

Pedestrian Injuries

Special Emphasis Report
Multnomah County 2022



Understanding Pedestrian Injuries

Pedestrians include people who are on foot, lying down, or on other small personal conveyances, such as a scooter or skateboard. Injuries to pedestrians struck by a motor vehicle traveling on a public roadway are referred to as “motor vehicle-traffic (MVT) related.” “Other” pedestrian injuries include those in which a person is struck by a motor vehicle not traveling on a public roadway (“motor vehicle non-traffic”) or by a non-motor vehicle, such as a bicycle or animal.

Impact and Magnitude of Pedestrian Injuries

The victims of pedestrian injuries are sisters, brothers, mothers, fathers, and friends in our community. In 2021, there were 30 deaths of Multnomah County residents due to pedestrian injuries (4 per 100,000), 99 hospitalizations (12 per 100,000) and 429 emergency department (ED) visits (53 per 100,000) due to nonfatal pedestrian injuries, as shown in Figure 1. Between 2017 and 2021 the number of deaths of Multnomah County residents due to pedestrian injuries increased 25% (from 24 deaths in 2017 to 30 in 2020), as shown in Figure 2. In total, these 132 deaths between 2017 and 2021 are associated with more than 2,400 years of potential life lost.

The combined cost of deaths and medical treatment for pedestrian injuries in Multnomah County in 2021 was \$374 million.¹ Both hospitalization and emergency department data track charges associated with each visit (e.g., anesthesiology, radiology, room and board charges, etc.). The cost of hospital and emergency department visits in 2021 was an estimated \$20 million dollars. More than 75% of all charges were paid for by public providers (Medicare & Medicaid).

¹ [USDOT 2023](#)

Members of the houseless community continue to experience the greatest exposure to traffic, and with greater exposure to any risk factor comes greater risk of severe, adverse health outcomes. At least 10 out of 30 deaths in 2021 (33%) were in individuals experiencing houselessness.

Causes of Pedestrian Injuries

The majority of pedestrian deaths (92%) and hospitalizations (90%) were due to motor vehicle traffic-related injuries and the remaining injuries were due to 'other' pedestrian injuries. For deaths, the most frequent specific cause (63%) was indicated by the ICD-10 code V03.1 (pedestrian injured in collision with car, pick-up truck or van, traffic accident).

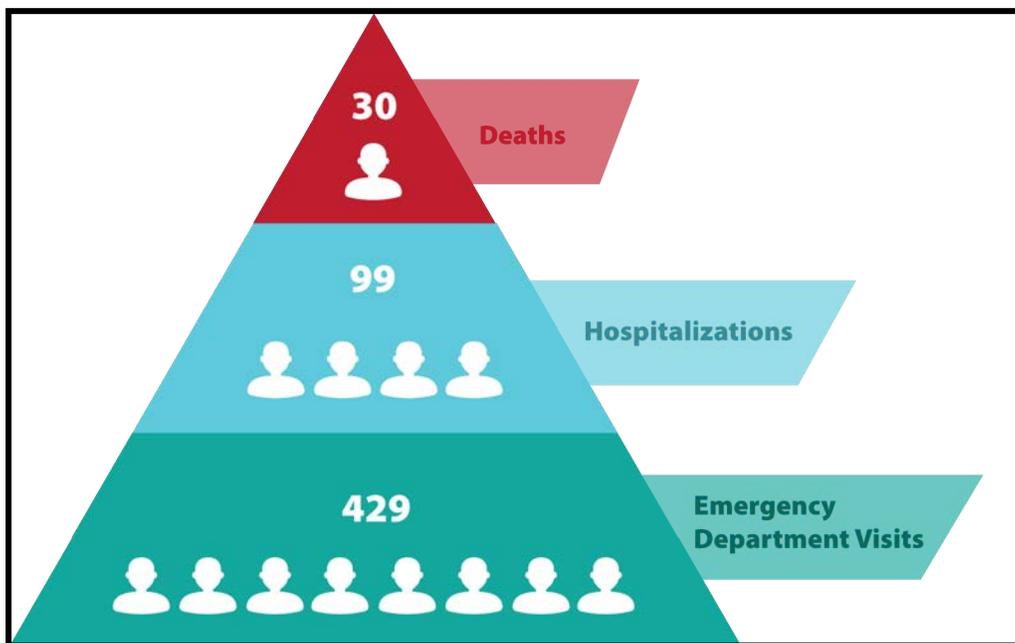


Figure 1: Burden of Pedestrian Injury-Related Deaths, Hospitalizations and Emergency Department Visits among Multnomah County residents, 2021

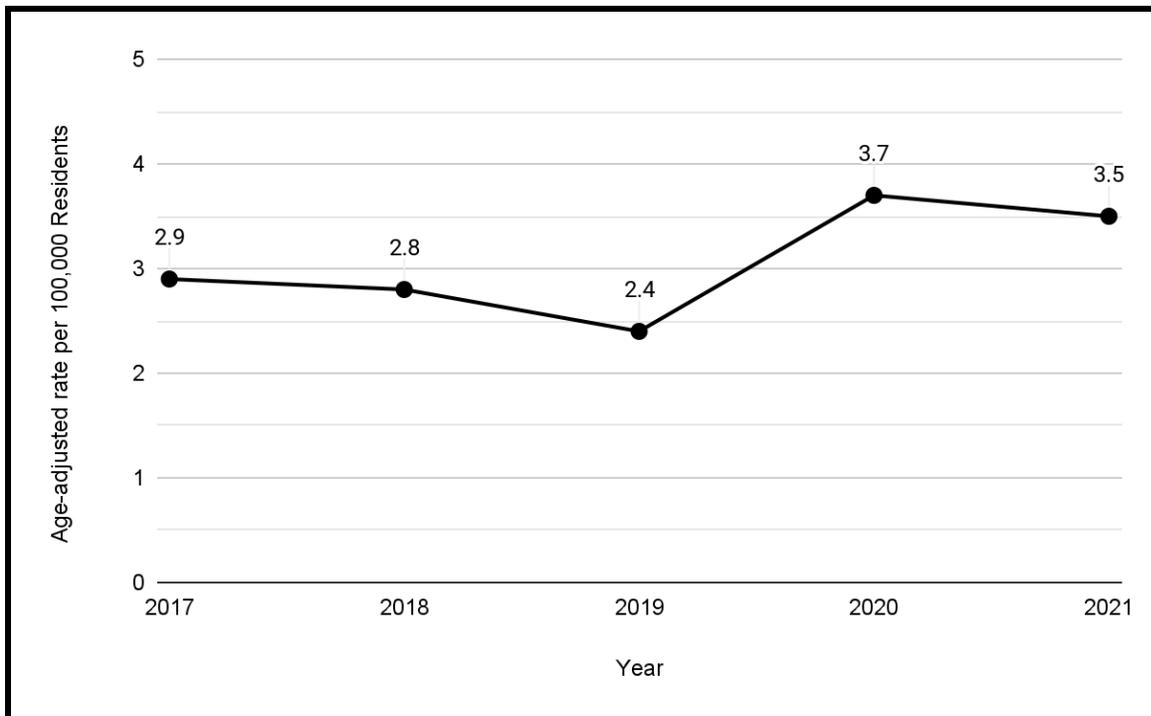


Figure 2: Five-Year Trend of Pedestrian Injury-Related Deaths among Multnomah County residents, 2017 to 2021

Pedestrian Injuries by Age Group and Sex

The highest rate of pedestrian injury-related ED visits per 100,000 was among ages 15-24 years, followed by 45-64 years as shown in Figure 3. For deaths, the highest rate occurred among persons 65+ years, and for hospitalizations the highest rate was among 45-64 year-olds. Males are over-represented among pedestrian injury-related ED visits (59%), hospitalizations (58%), and deaths (63%) compared to females.

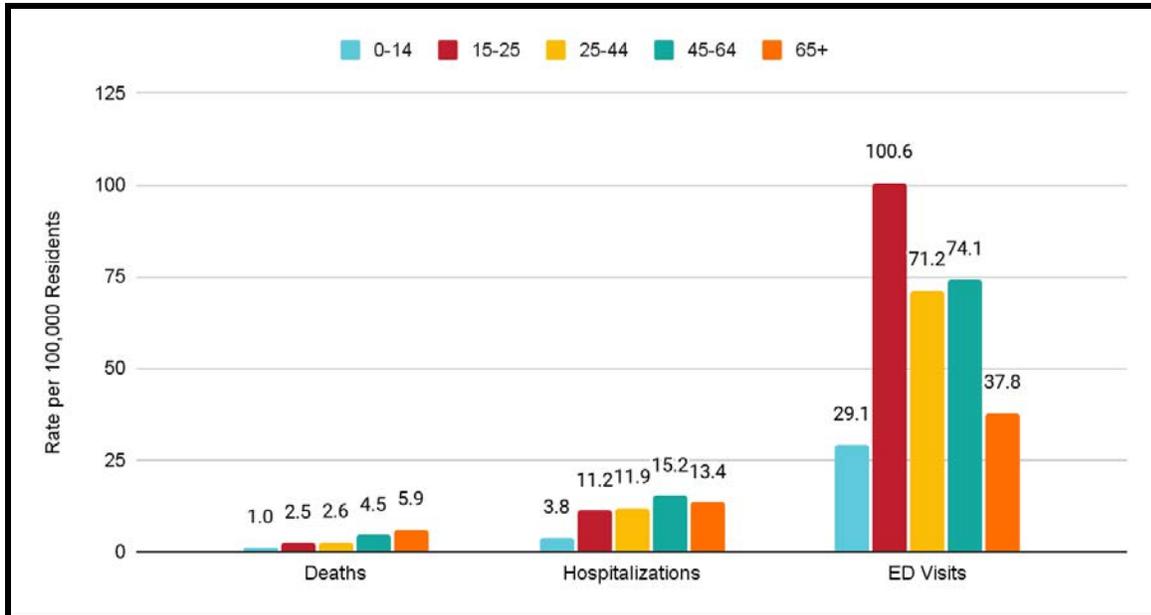


Figure 3: Rate of Pedestrian Injury-Related Deaths, Hospitalizations, and Emergency Departments Visits among Multnomah County residents by Age, 2017-2021

Pedestrian Injuries by Race and Ethnicity

Rates of pedestrian injury-related deaths, hospitalization, and ED visits were consistently higher among Black residents. The age-adjusted rate of death for this group (4 per 100,000) was nearly double that of Hispanic and White non-Hispanic residents (each 3 per 100,000) (Figures 4, 5). For hospitalizations, the rate for Black residents (26 per 100,000) was 3 times higher than both Hispanic and White non-Hispanic residents (each 9 per 100,000). Most strikingly, among ED visits, the rate among Black residents (189 per 100,000) was 4 times higher than the White non-Hispanic rate (52 per 100,000).

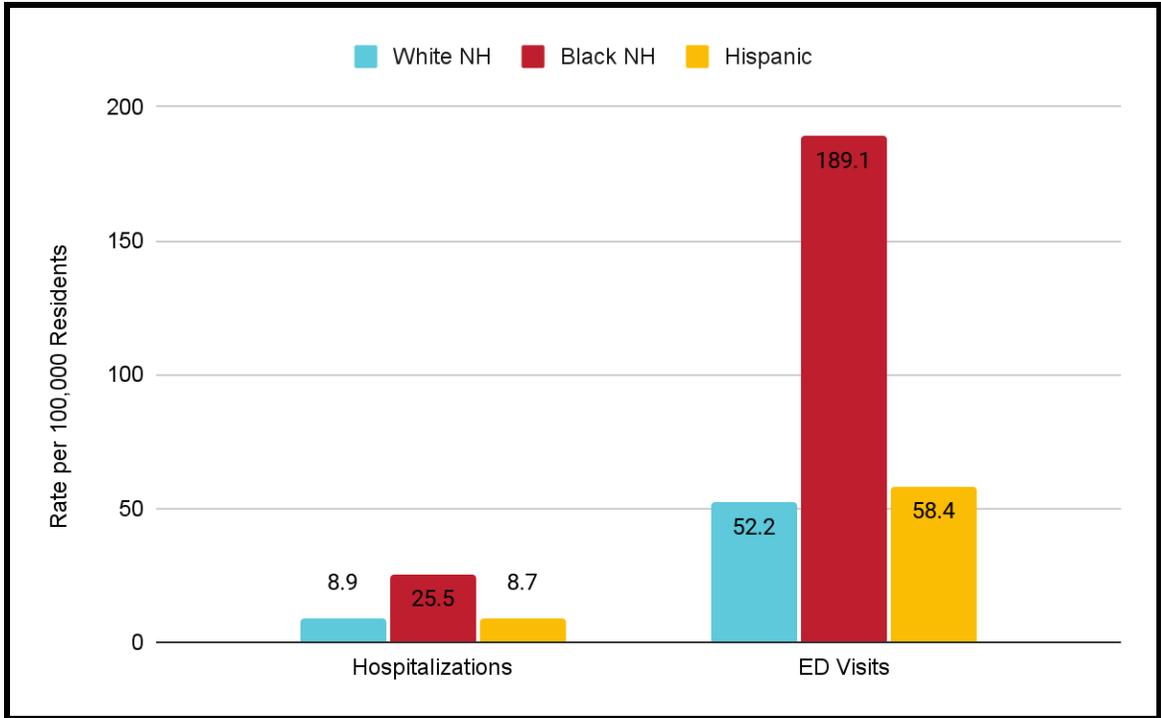


Figure 4: Rate of Pedestrian Injury-Related Hospitalizations, and Emergency Visits among Multnomah County residents by Race and Ethnicity, 2017-2021

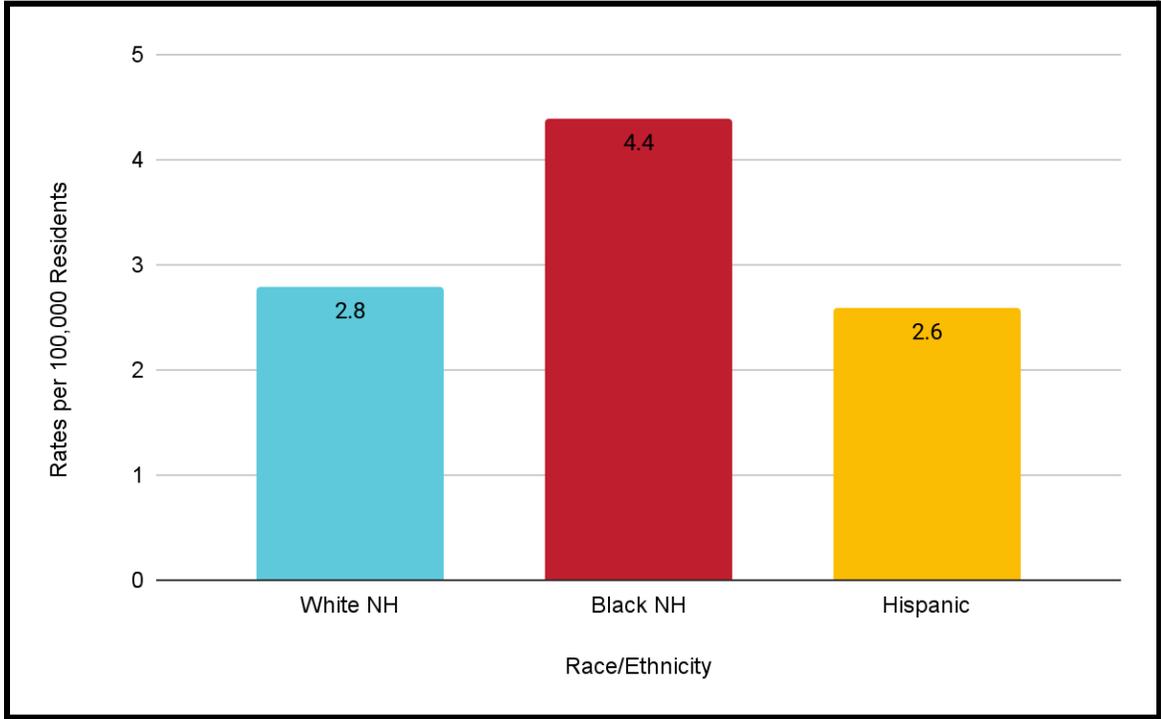


Figure 5: Rate of Pedestrian Injury-Related Deaths by Race and Ethnicity, 2017-2021

Pedestrian Injuries Prevention Resources

- Centers for Disease Control and Prevention
https://www.cdc.gov/transportationsafety/pedestrian_safety/index.html
- National Highway Traffic Safety Administration
<https://www.nhtsa.gov/road-safety/pedestrian-safety>
- Federal Highway Administration
https://safety.fhwa.dot.gov/ped_bike/
- Safe Routes to Schools
https://www.fhwa.dot.gov/environment/safe_routes_to_school/
- Vision Zero
<https://visionzeronetwork.org/about/what-is-visionzero/>

Data Sources

Deaths: Multnomah County analysis of vital records data supplied by the Oregon Health Authority

Hospitalizations and ED visits: Multnomah County analysis of Hospital Discharge data supplied by the Office of Health Analytics, Oregon Health Authority

Population data: Oregon Public Health Assessment Tool (OPHAT), Census Bureau/NCHS population estimates