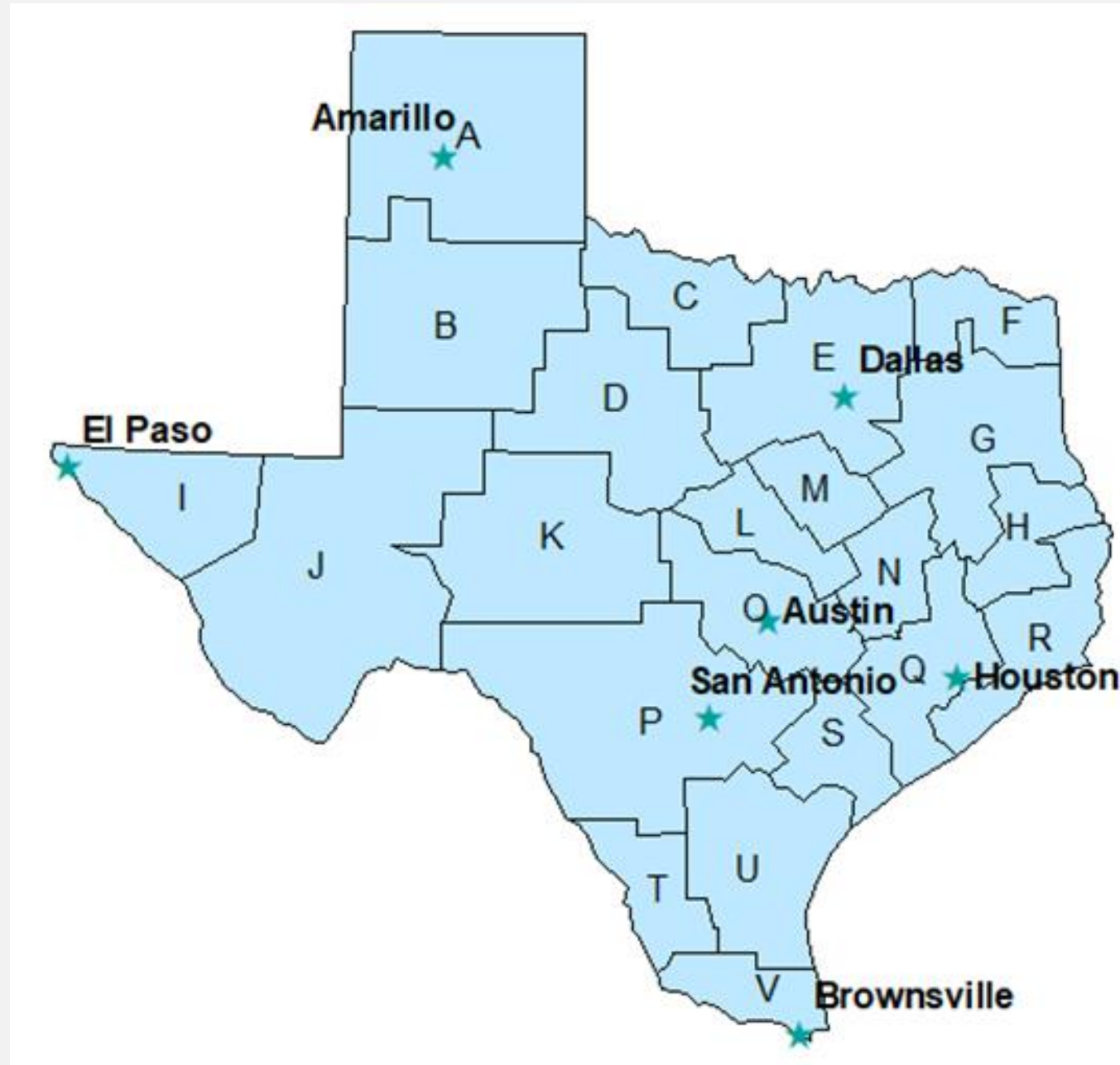
Median and Average Length of Stay by Trauma Service Area



Definitions

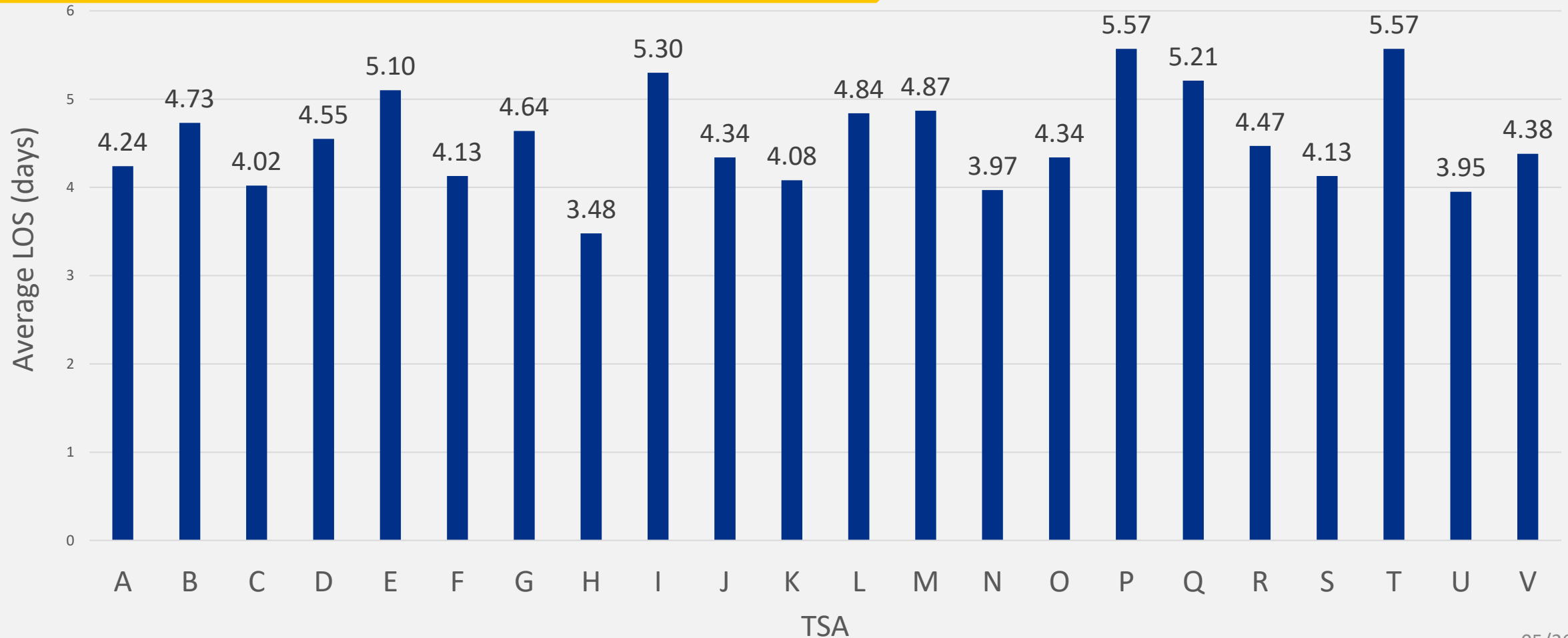
- Length of stay (LOS) is the duration of a single hospitalization episode. Inpatient days are calculated by subtracting day of admission from day of discharge.
- The median is the middle value when a data set is ordered from least to greatest.
- The mean / average of a data set is determined by adding all numbers in the data set and then dividing by the number of values in the set.

Trauma Service Areas (TSA)



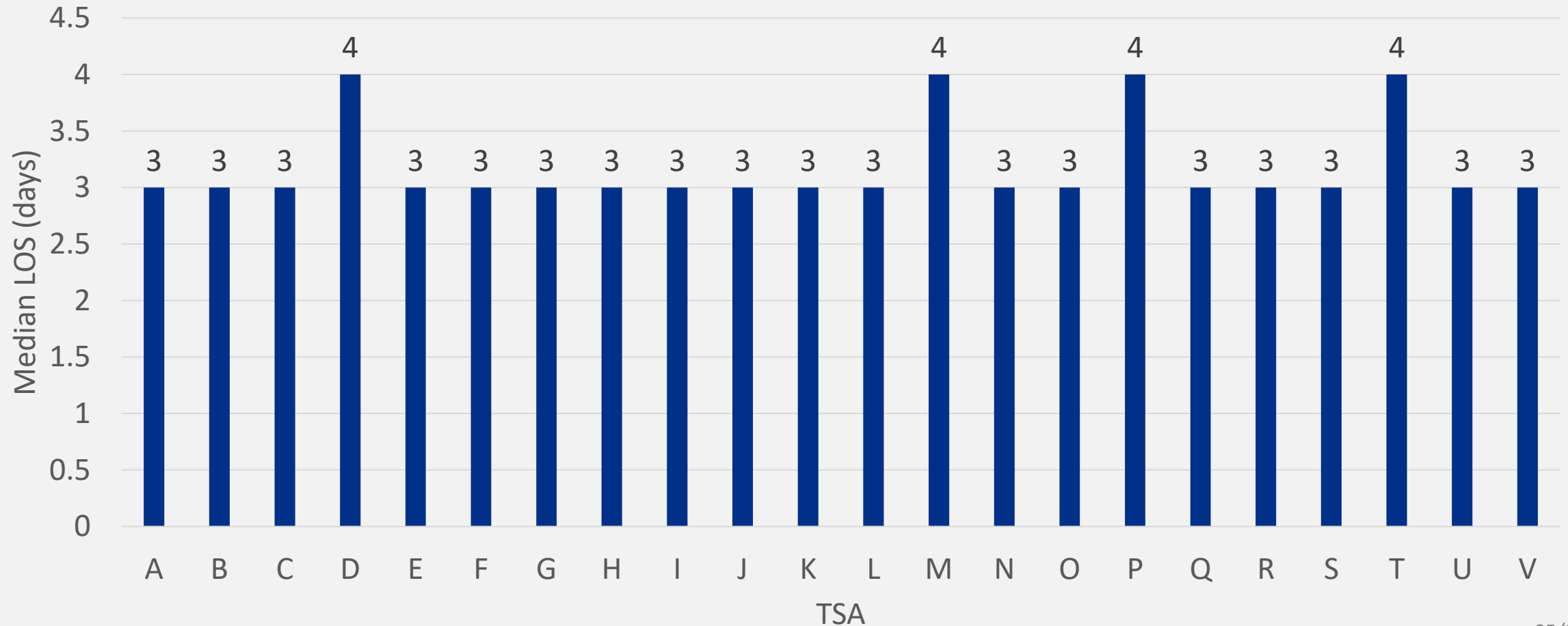
2020 – Mean / Average LOS by TSA

N =137,826



2020 - Median LOS by TSA

N =137,826



Injury Severity Score by Trauma Service Area



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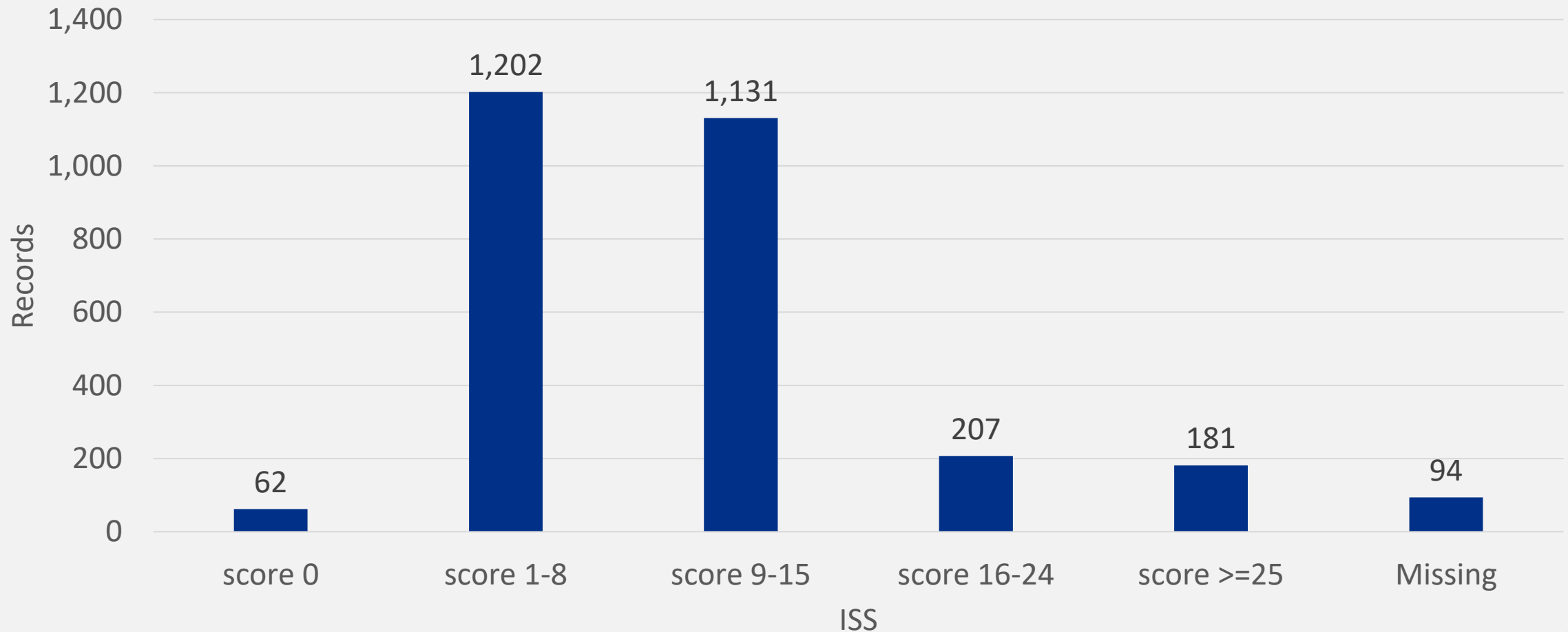
Texas Department of State
Health Services

Definition: Injury Severity Score

The Injury Severity Score (ISS) assesses the combined effects of patients with multiple injuries and is based on an anatomical injury severity classification known as the Abbreviated Injury Scale (AIS). AIS is an anatomically-based injury severity scoring system that classifies each injury by body region on a six-point scale.

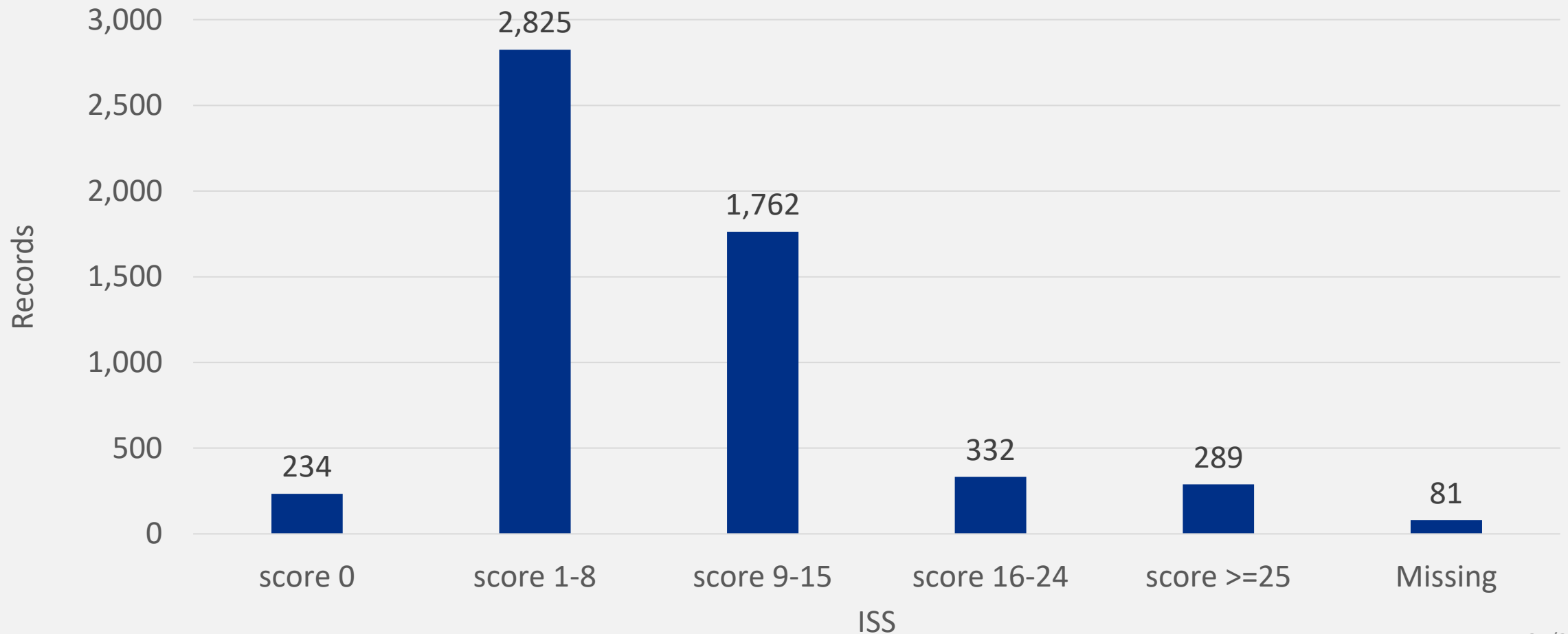
2020 - TSA A - ISS

N = 2,877



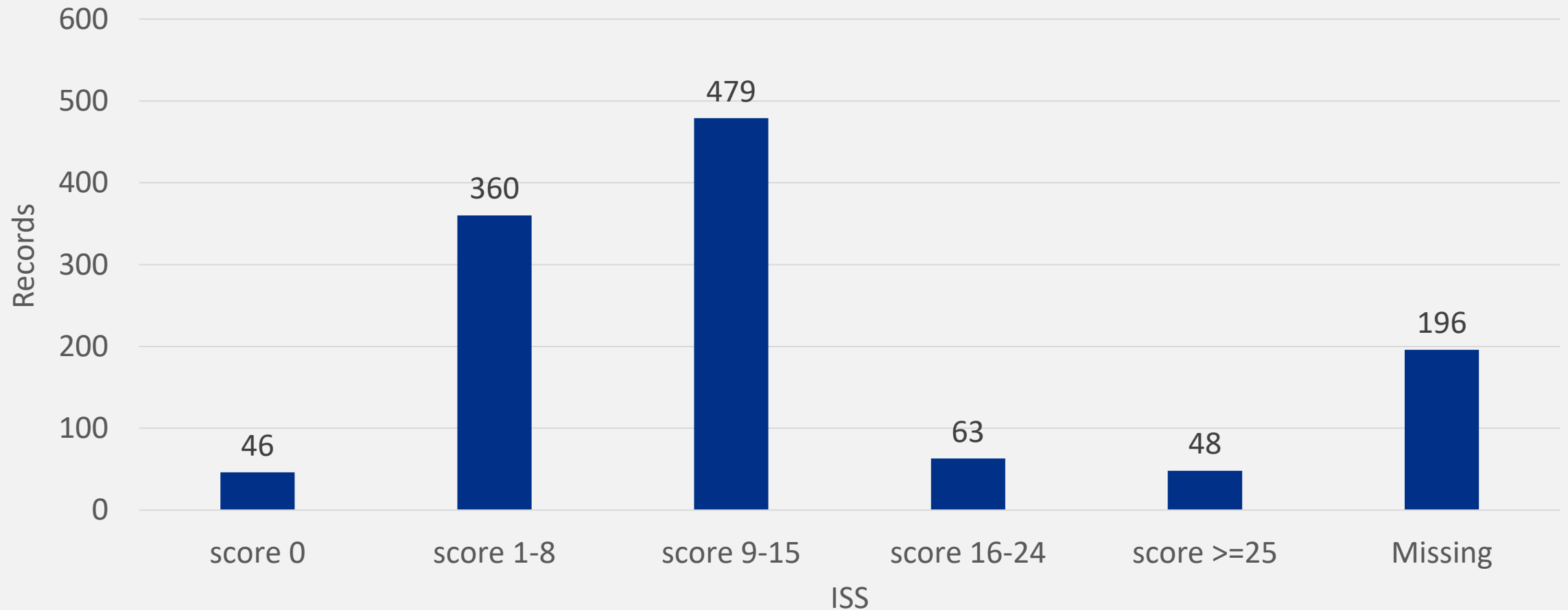
2020 - TSA B - ISS

N = 5,523



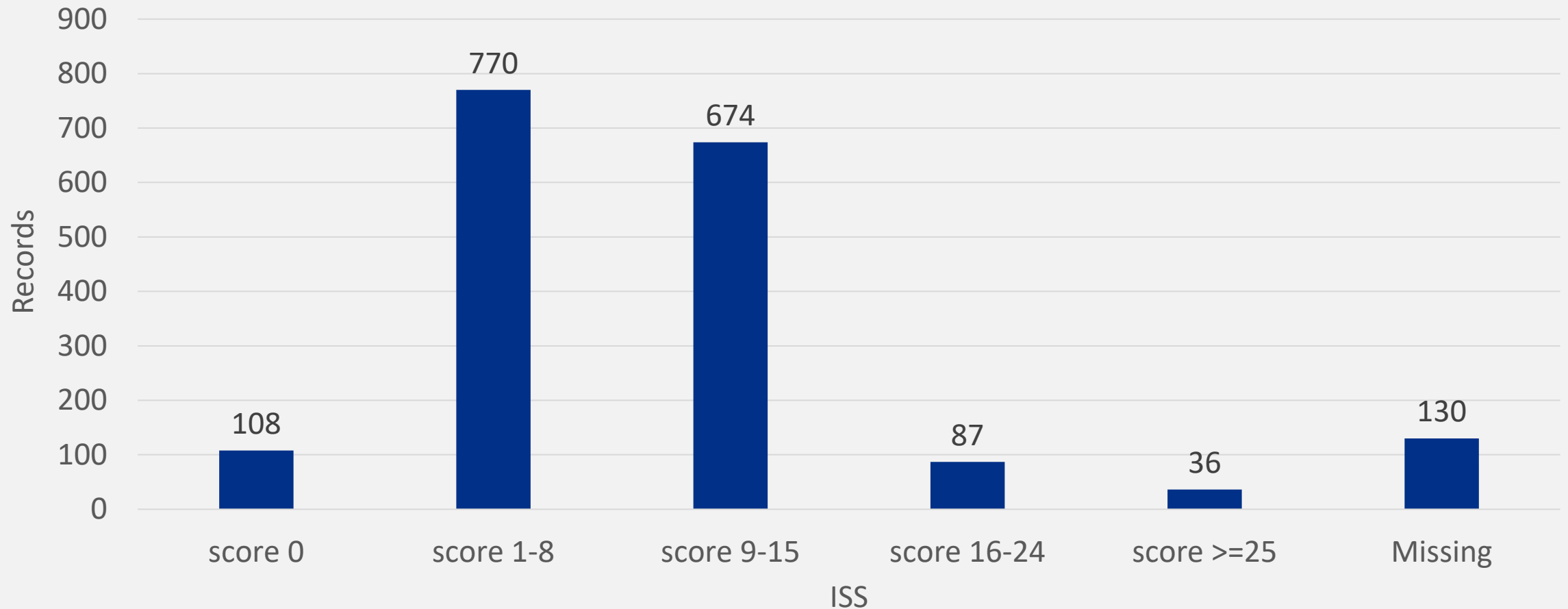
2020 - TSA C – ISS

N = 1,192



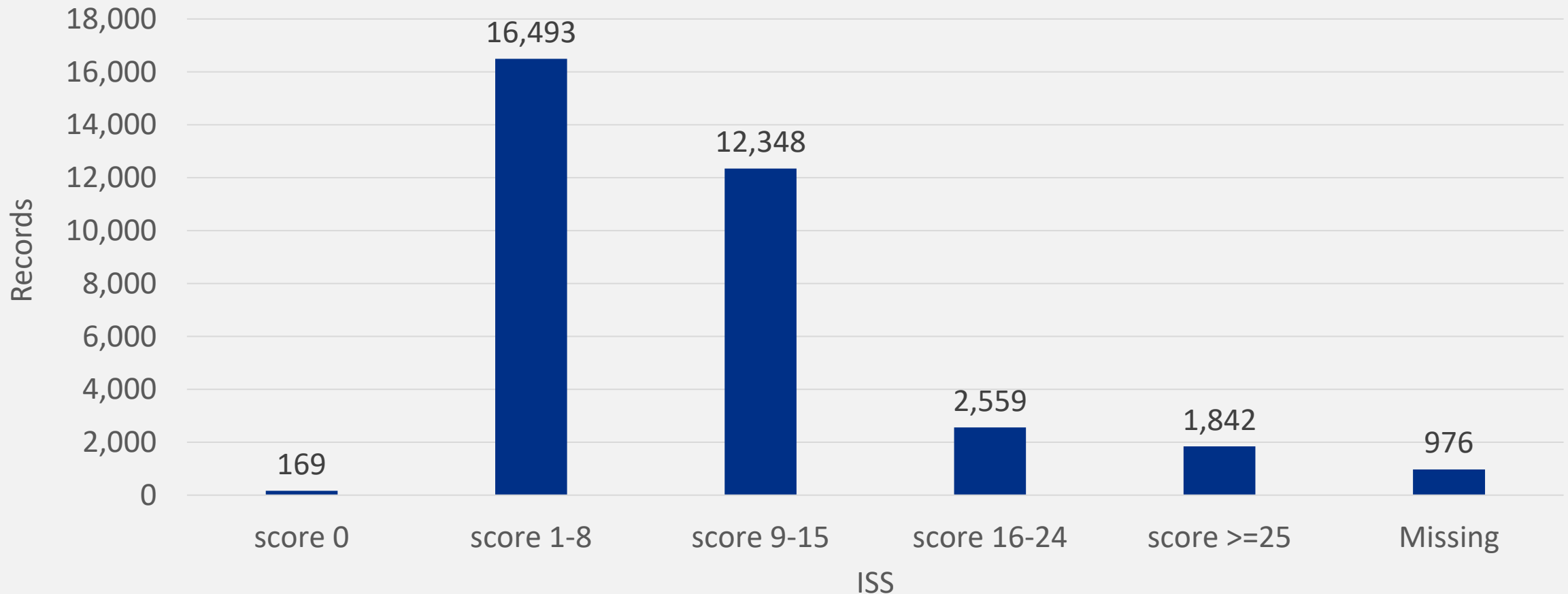
2020 - TSA D - ISS

N = 1,805



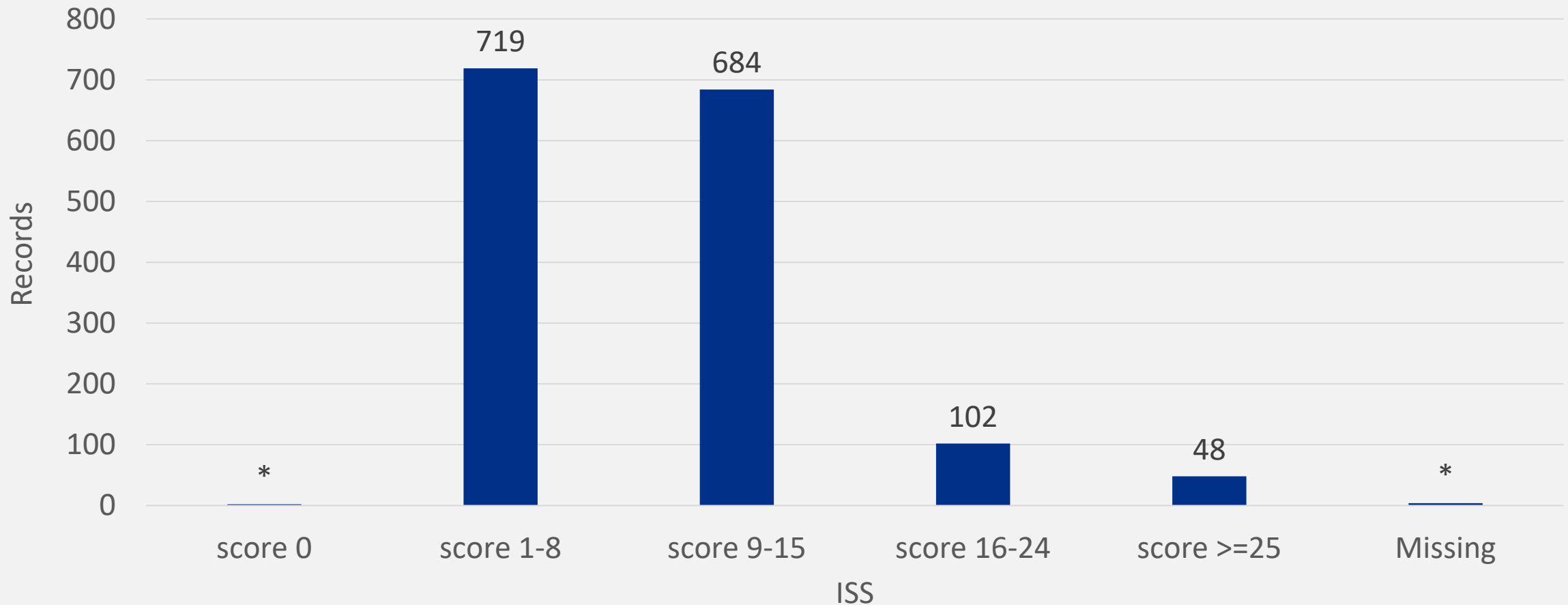
2020 - TSA E - ISS

N = 34,387



2020 - TSA F - ISS

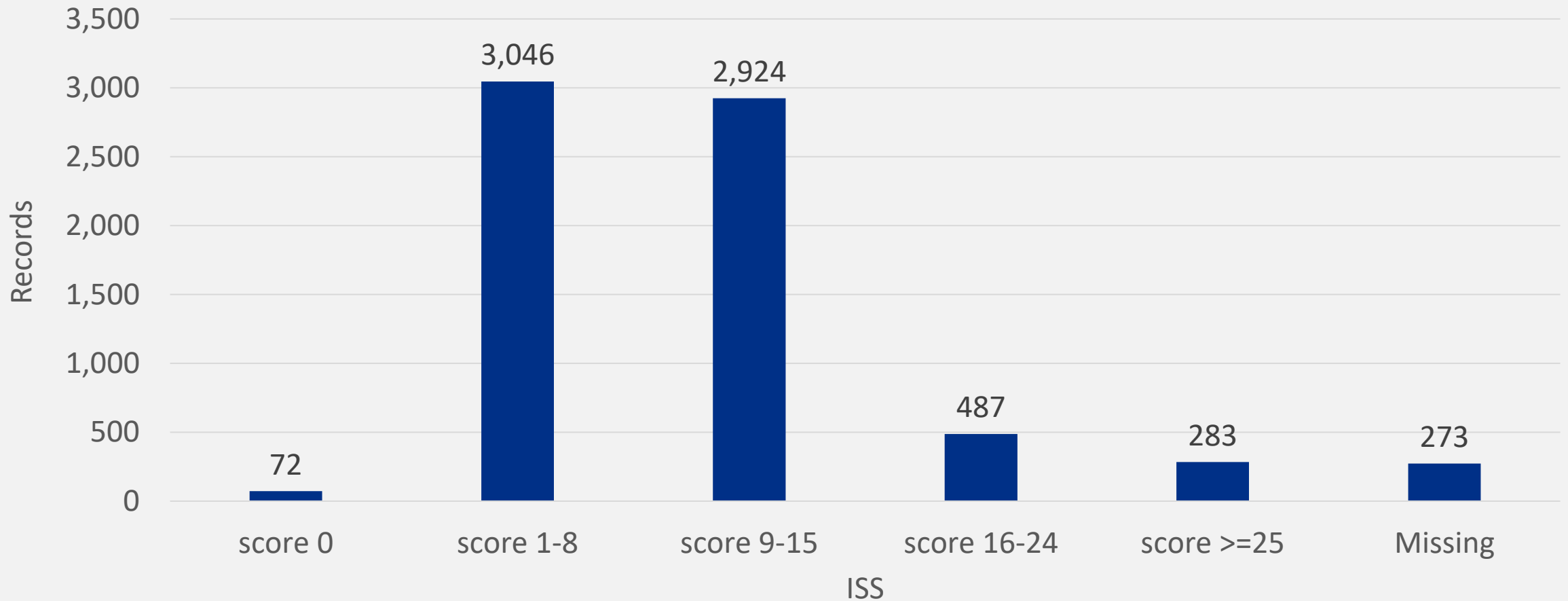
N = 1,559



* = less than 5 records so suppressed

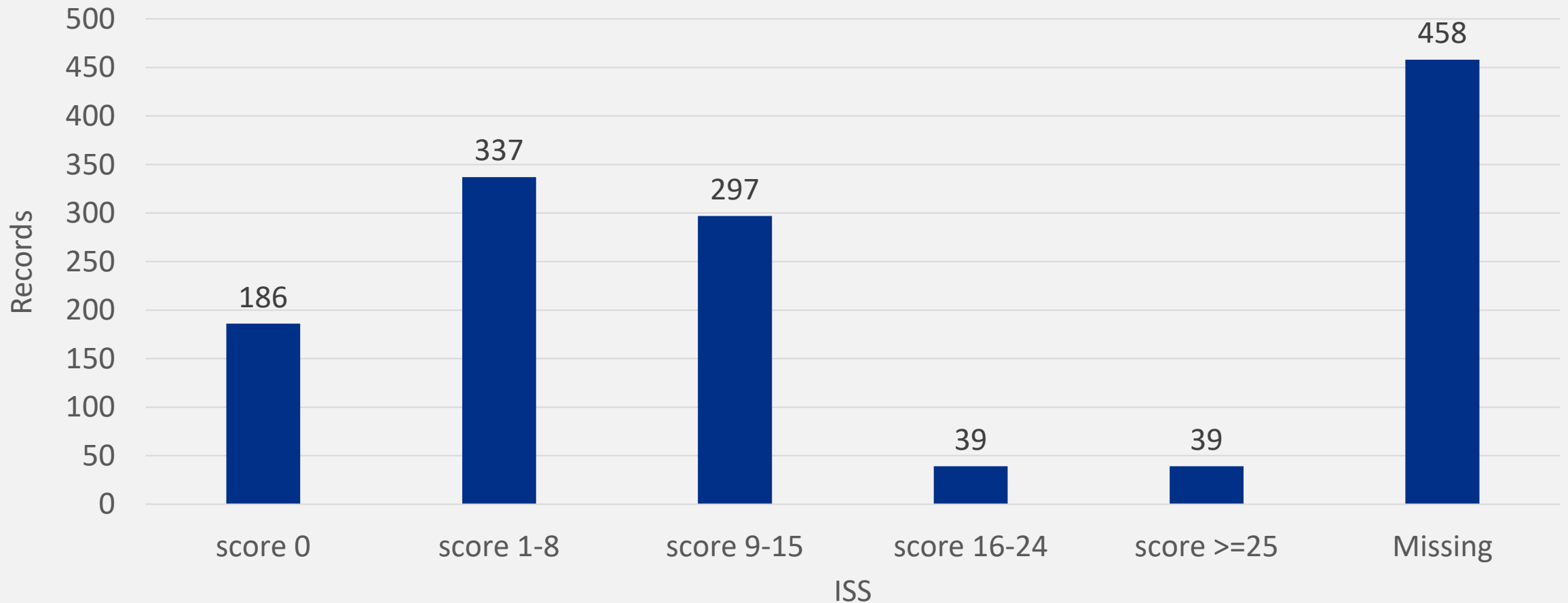
2020 - TSA G - ISS

N = 7,085



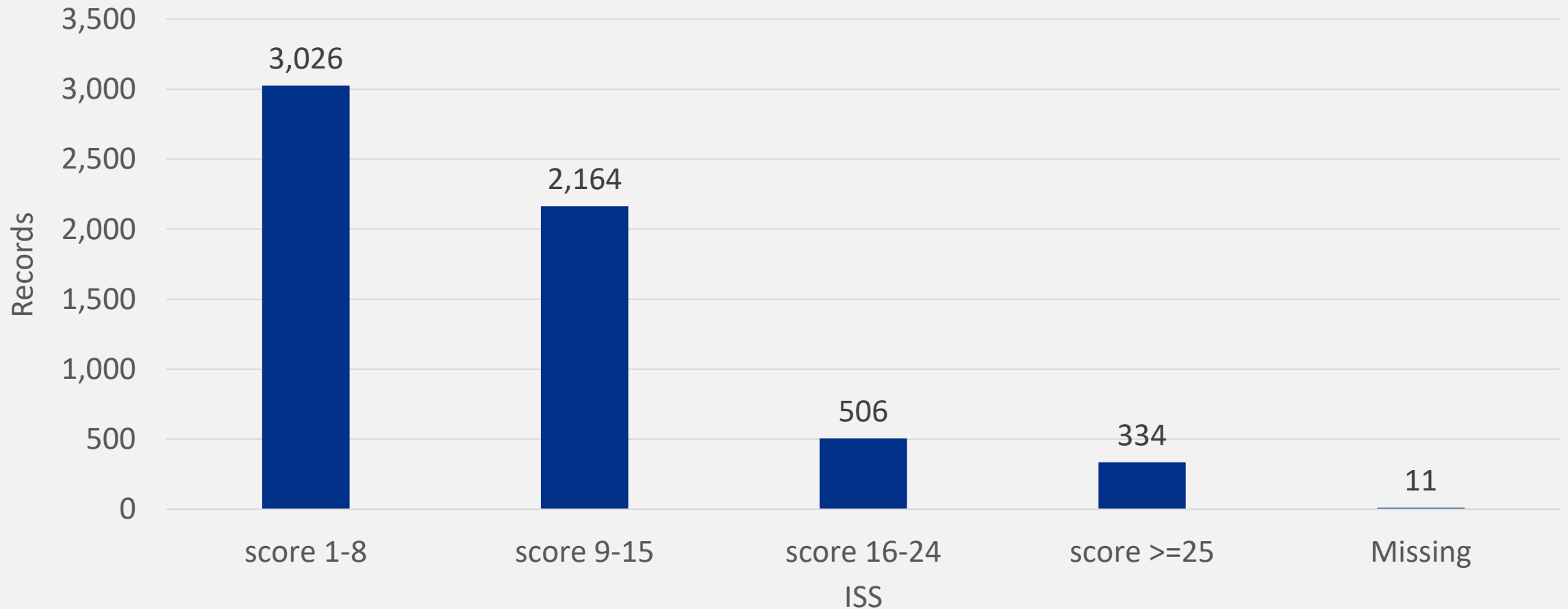
2020 - TSA H - ISS

N = 1,356



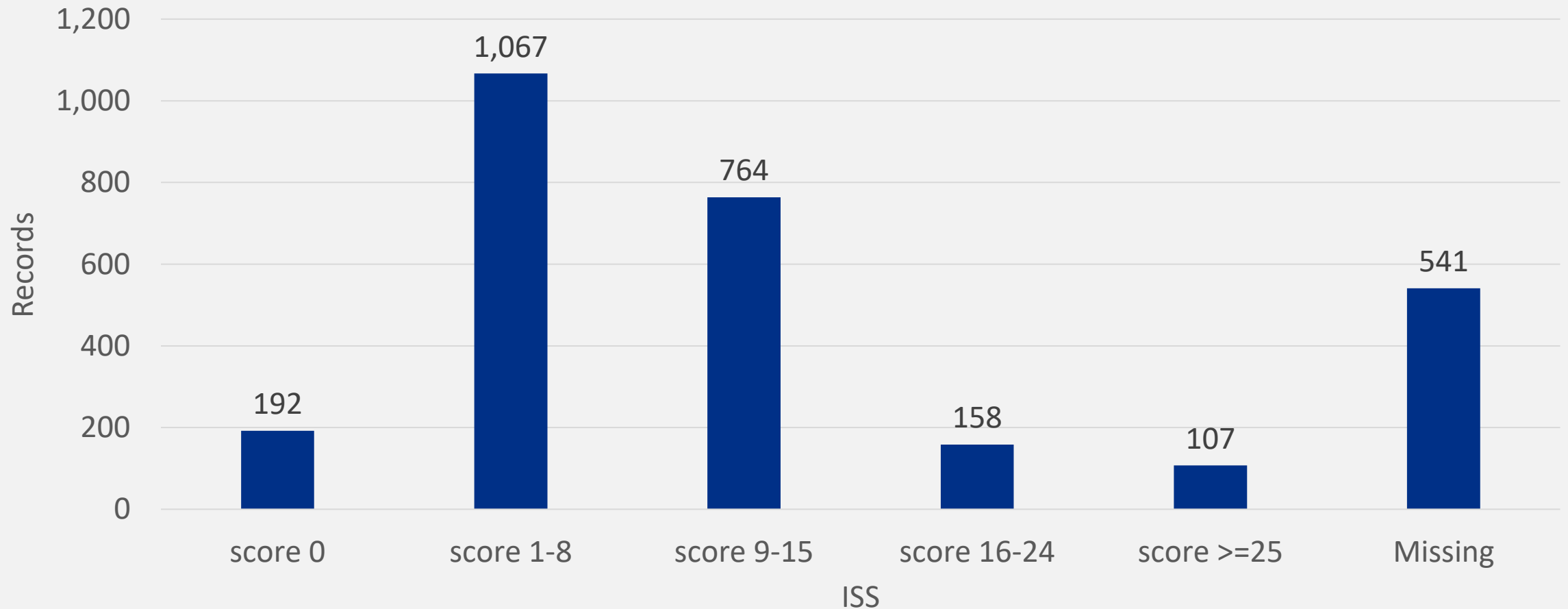
2020 - TSA I - ISS

N = 6,041



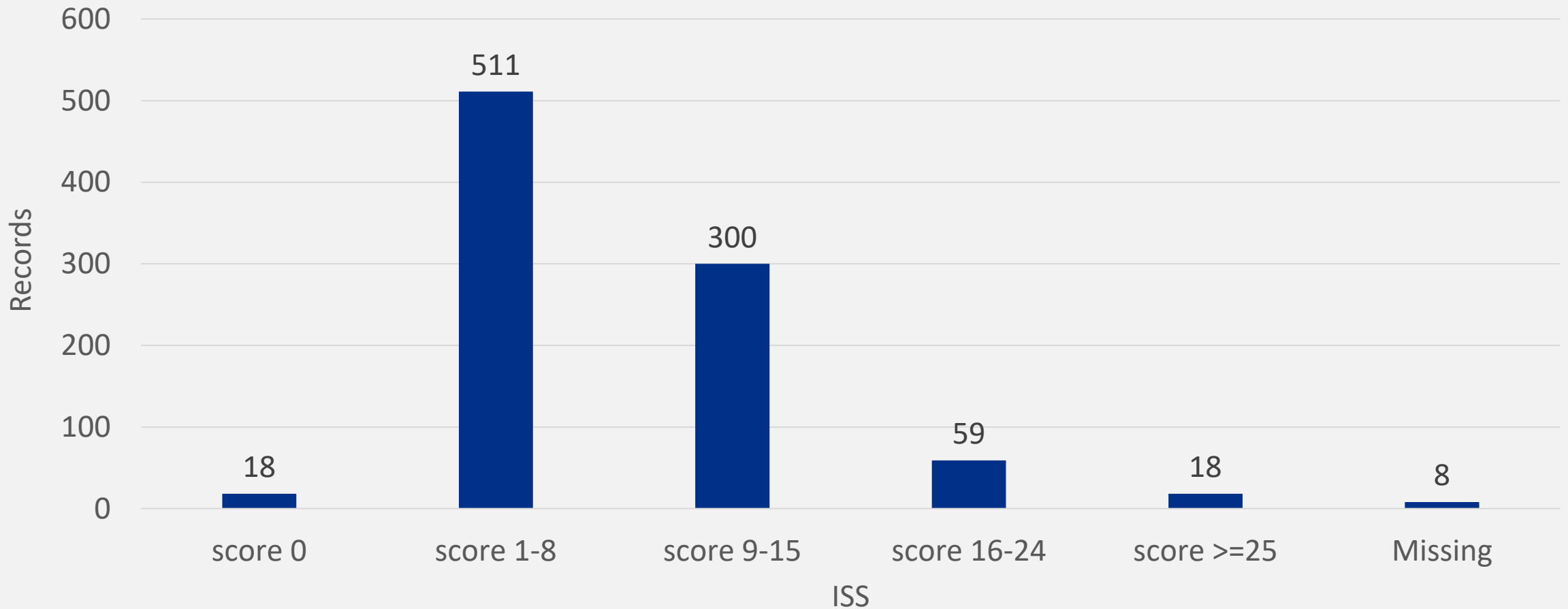
2020 - TSA J - ISS

N = 2,829



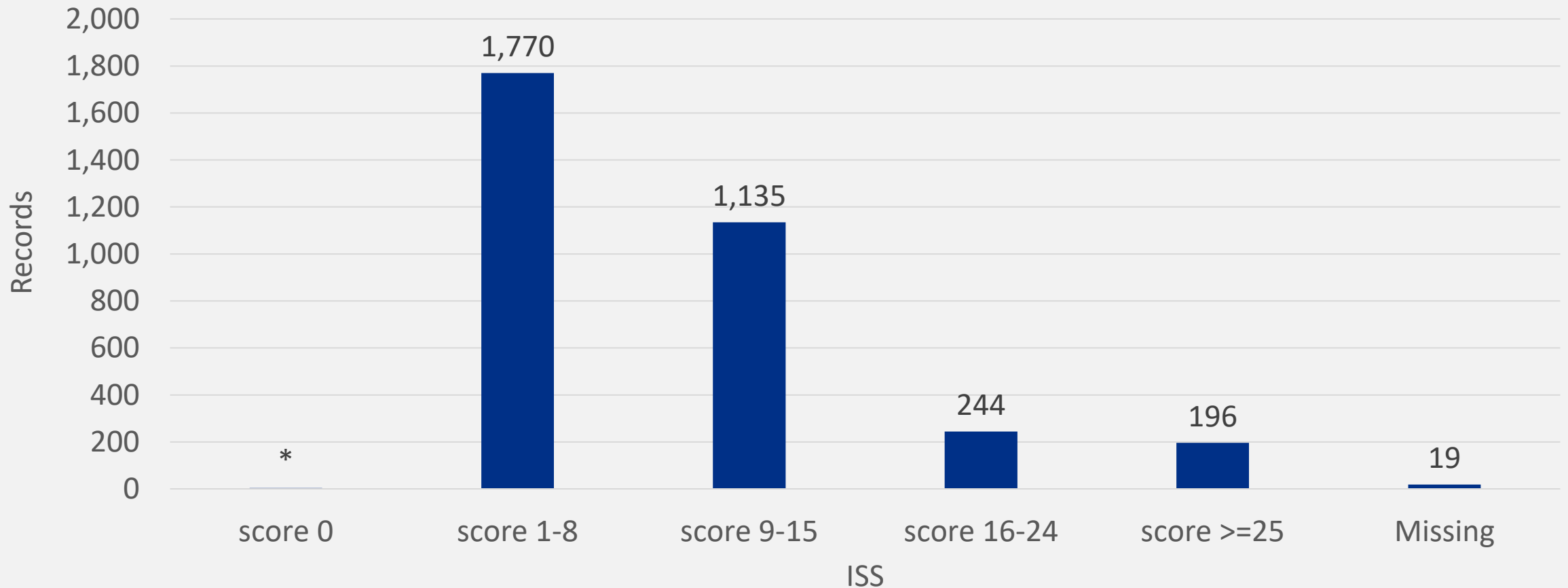
2020 - TSA K - ISS

N = 914



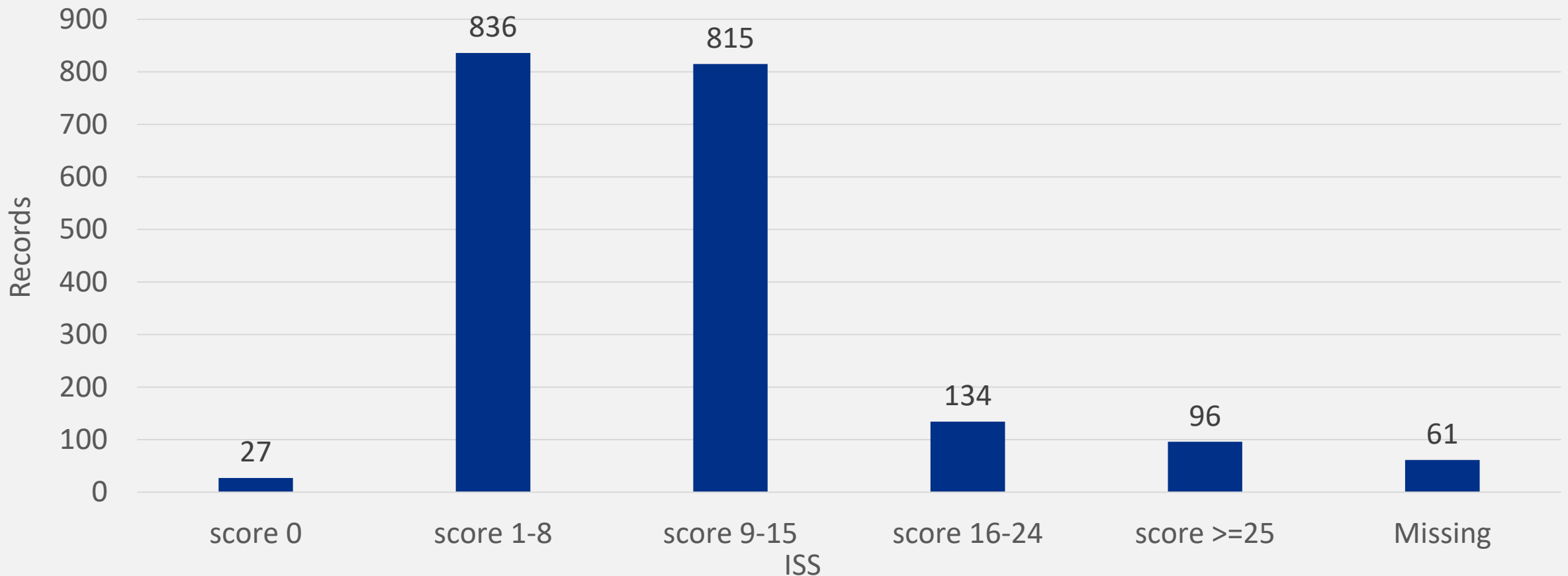
2020 - TSA L - ISS

N = 3,368



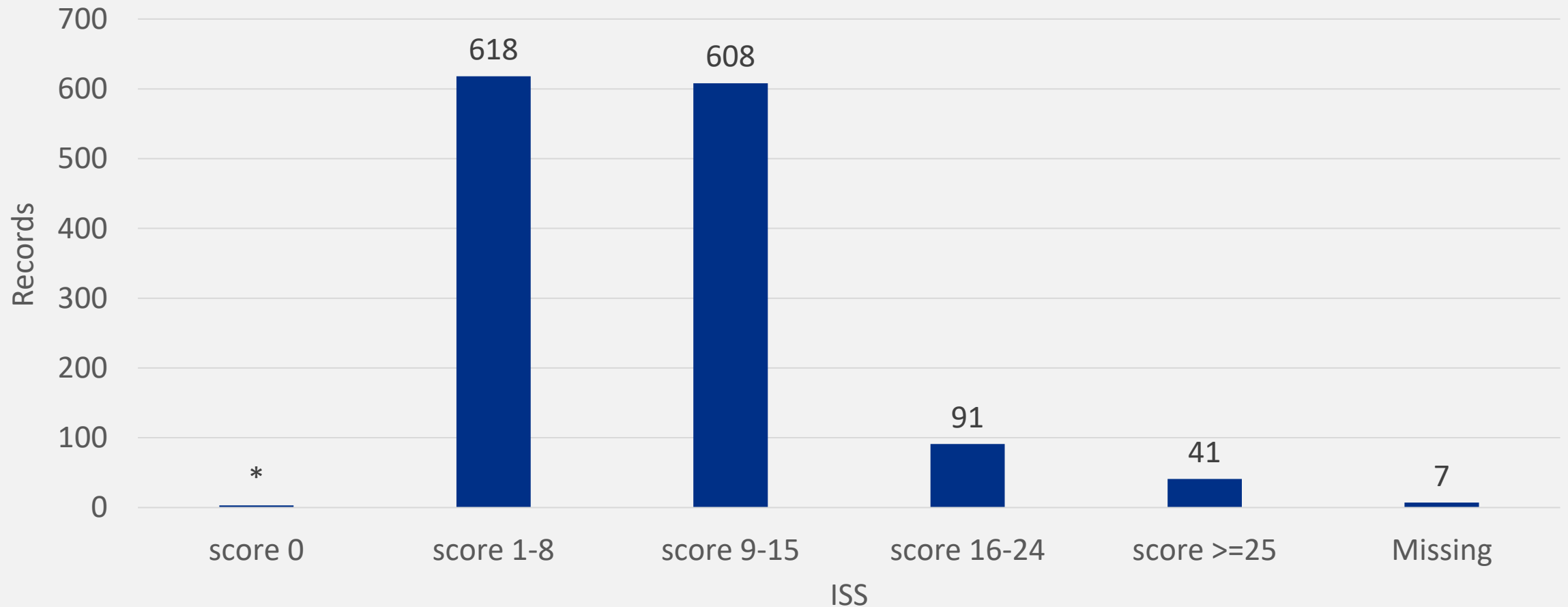
2020 - TSA M - ISS

N = 1,969



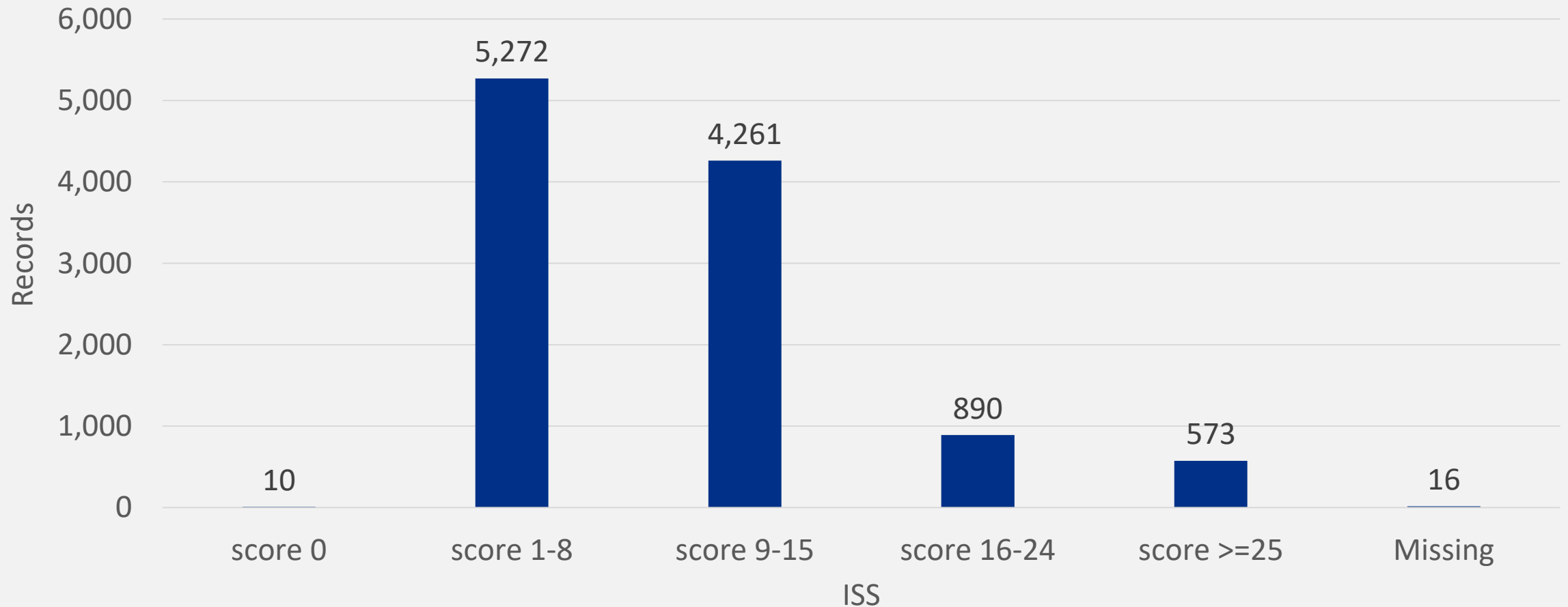
2020 - TSA N - ISS

N = 1,368



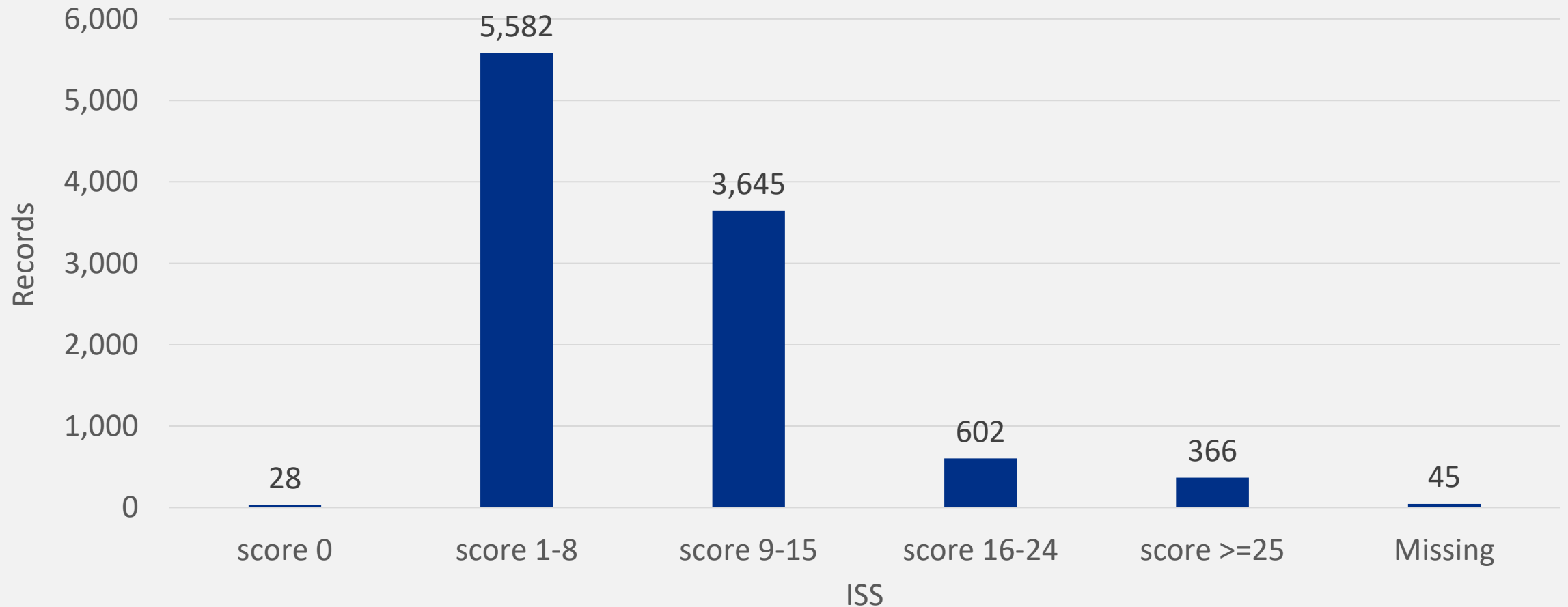
2020 - TSA O - ISS

N = 11,022



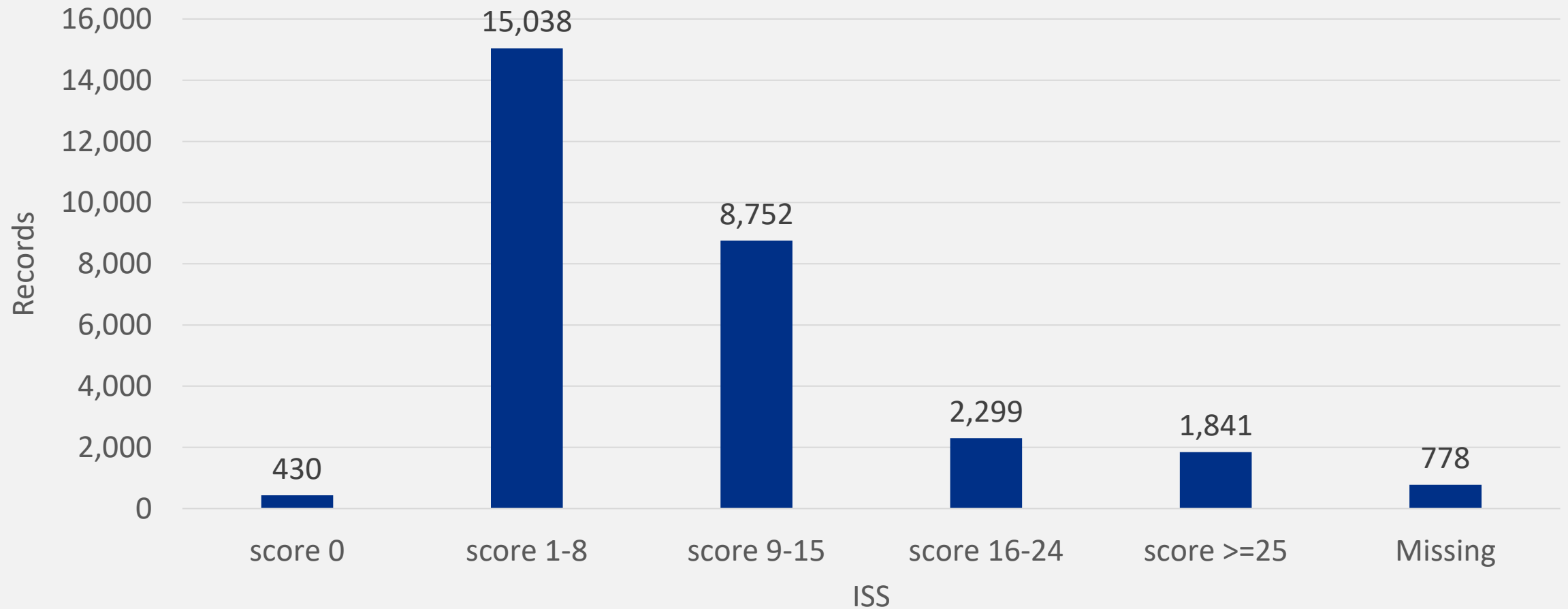
2020 - TSA P - ISS

N = 10,268



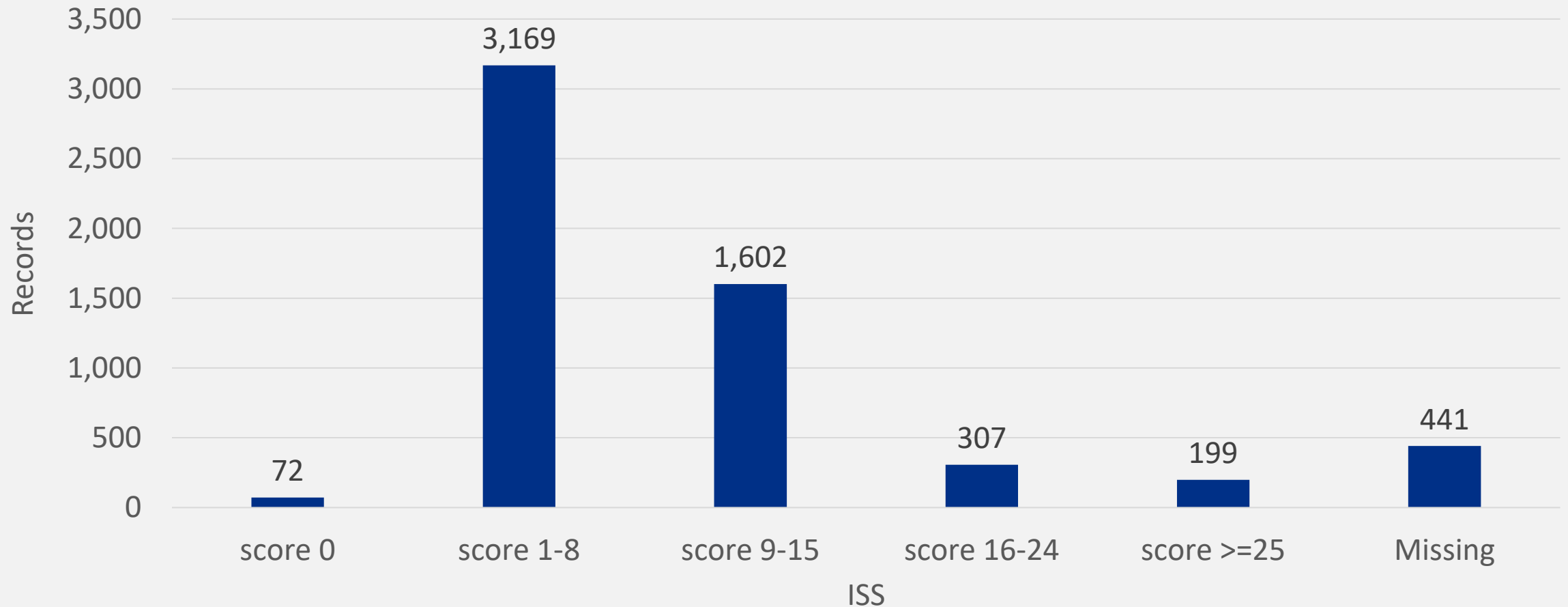
2020 - TSA Q - ISS

N = 29,138



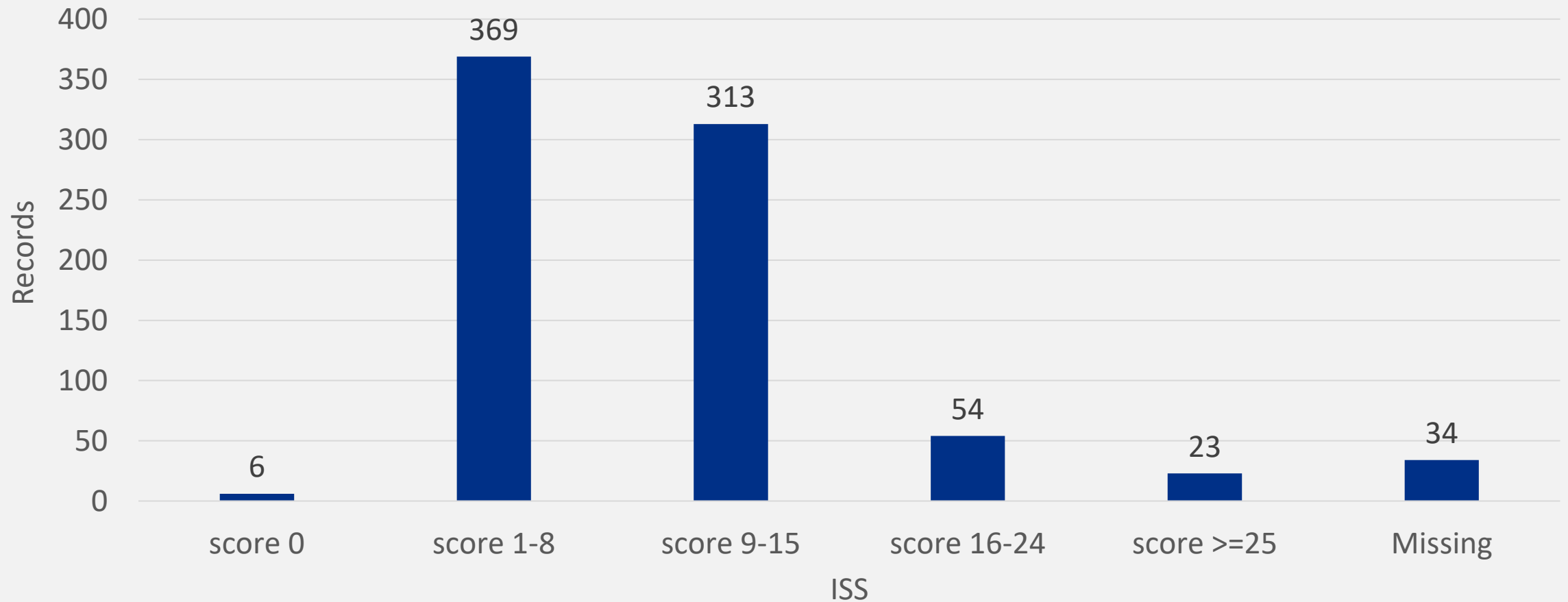
2020 - TSA R - ISS

N = 5,790



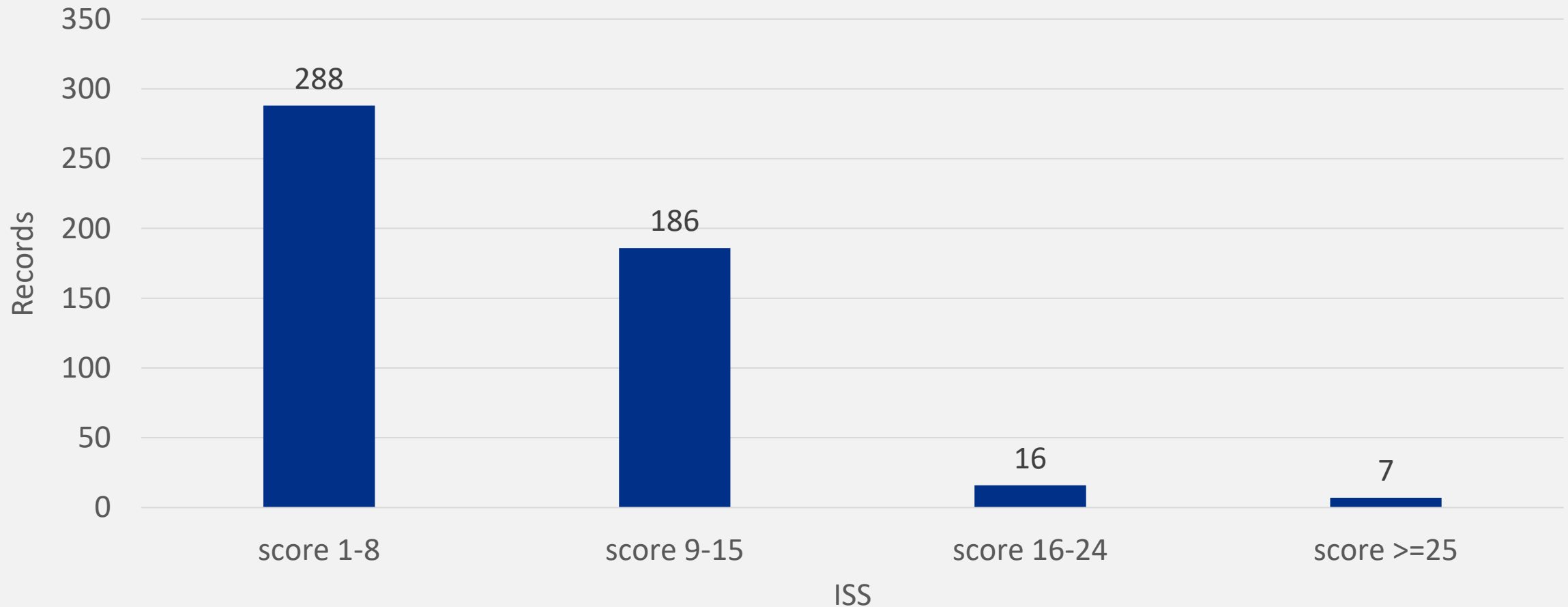
2020 - TSA S - ISS

N = 799



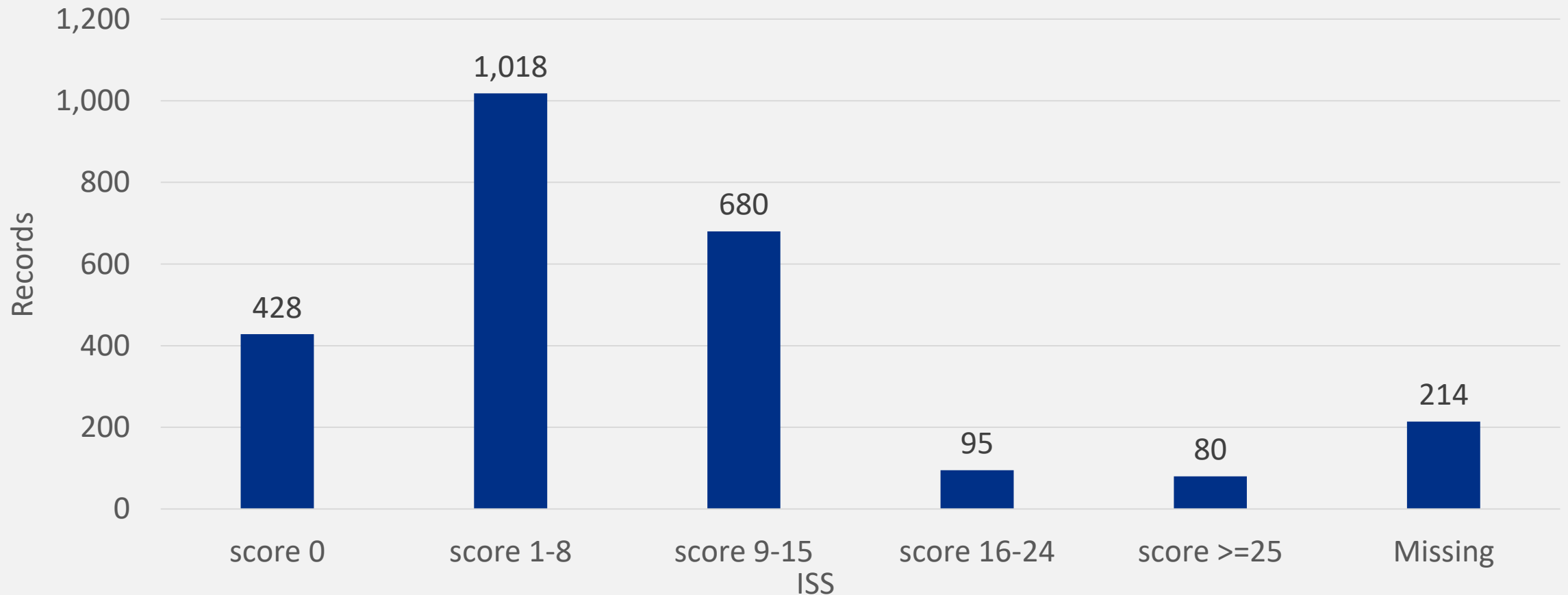
2020 - TSA T - ISS

N = 497



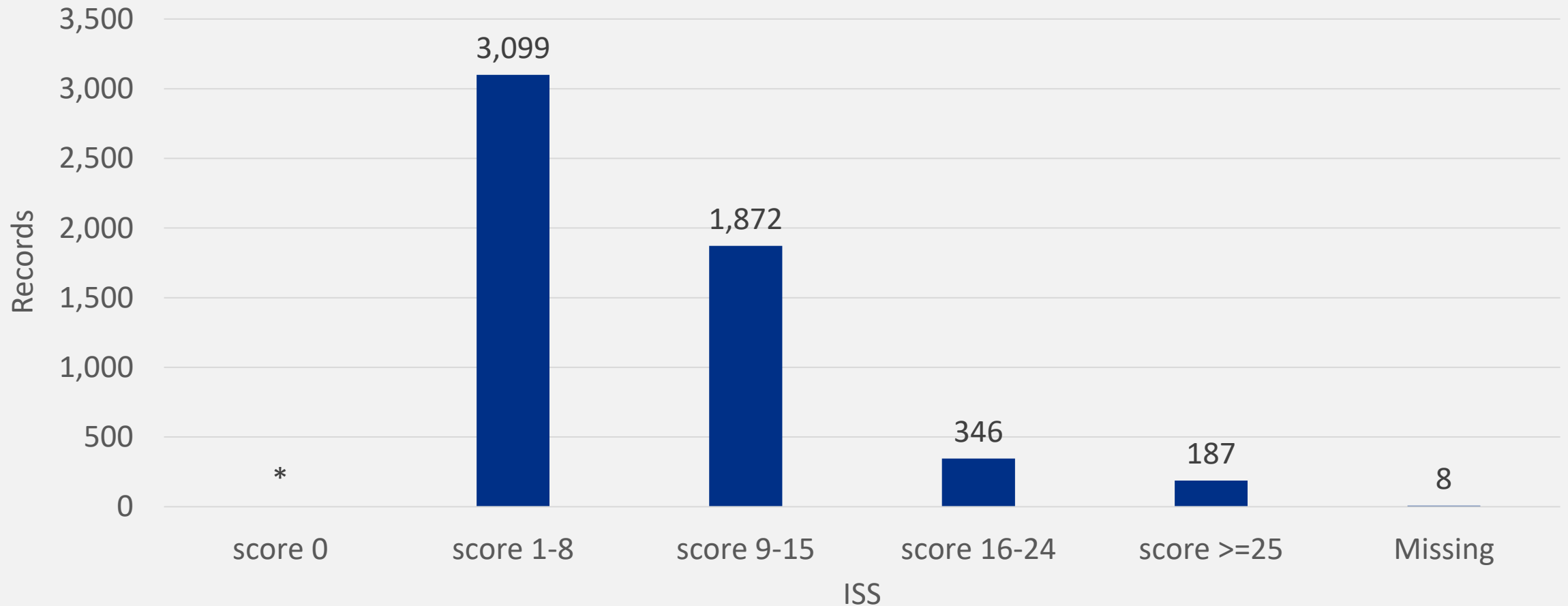
2020 - TSA U - ISS

N = 2,515



2020 - TSA V - ISS

N = 5,513



Resources

- National Trauma Data Bank (NTDB) data dictionary:
<https://www.facs.org/quality-programs/trauma/tqp/center-programs/ntdb/ntds>
- NSW Institute of Trauma and Injury Management
<https://aci.health.nsw.gov.au/get-involved/institute-of-trauma-and-injury-management>
- Coding is based on the International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM)

Thank you!

Trauma Injury Severity Score and Length of Stay
by Trauma Service Area-Texas-2020

May 26, 2022

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