Using Data to Promote Health, Safety, and Quality of Life among Individuals with I/DDs

A PRESENTATION FOR THE REGIONAL QUALITY COUNCILS OF THE COMMONWEALTH OF VIRGINIA

AT VIRGINIA COMMONWEALTH UNIVERSITY

AUGUST 22, 2019

Number of Individuals Served by RQCs, by Region

Region	Population
Central	2098
Eastern	2484
Northern	1537
Southwestern	1873
Western	2252

Data included in the charts is for example purposes only and is not actual data for Virginia.

A First Outcome: Heath and Safety

- We focus on incidents of:
  - Abuse
  - Neglect
  - Serious Injury
  - Inpatient Admissions—especially, preventable inpatient admissions
- The methods that we apply to promote health and safety extend to other aspects of quality of life.

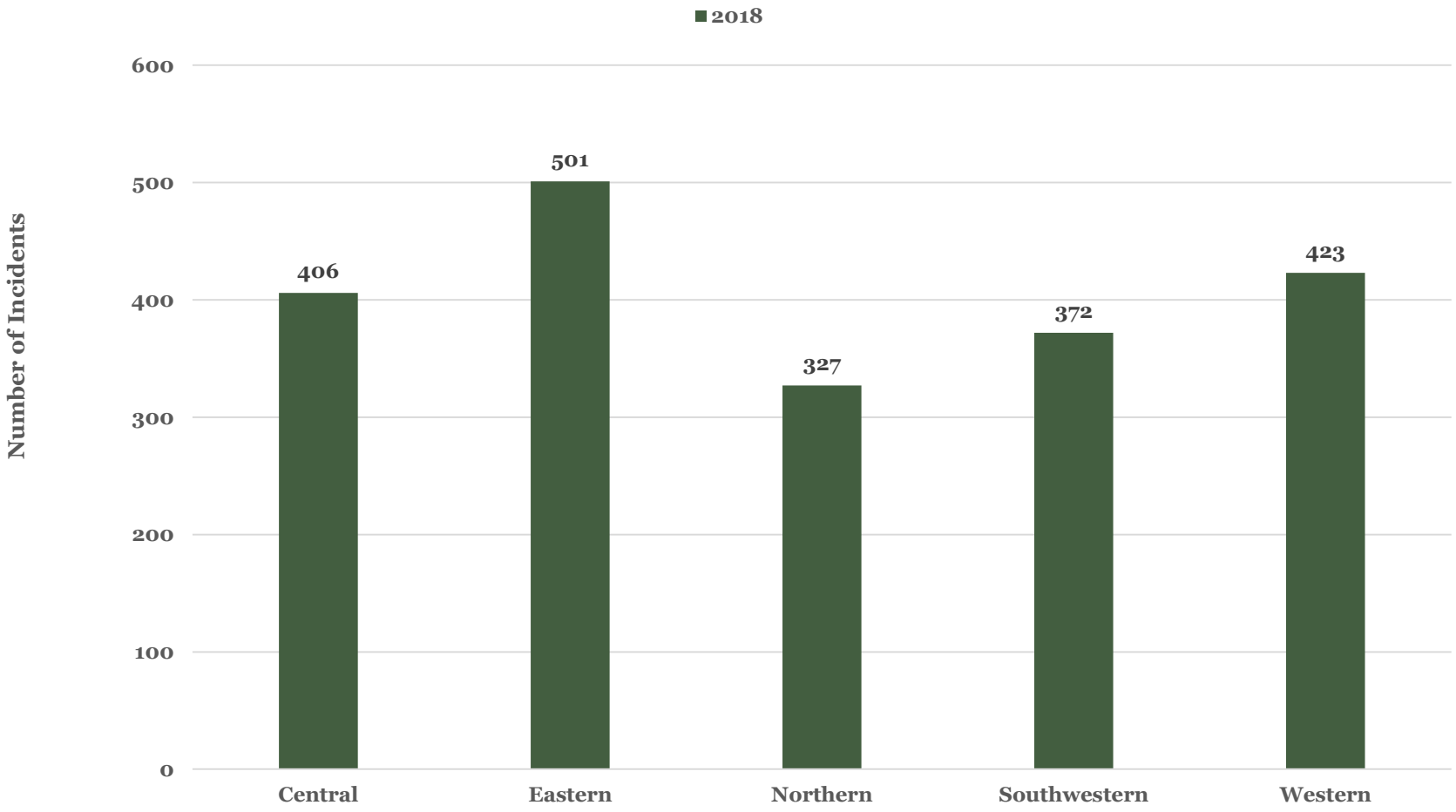
Does the evidence show that one or more of the RQCs have reason to act?

- Part of the RQCs mandate is to identify initiatives to foster health, safety, and quality of life.
- To do this, we start by looking at basic descriptive data.
- The question: Does the data provide evidence that individuals could be safer or healthier than they are
  - By practical, feasible actions
  - That respect individuals' autonomy.

What do the following figures tell us?

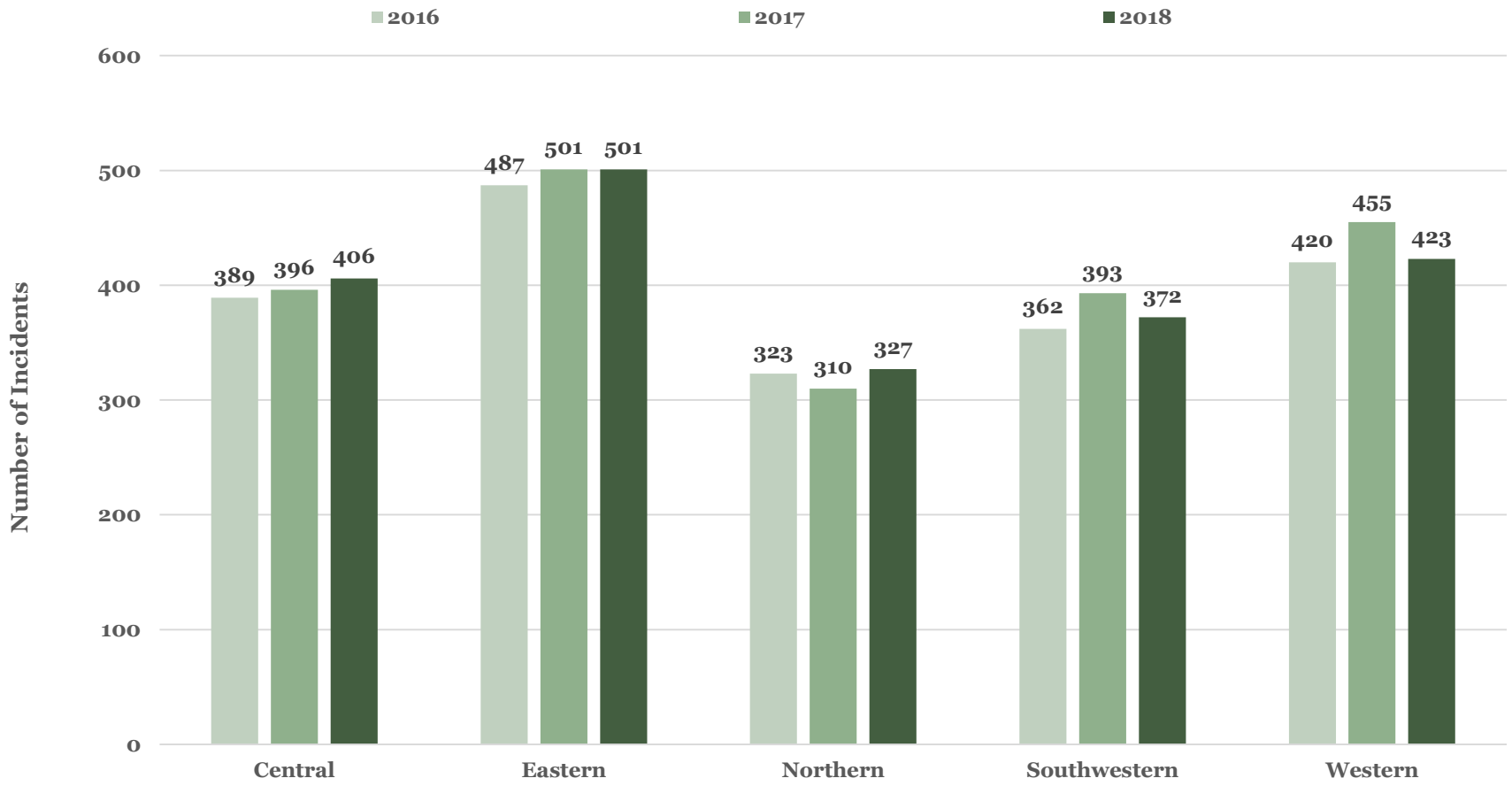
- We start with
  - The overall number of incidents in a single year, by region
  - The number of individuals who experienced and incident in a single year, by region.
- Then we consider *the overall rate* at which incidents occur.

Number of Incidents by Region, 2018



Data included in the charts is for example purposes only and is not actual data for Virginia.

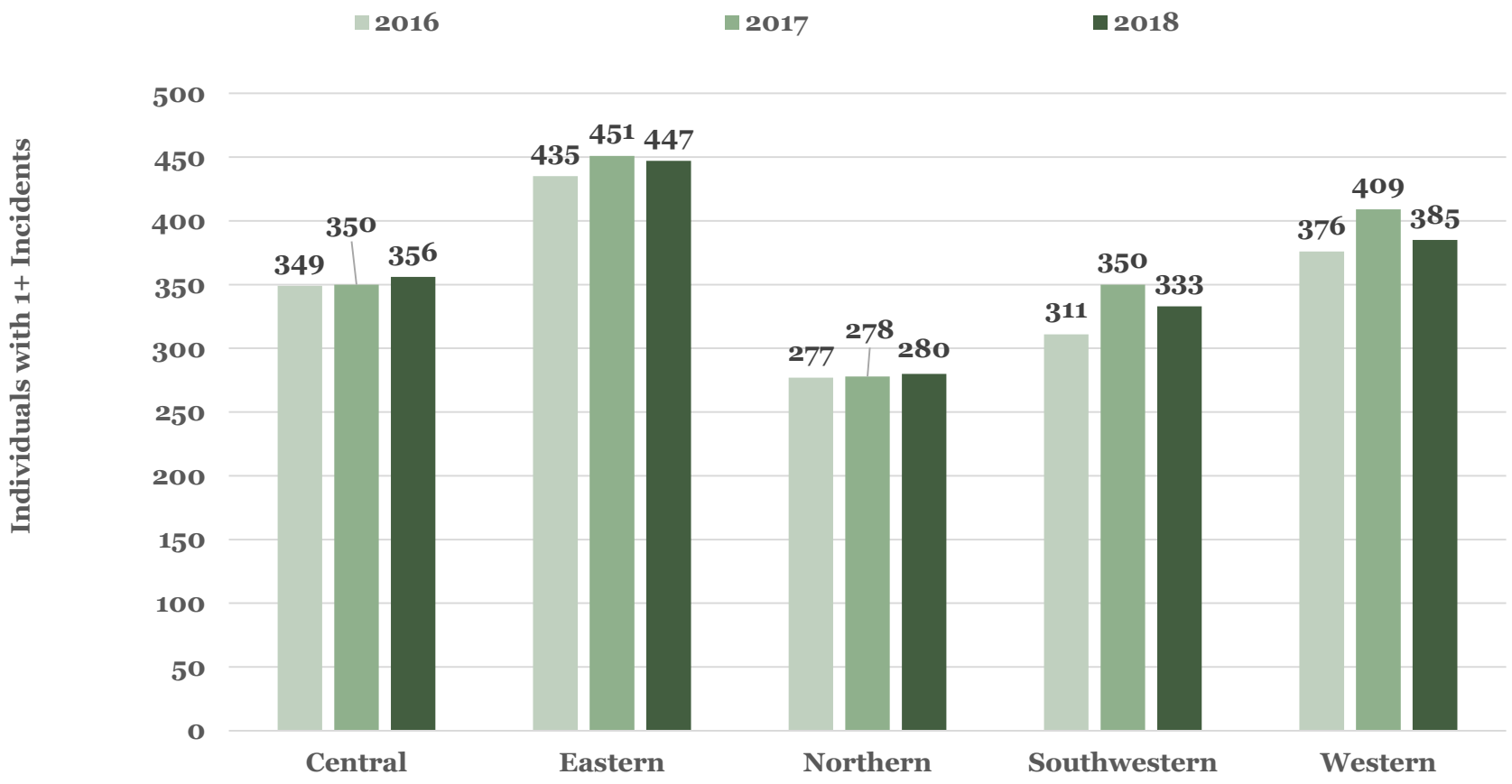
Number of Incidents by Region, 2016-2018



Data included in the charts is for example purposes only and is not actual data for Virginia.

Mission Analytics Group

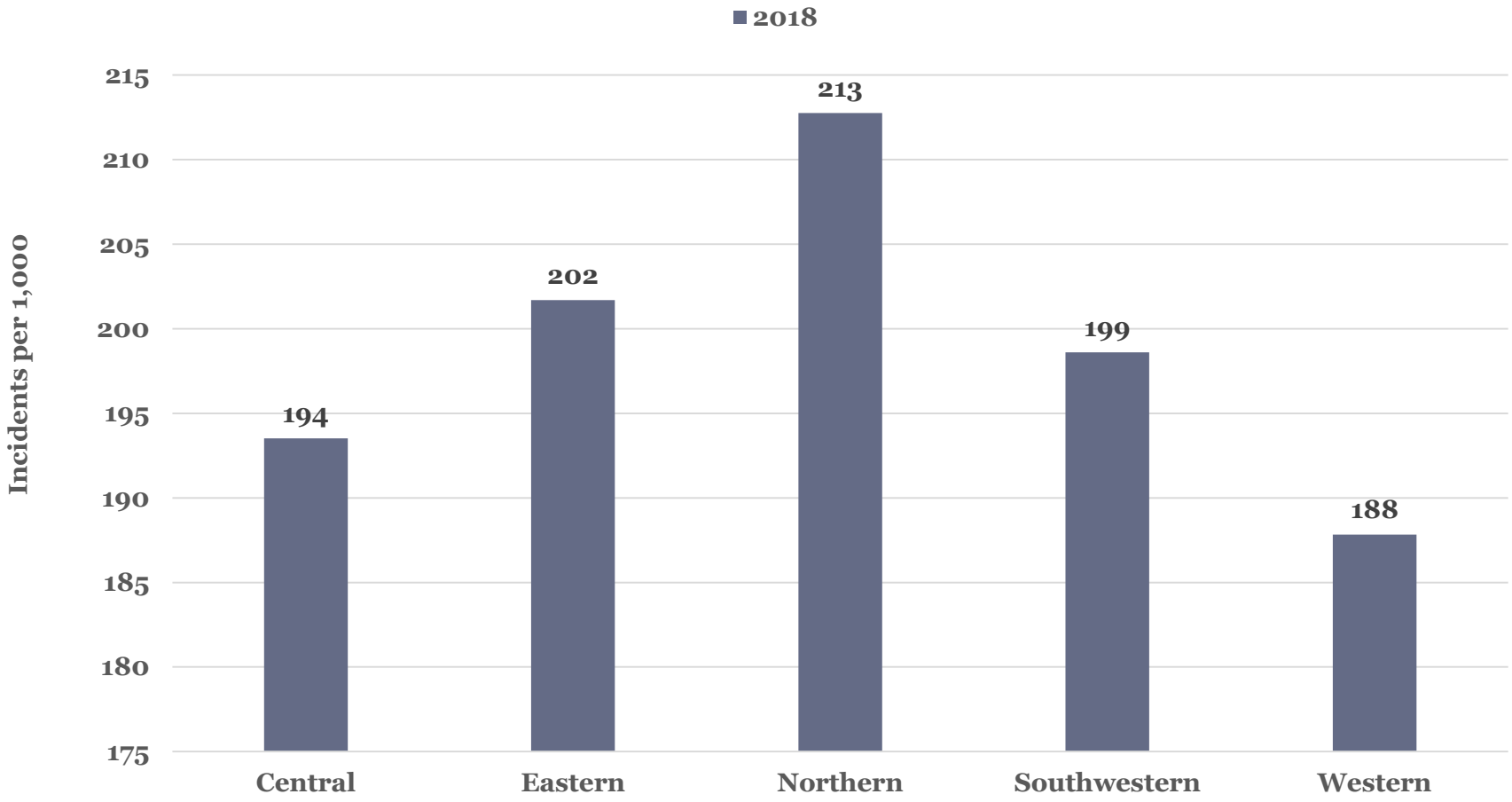
Individuals with at Least One Incident by Region, 2016-2018



Data included in the charts is for example purposes only and is not actual data for Virginia.

Mission Analytics Group

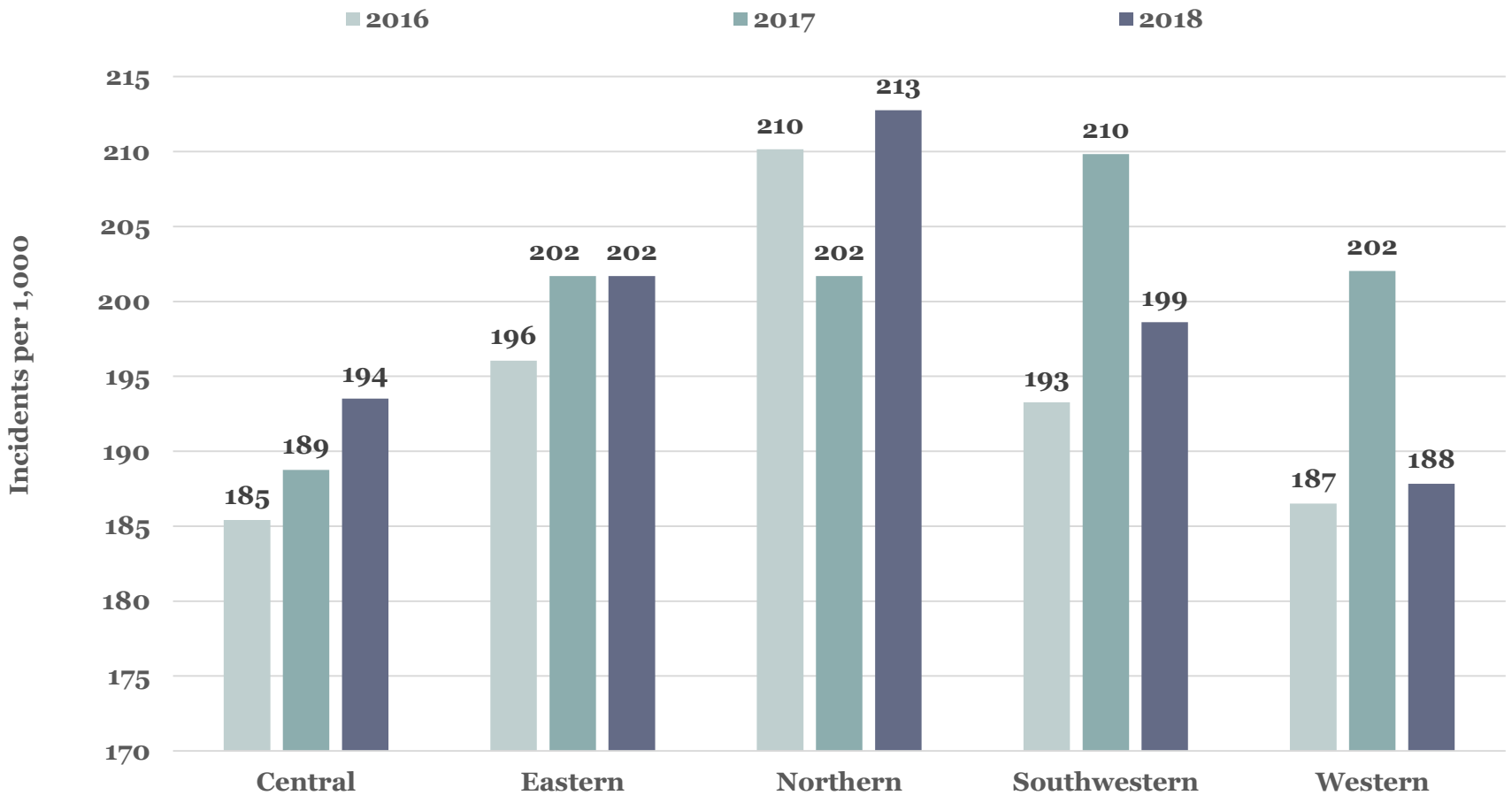
Incidents per 1,000 Individuals by Region, 2018



Data included in the charts is for example purposes only and is not actual data for Virginia.

Mission Analytics Group

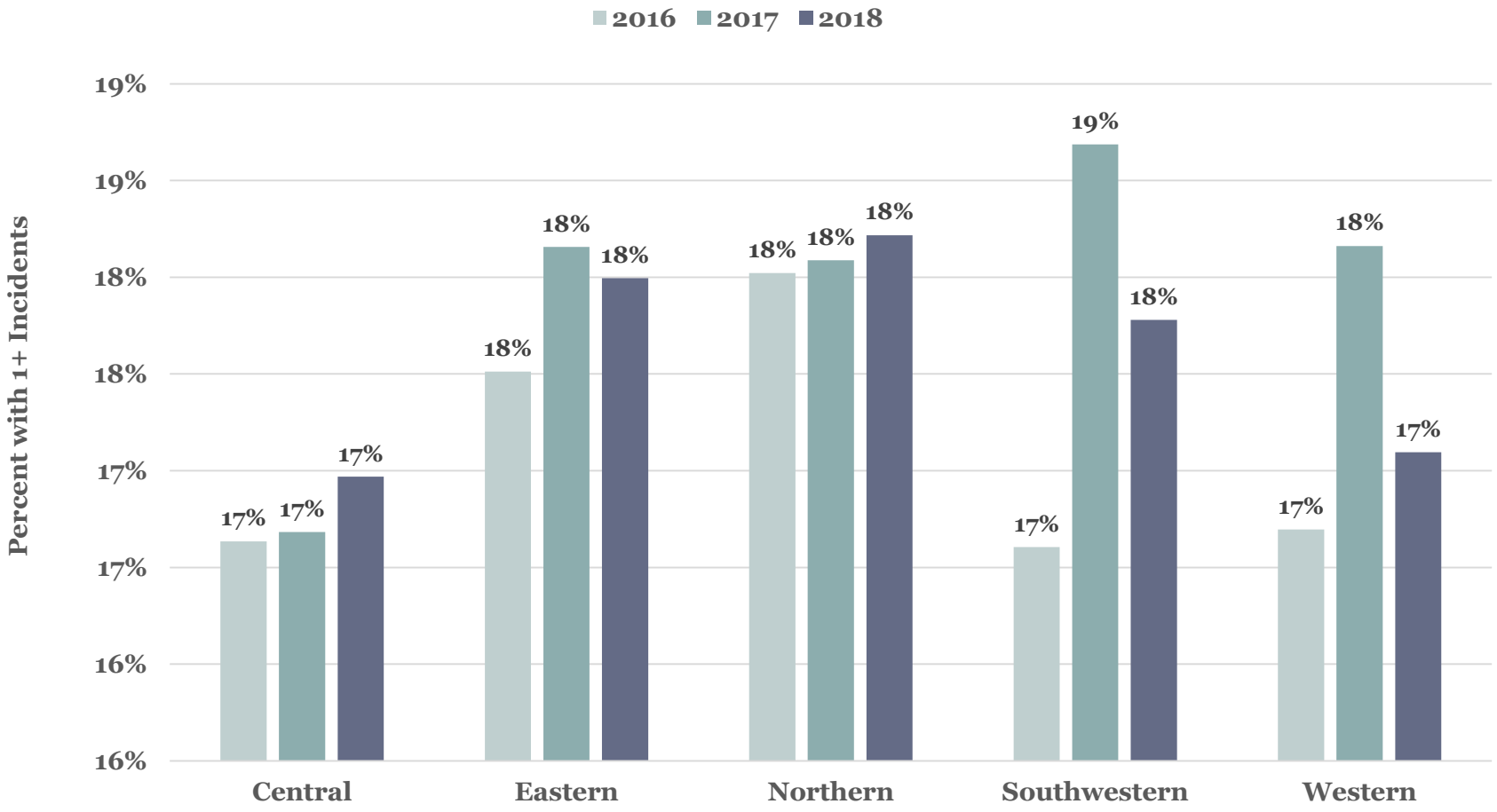
Incidents per 1,000 Individuals by Region, 2016-2018



Data included in the charts is for example purposes only and is not actual data for Virginia.

Mission Analytics Group

Percent of Individuals with at Least One Incident, by Region 2016-2018



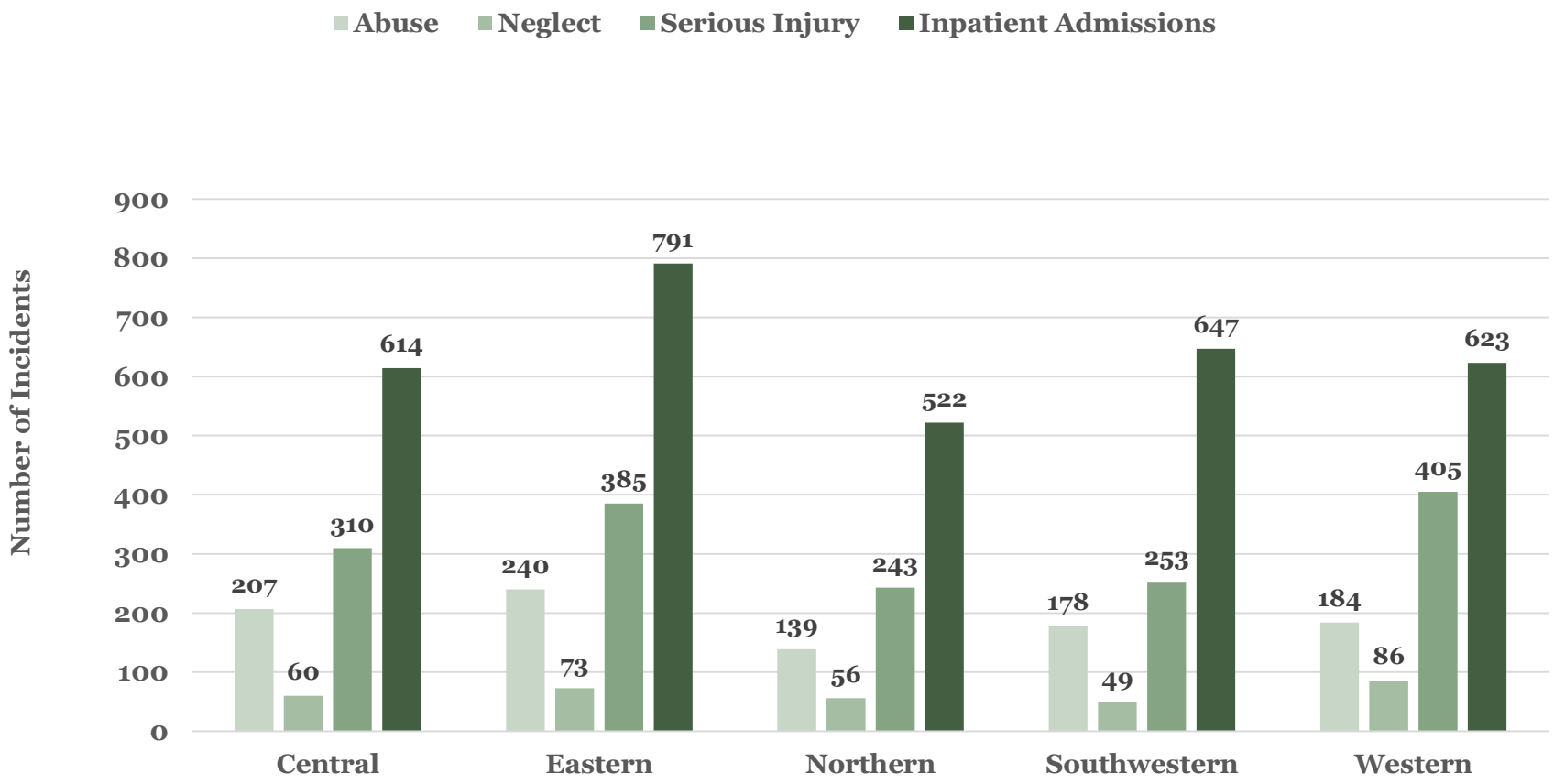
Data included in the charts is for example purposes only and is not actual data for Virginia.

Mission Analytics Group

The next slides disaggregate the overall number and rate of incidents by type.

- These slides present
  - The number of each type of incident, by region, for a single year.
  - The rate at which each incident occurs, by region and year.

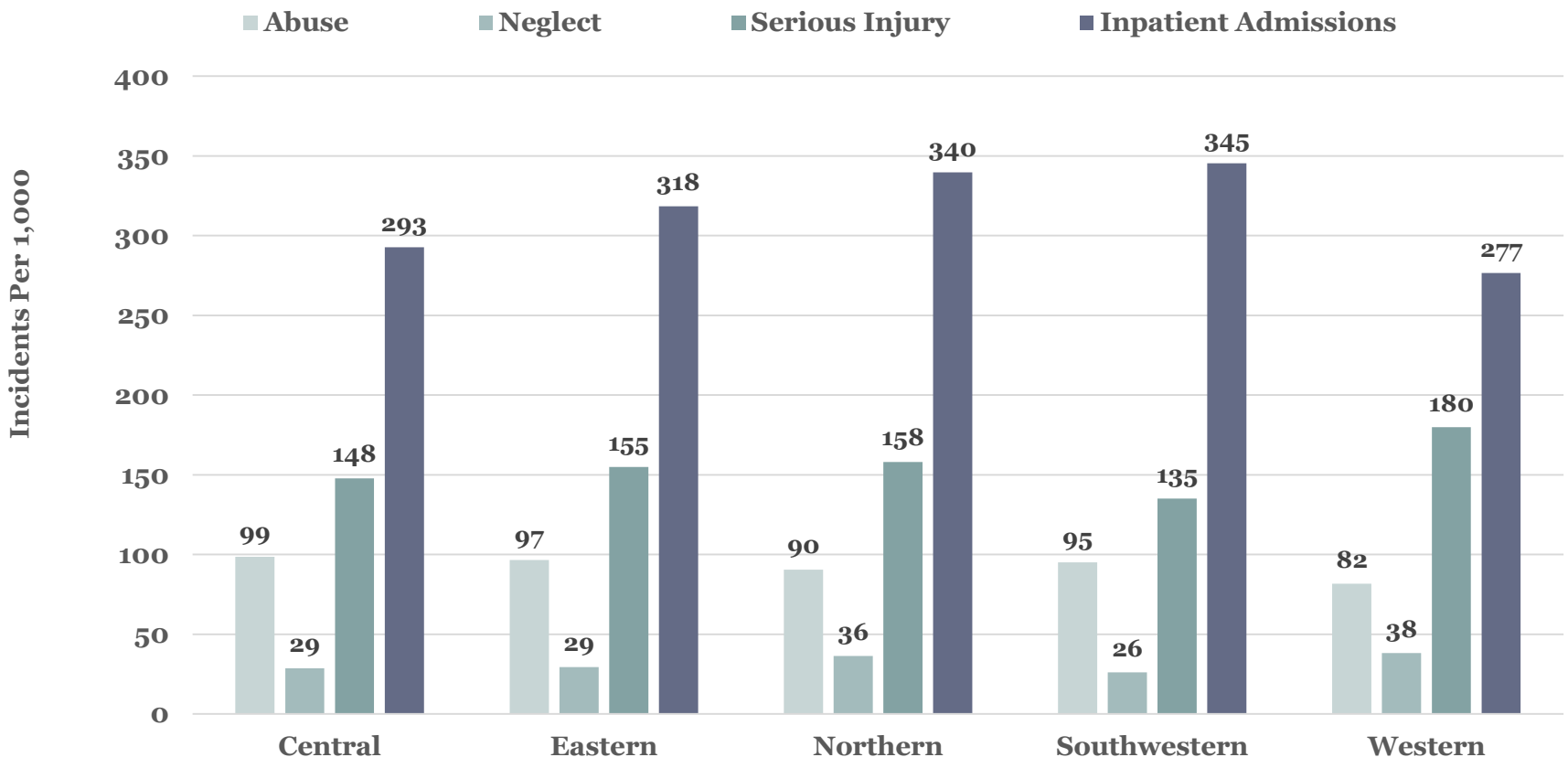
Number of Incidents by Region and Type, 2018



Data included in the charts is for example purposes only and is not actual data for Virginia.

Mission Analytics Group

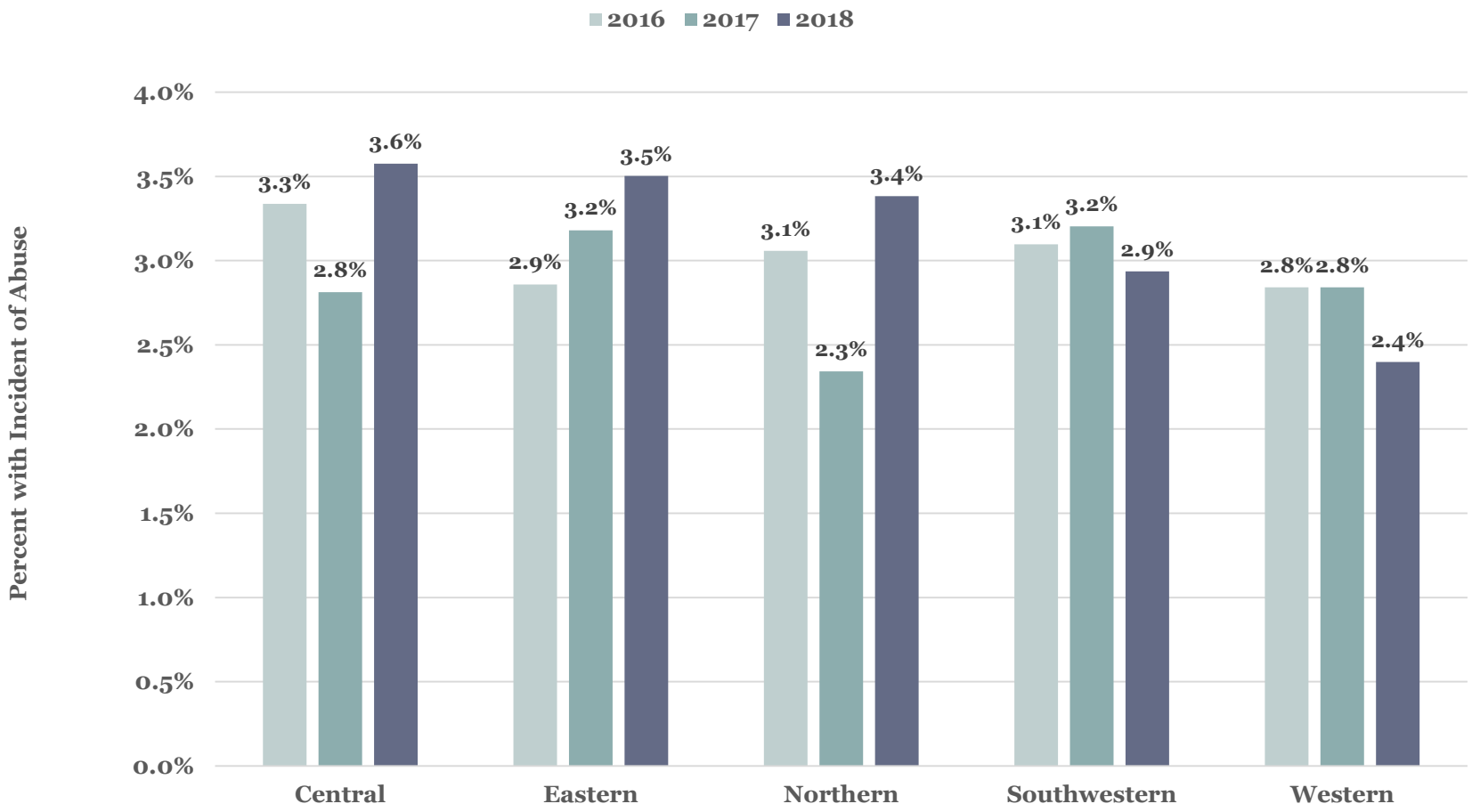
Incidents per 1,000 by Region, 2018



Data included in the charts is for example purposes only and is not actual data for Virginia.

Mission Analytics Group

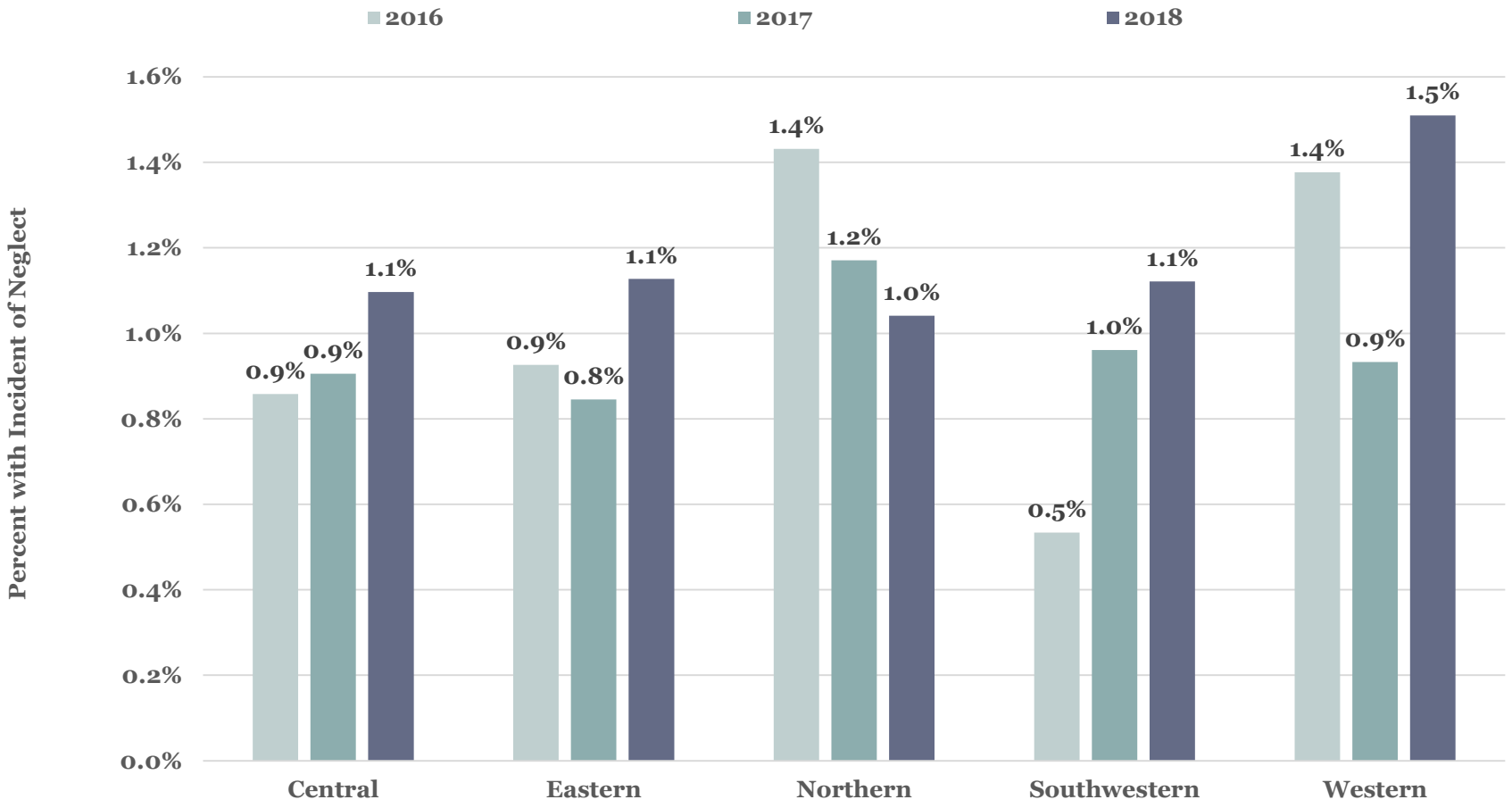
Percent of Individuals with at Least One Incident of Abuse by Region, 2016-2018



Data included in the charts is for example purposes only and is not actual data for Virginia.

Mission Analytics Group

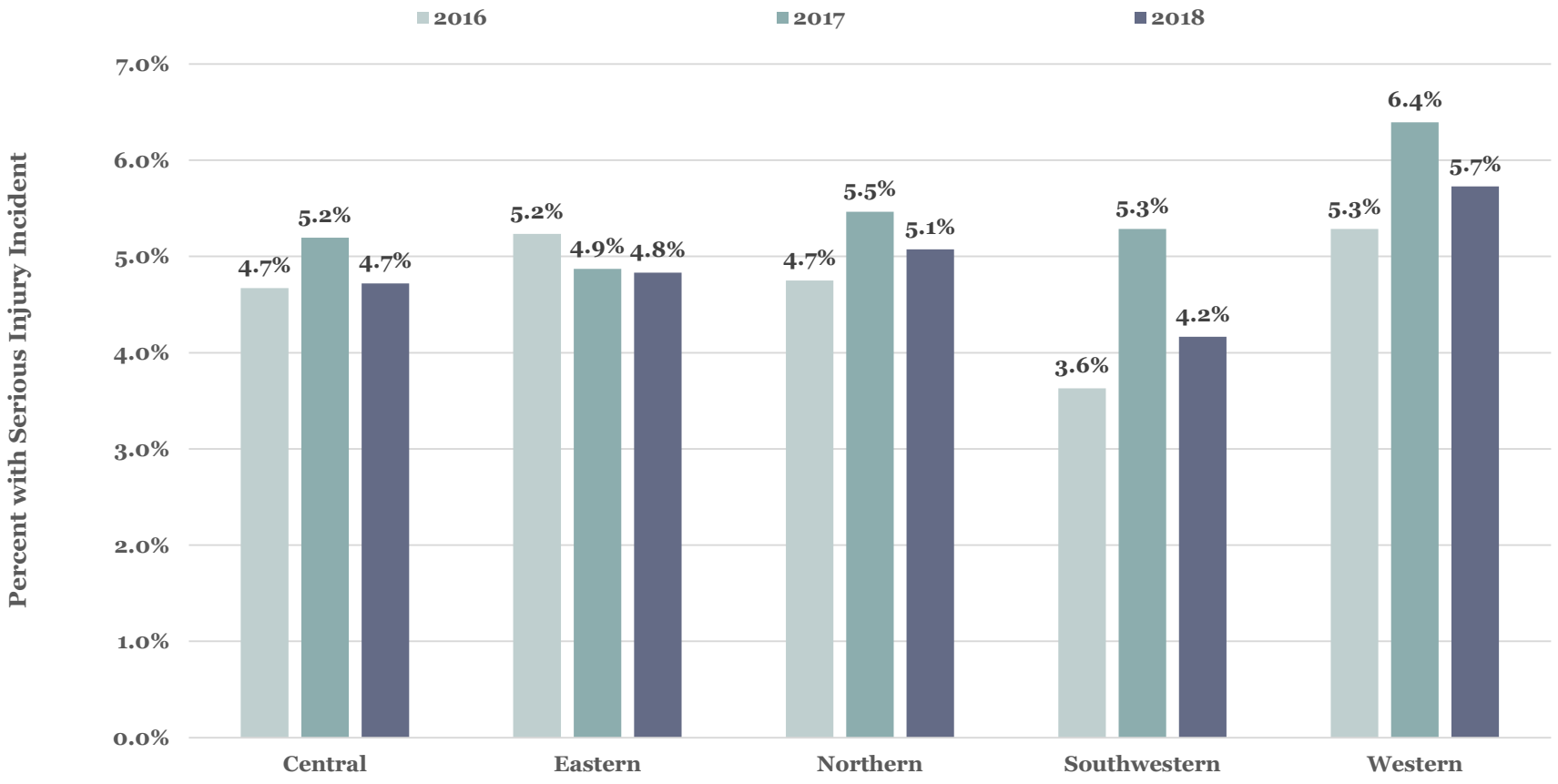
Percent with at Least One Incident of Neglect, by Region, 2016-2018



Data included in the charts is for example purposes only and is not actual data for Virginia.

Mission Analytics Group

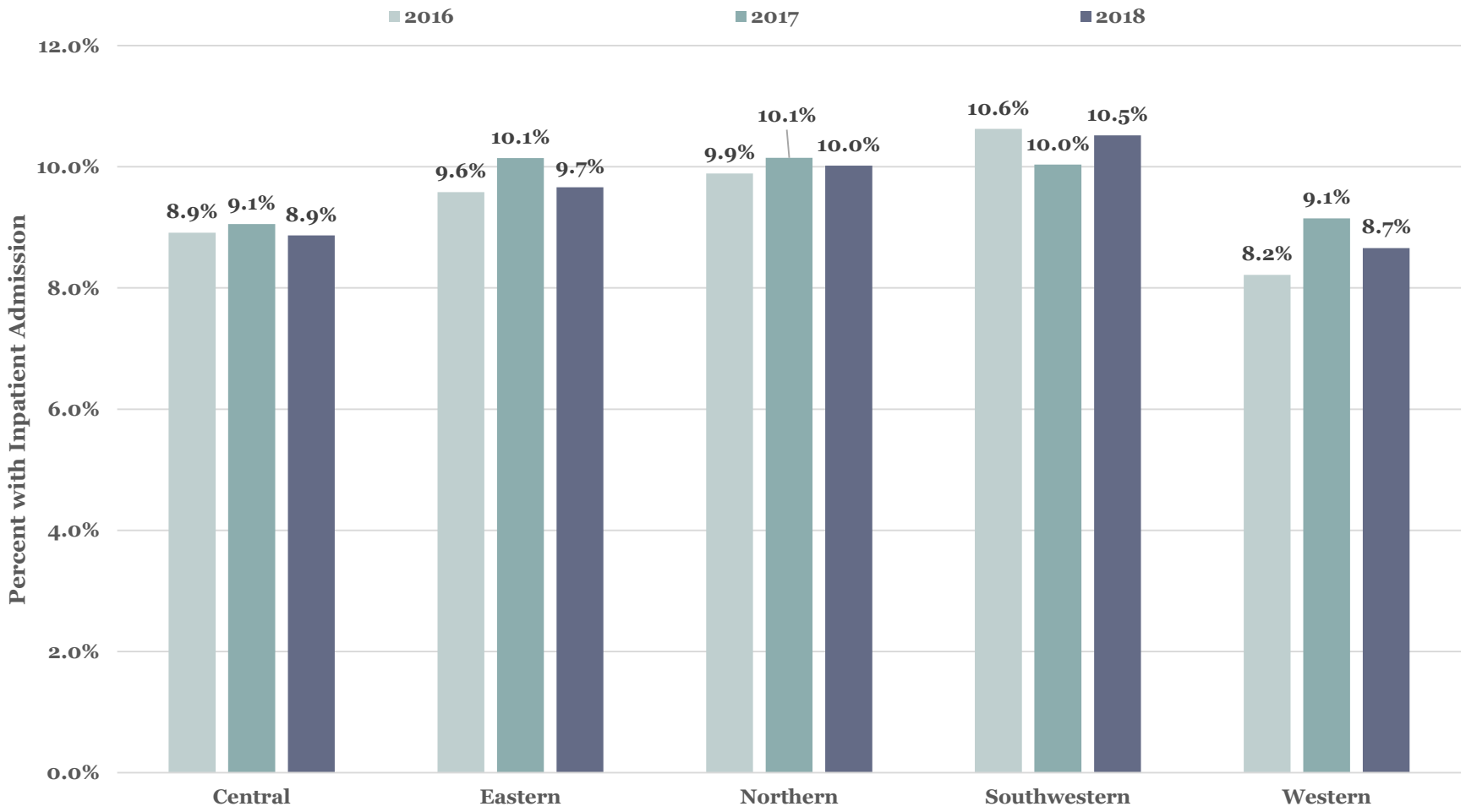
Percent with Serious Injury Incident, by Region, 2016-2018



Data included in the charts is for example purposes only and is not actual data for Virginia.

Mission Analytics Group

Percent with Inpatient Admission by Region, 2016-2018

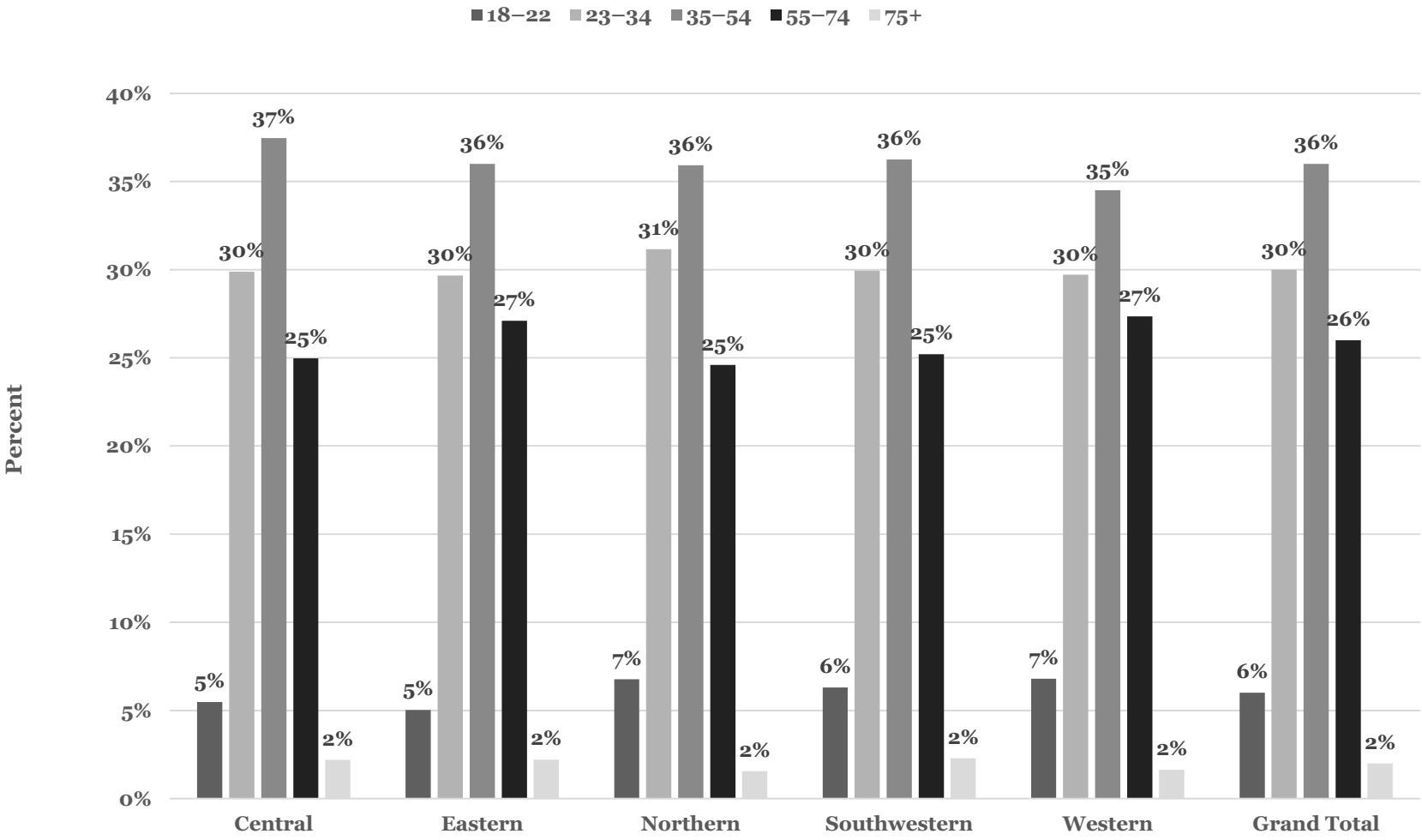


Data included in the charts is for example purposes only and is not actual data for Virginia.

Mission Analytics Group

Next, we turn to population characteristics that help explain why incidents happen.

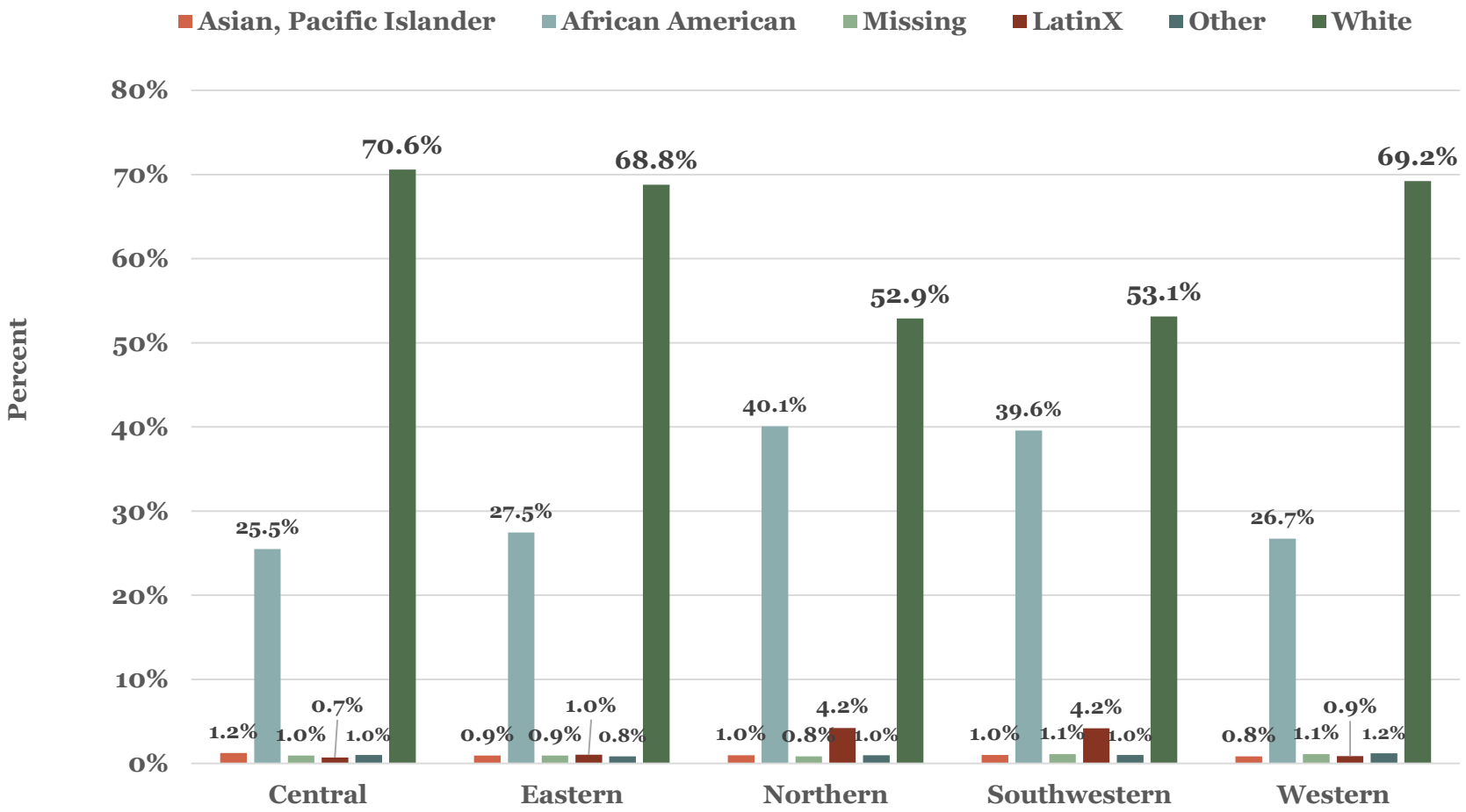
Distribution of Age by Region



Data included in the charts is for example purposes only and is not actual data for Virginia.

Mission Analytics Group

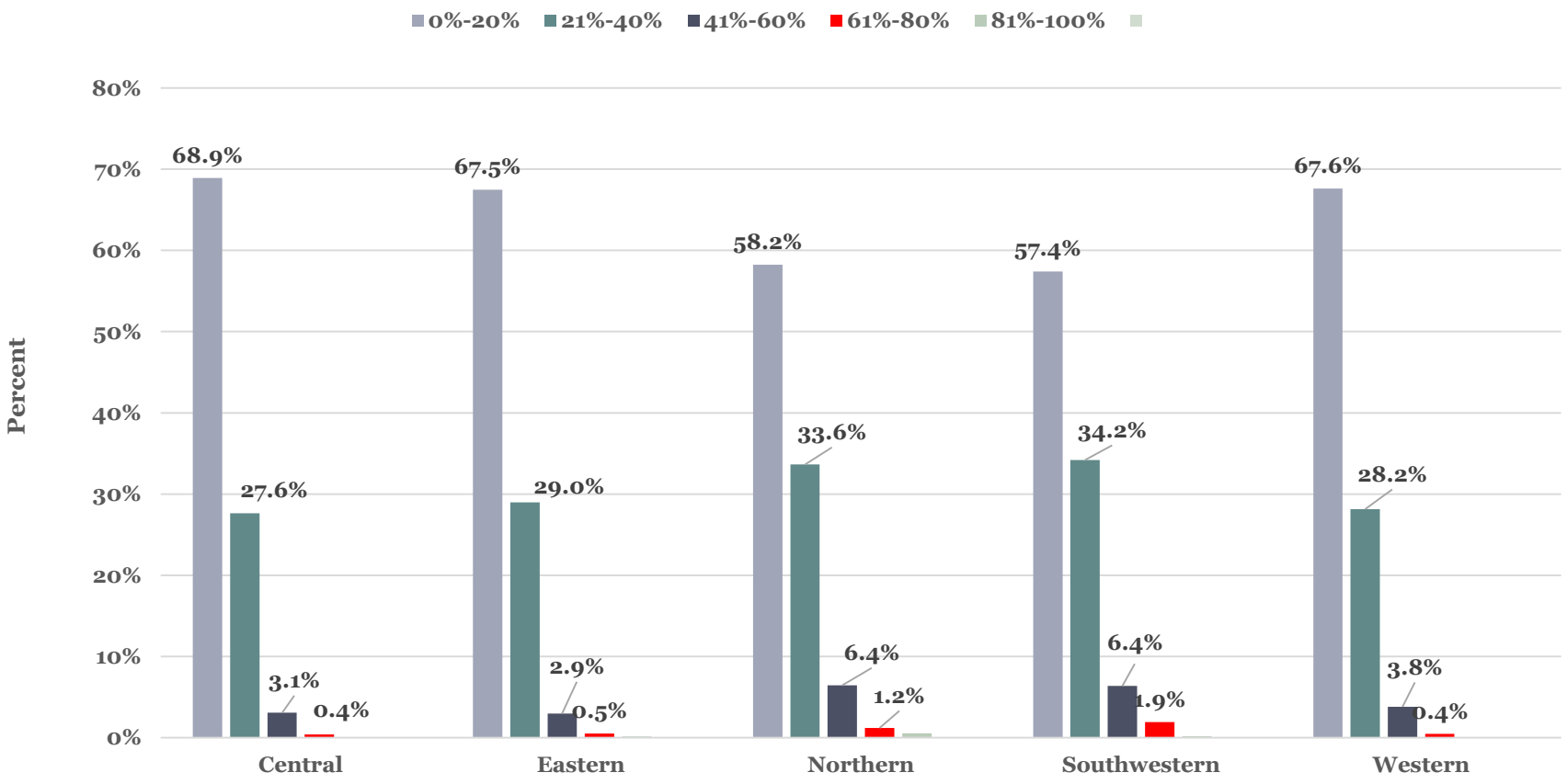
Distribution of the Population by Race/Ethnicity and Region, 2016-2018



Data included in the charts is for example purposes only and is not actual data for Virginia.

Mission Analytics Group

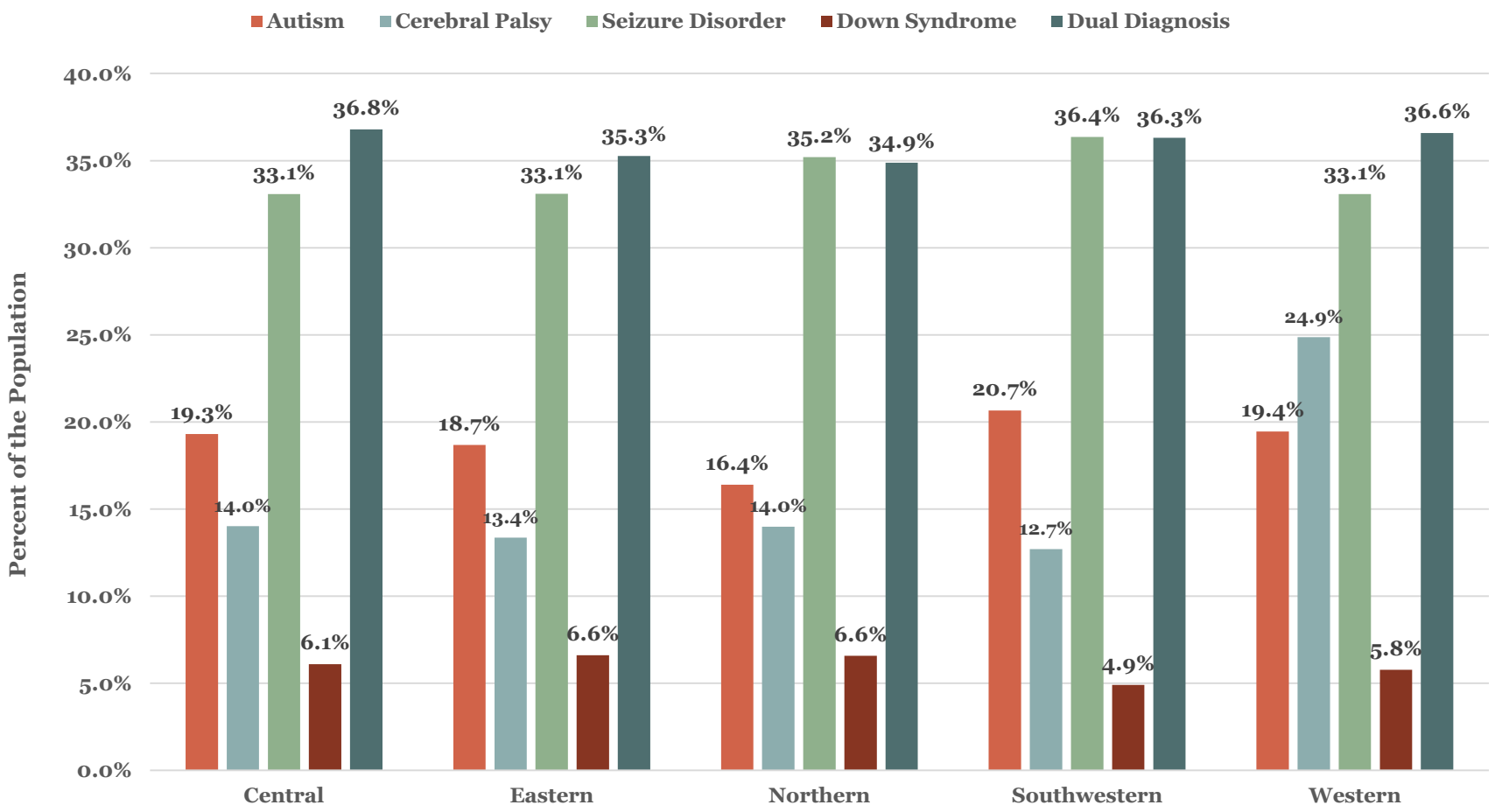
Distribution of the Population by Health Score and by Region, 2016-2018



Data included in the charts is for example purposes only and is not actual data for Virginia.

Mission Analytics Group

Distribution of I/DD and Dual Dx by Region, 2016-2018

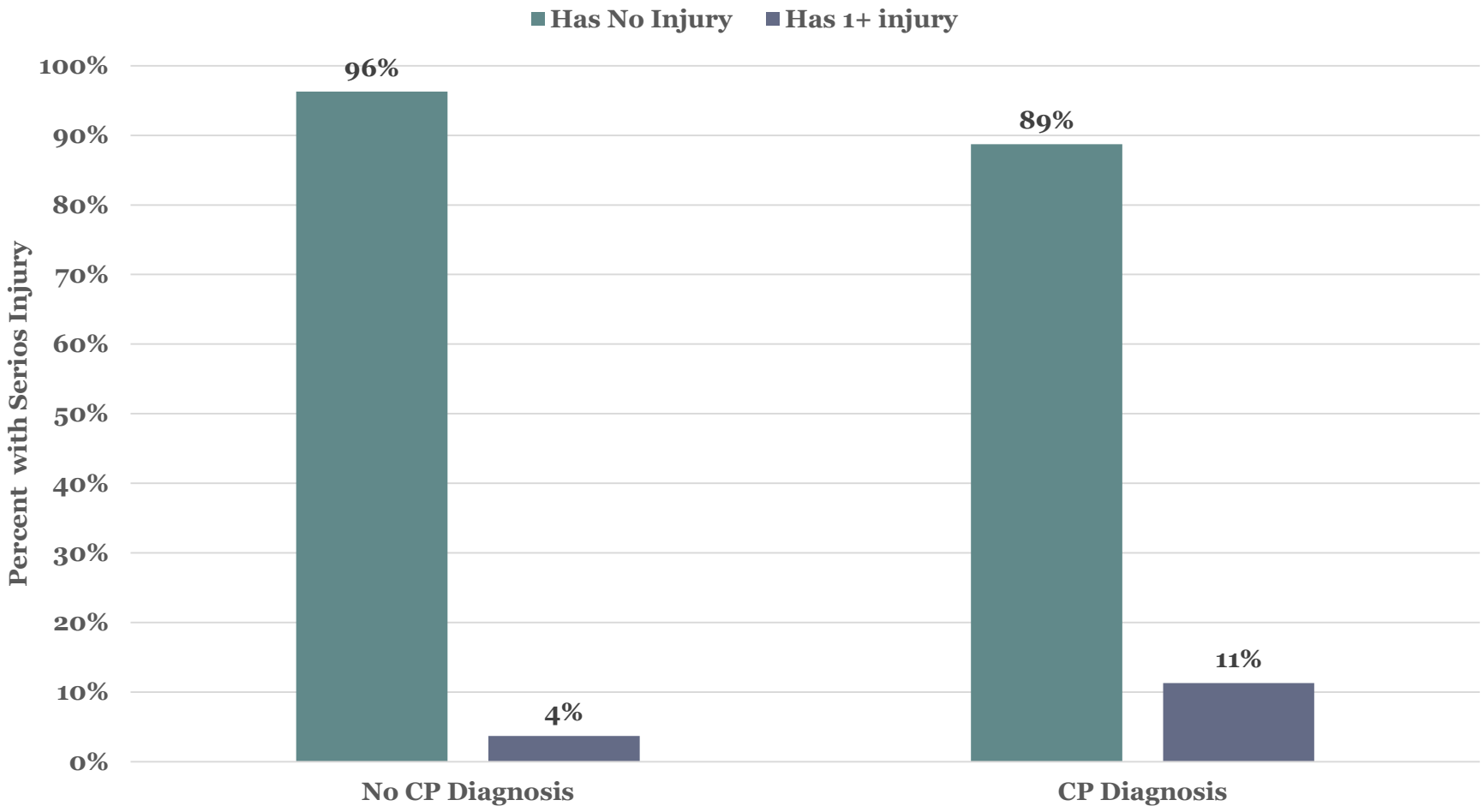


Data included in the charts is for example purposes only and is not actual data for Virginia.

Mission Analytics Group

Finally, we examine associations between population characteristics and outcomes

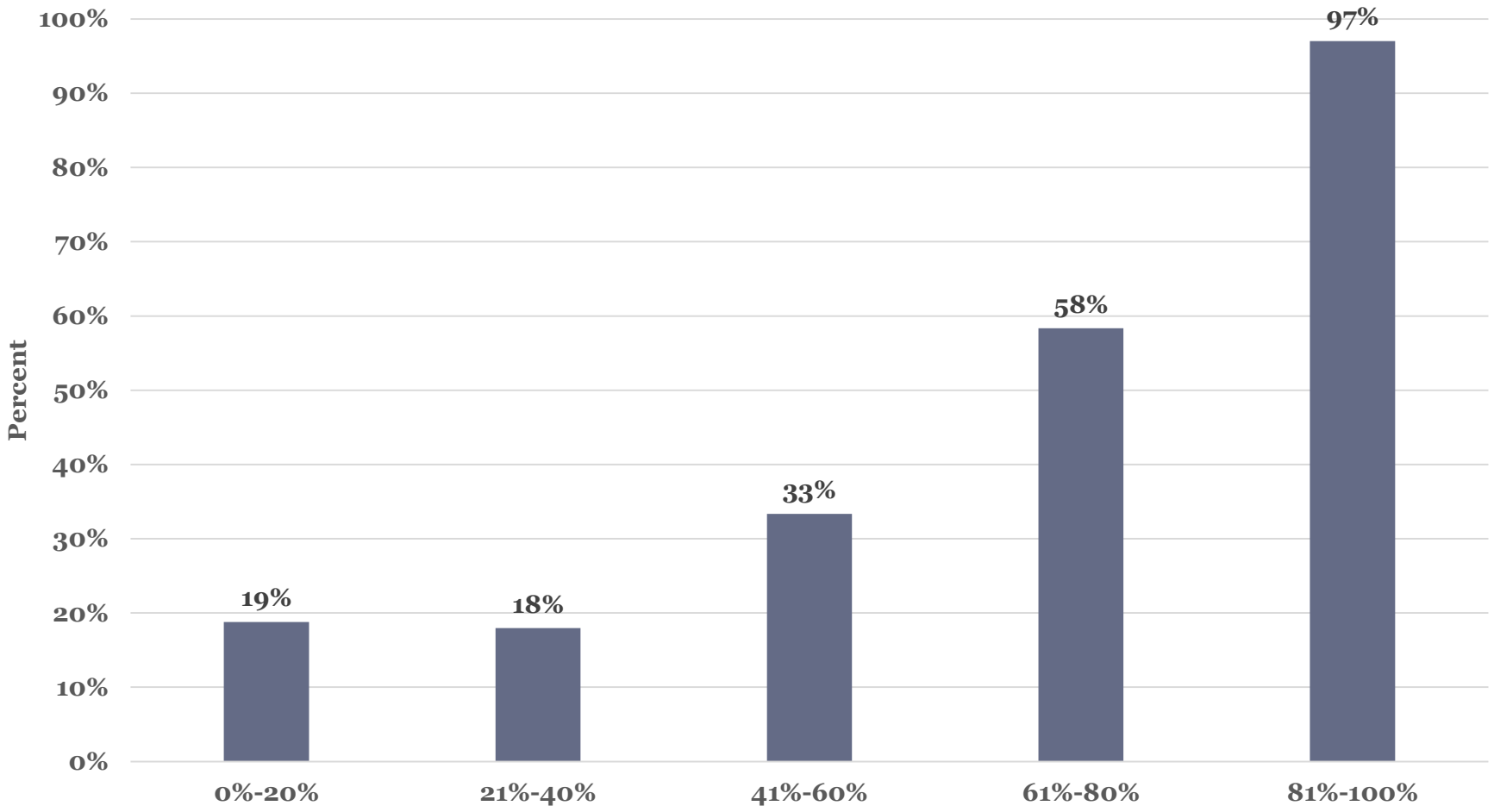
Percent with Injury, No CP Diagnosis vs. With CP Diagnosis, 2018



Data included in the charts is for example purposes only and is not actual data for Virginia.

Mission Analytics Group

Percent with Inpatient Admission by Percent Health Score, 2018

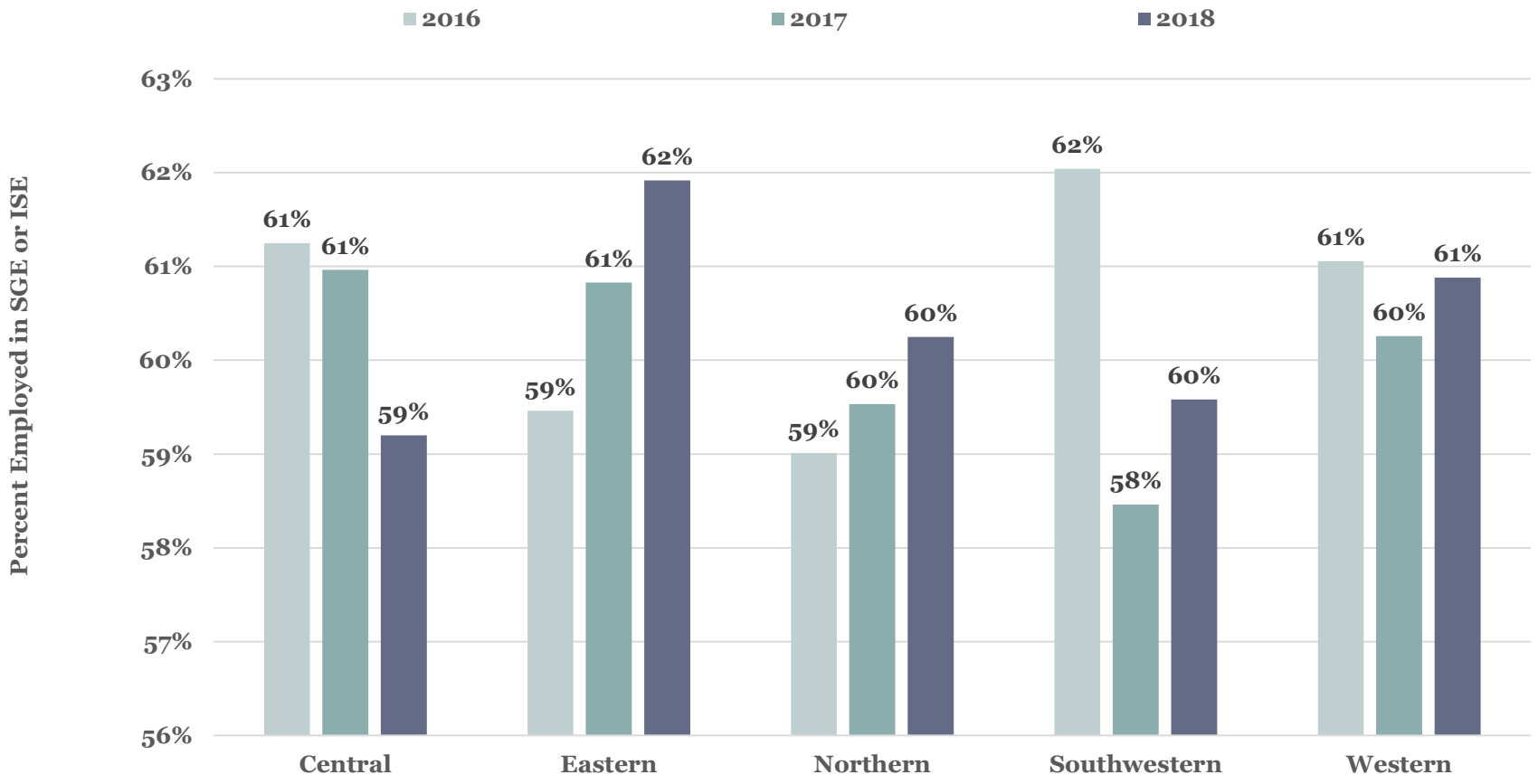


Data included in the charts is for example purposes only and is not actual data for Virginia.

Mission Analytics Group

Extension: Outcomes of Other Types

Percent Employed in GSE or ISE by Region, 2018



Data included in the charts is for example purposes only and is not actual data for Virginia.

Mission Analytics Group

Here are some key ideas.

- *Counts* measure the impact of an incident on a population: They *are not* a measure of risk.
- *Rates* measure the likelihood that the average person will experience an incident.
- The *impact* of an incident or an intervention is the combined effect of
  - Average risk—i.e. the likelihood that a typical person will experience the incident
  - The number of people who might experience an incident—i.e. the population *at risk*.

'A few more key ideas.

- Rates are impossible interpret unless you have *a benchmark;* in most cases, this will be either
  - Rates in other regions
  - The rate in your region in the recent past.
- But for rates to be comparable, the populations in the regions (or years) that you compare must be alike: e.g.
  - The distribution—i.e. the percentage of the population—with disabilities must be similar
  - The distributions of demographics, health status, and anything related to the outcome that you care about must be similar.
- So, compare sub-populations—e.g. the population with CP—and ask whether risk varies by region.

‘Two final (fantastically important) ideas.

- To interpret data and develop interventions, you need to understand populations.
- You also need to understand *how services are organized*.