



Adolescent Motor Vehicle Mortality and Injury Hospitalization in Wyoming

Nationwide, motor vehicle crashes are the second leading cause of death for U.S. teens.¹

*"Teen motor vehicle crashes are preventable, and proven strategies can improve the safety of young drivers on the road."*²

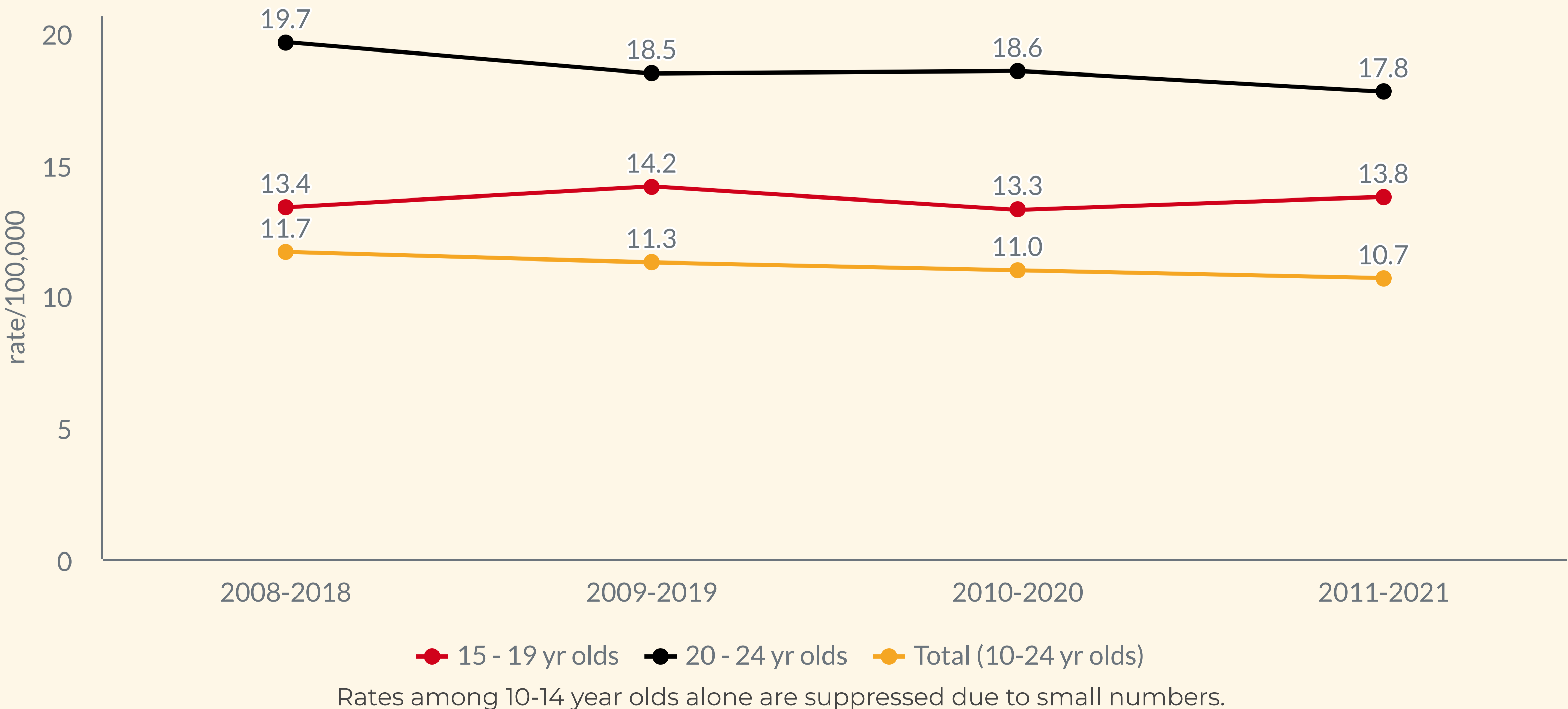
In Wyoming, from 2011 to 2021, **512** people died from motor vehicle crashes.

Deaths from motor vehicles crashes among 10-24 year olds made up **26.6%** (n=136) of these deaths.

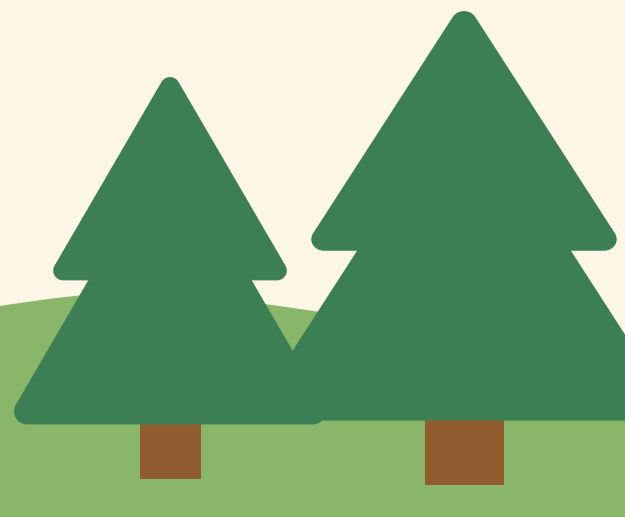
The motor vehicle mortality rate among 10-24 year olds in Wyoming during this time period was **10.7** per 100,000.³

The Wyoming Maternal and Child Health (MCH) Youth and Young Adult Health Program has chosen Adolescent Motor Vehicle Safety Promotion as one of its Title V Priorities.

Trends in the Wyoming Adolescent and Young Adult Motor Vehicle Mortality Rate by Age Group³

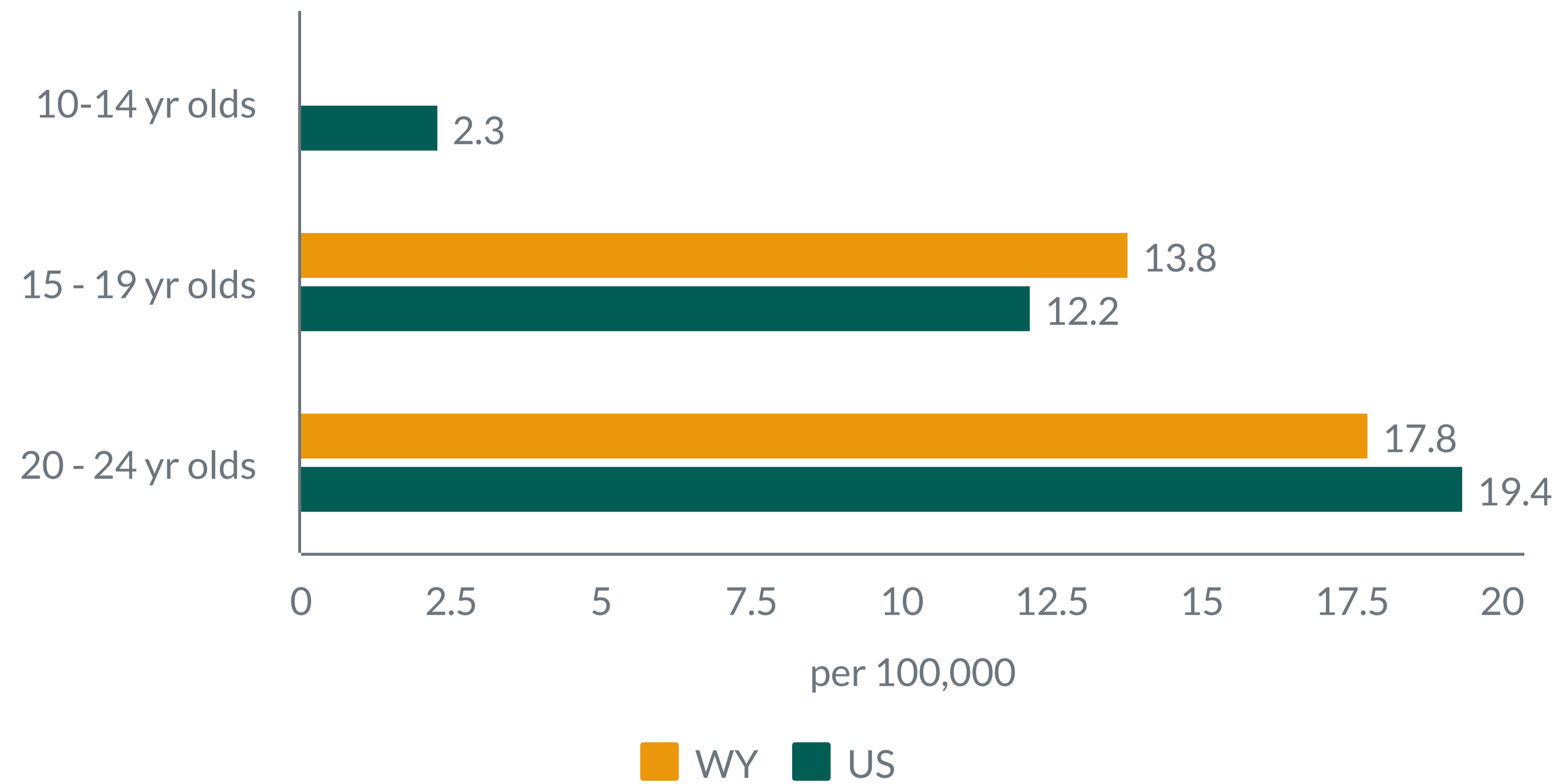


The Wyoming Adolescent and Young Adult (ages 10-24 yrs) Motor Vehicle Mortality Rate has been decreasing over the past decade.



Comparison to the U.S. Rate

Wyoming (2011-2021) Compared to U.S. (2020)^ Adolescent and Young Adult Motor Vehicle Mortality Rates by Age Group^{1,3}



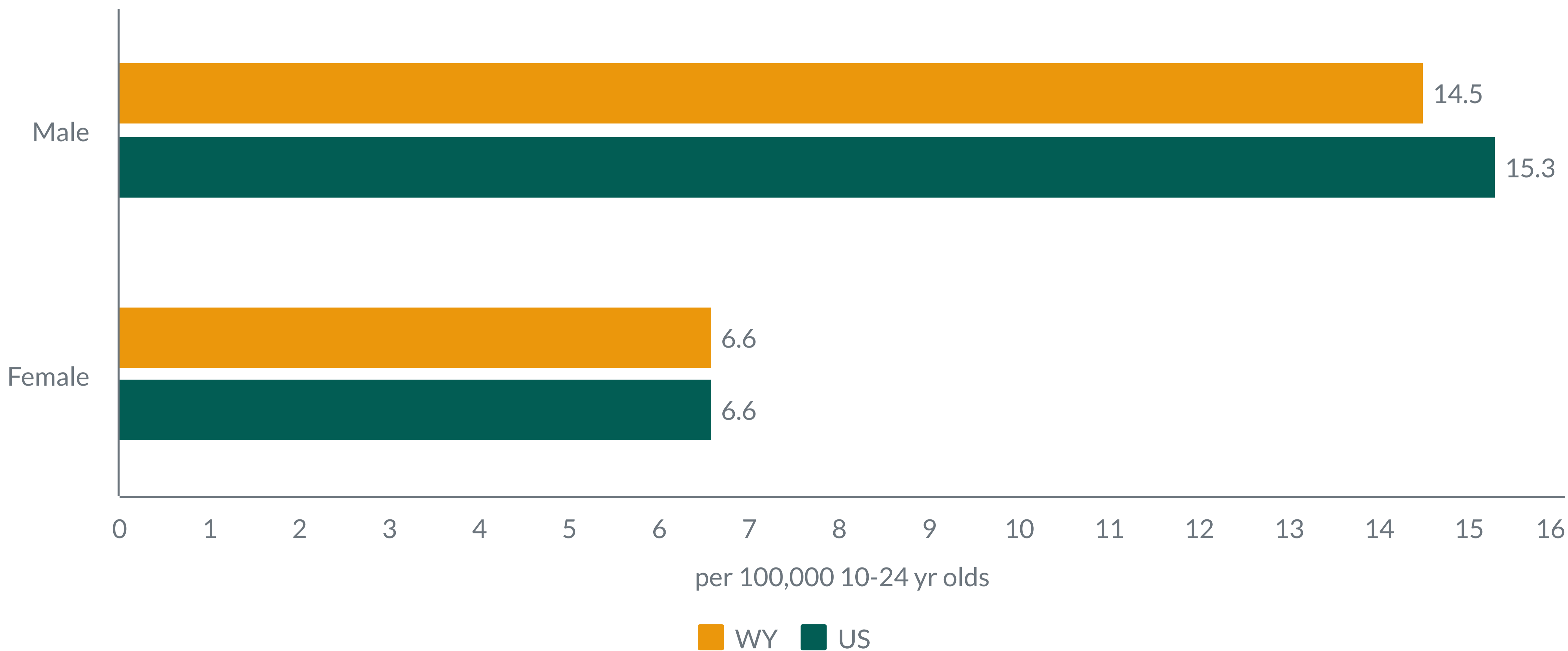
Rates among 10-14 year olds in WY are suppressed due to small numbers.

^U.S. rates are from CDC WISQARS. 2021 data are not yet available at the national level. Wyoming rates are calculated from Wyoming Vital Statistics Data, and data are combined over multiple years for a better comparison because of small numbers in individual years.

In Wyoming and the U.S., the motor vehicle mortality rate was **highest among 20-24 year olds.**

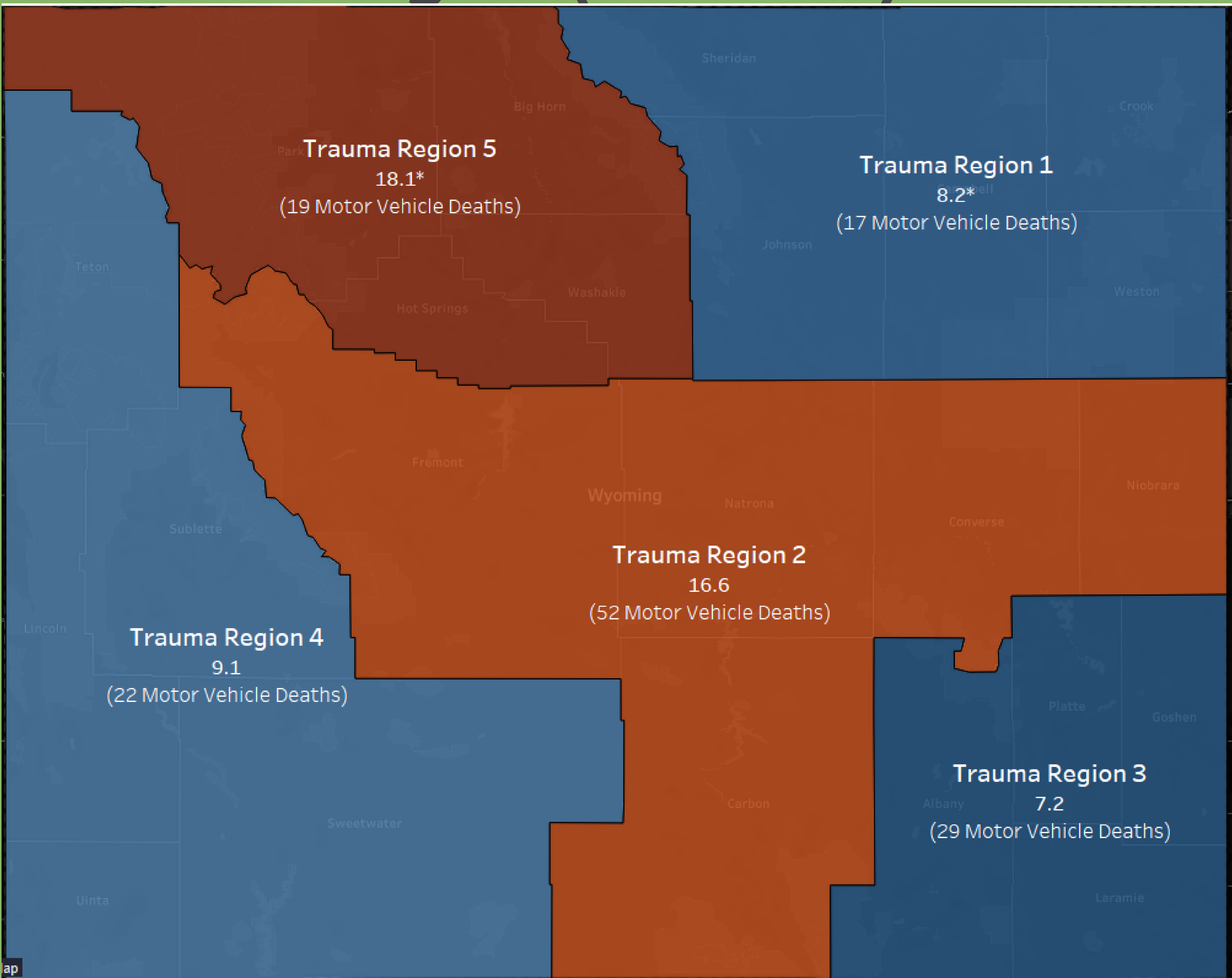
In **Wyoming**, the motor vehicle mortality rate for **15-19 year olds** was **higher** than the U.S. rate, and has been continuously higher over the past decade.⁴

Wyoming (2011-2021) Compared to U.S. (2020)^ Adolescent and Young Adult Motor Vehicle Mortality Rates by Gender^{1,3}



Adolescent and Young Adult motor vehicle mortality rates are higher among males compared to females in Wyoming and the U.S.

Wyoming Adolescent and Young Adult Motor Vehicle Mortality Rate (per 100,000 10-24 yr olds) by Trauma Region (2011-2021)³



* interpret with caution due to small numbers

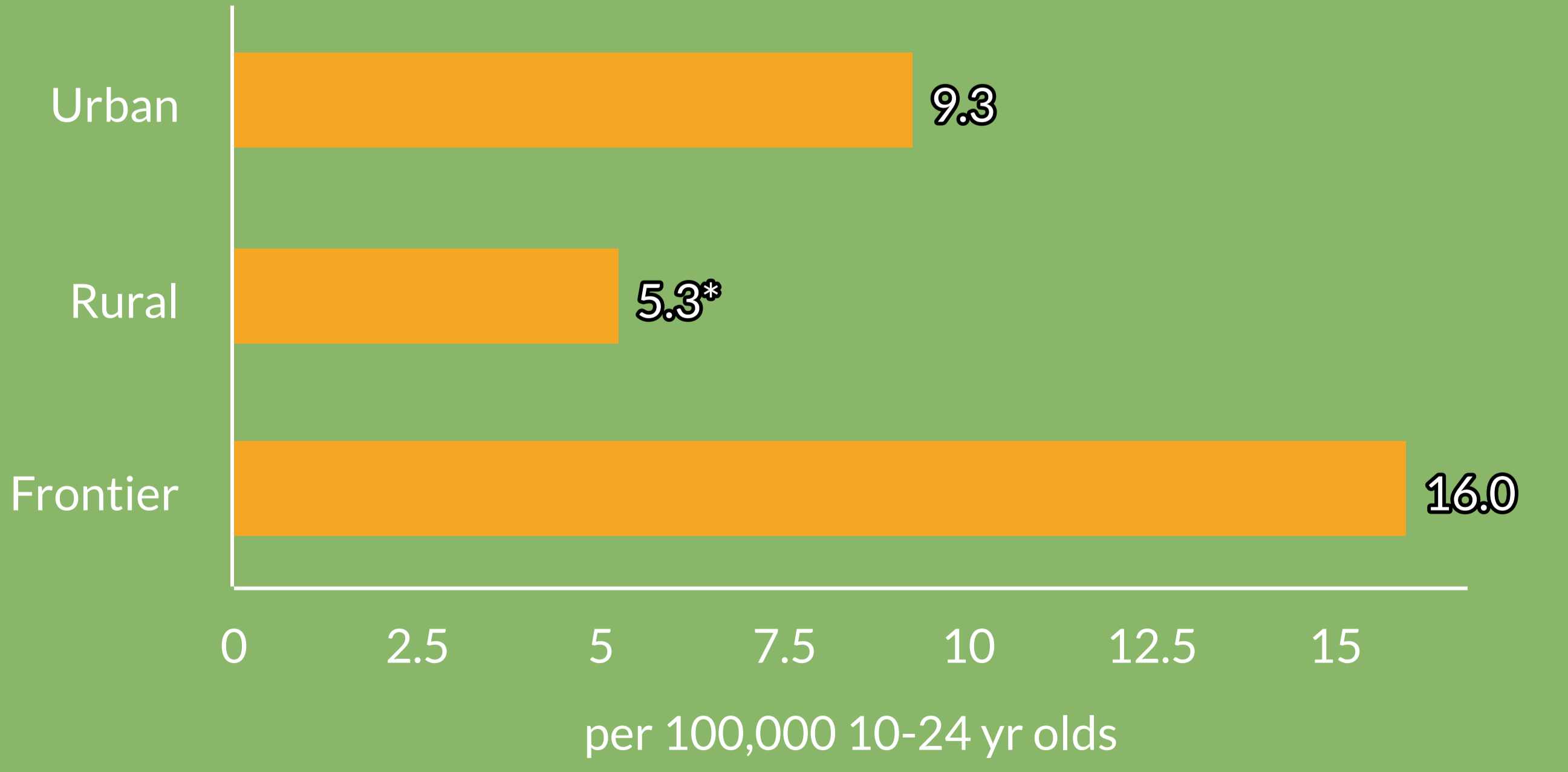
Between 2011 and 2021, Trauma Region 5 had the highest motor vehicle mortality rate among 10-24 year olds (18.1/100,000) followed by Trauma Region 2 (16.6/100,000). Trauma Region 3 has the lowest vehicle mortality rate among 10-24 year olds (7.2/100,000).

Wyoming Trauma Regions are designated by the Wyoming Department of Health's Office of Emergency Medical Services' Trauma Program. Region 4 contains of the north-western part of Fremont county, and region 1 contains of part of northern Niobrara County. The map above places the county in the region for which the majority of the county is designated.

Wyoming Adolescent and Young Adult Motor Vehicle Mortality Rate (per 100,000 10-24 yr olds) by Urban, Rural and Frontier County Designation (2011-2021)³

According to the CDC, deaths from motor vehicle crashes for drivers or passengers are 3 to 10 times higher in rural America than in urban America.⁵

Wyoming Adolescent and Young Adult Motor Vehicle Mortality Rate by Urban, Rural and Frontier County Designation (2011-2021)



In Wyoming the motor vehicle mortality rate among 10-24 year olds was **highest** in **frontier counties**, followed by urban counties, and **lowest** in rural counties.

* interpret with caution due to small numbers

In Wyoming, 17 of the 23 counties are classified 'Frontier', meaning there are less than 6 people per square mile. Four (4) counties are classified 'Rural' and two (2) are classified as "Urban". Laramie and Natrona each have a town with over 60,000 people and are considered urban.⁶

Frontier Counties: Big Horn, Carbon, Converse, Crook, Fremont, Goshen, Hot Springs, Johnson, Lincoln, Niobrara, Park, Platte, Sublette, Sweetwater, Teton, Washakie and Weston

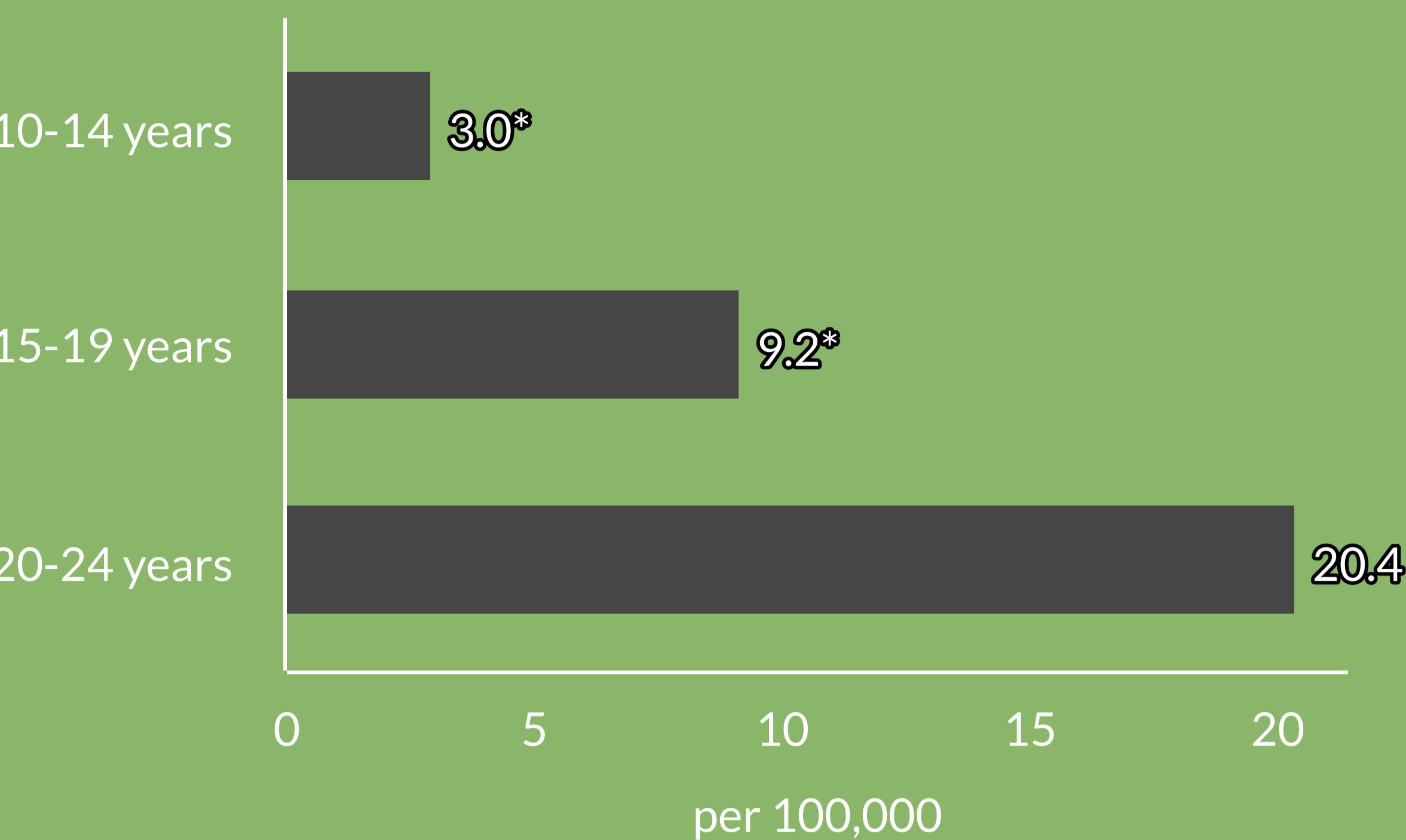
Rural Counties: Albany, Campbell, Sheridan and Uinta

Urban Counties: Laramie and Natrona

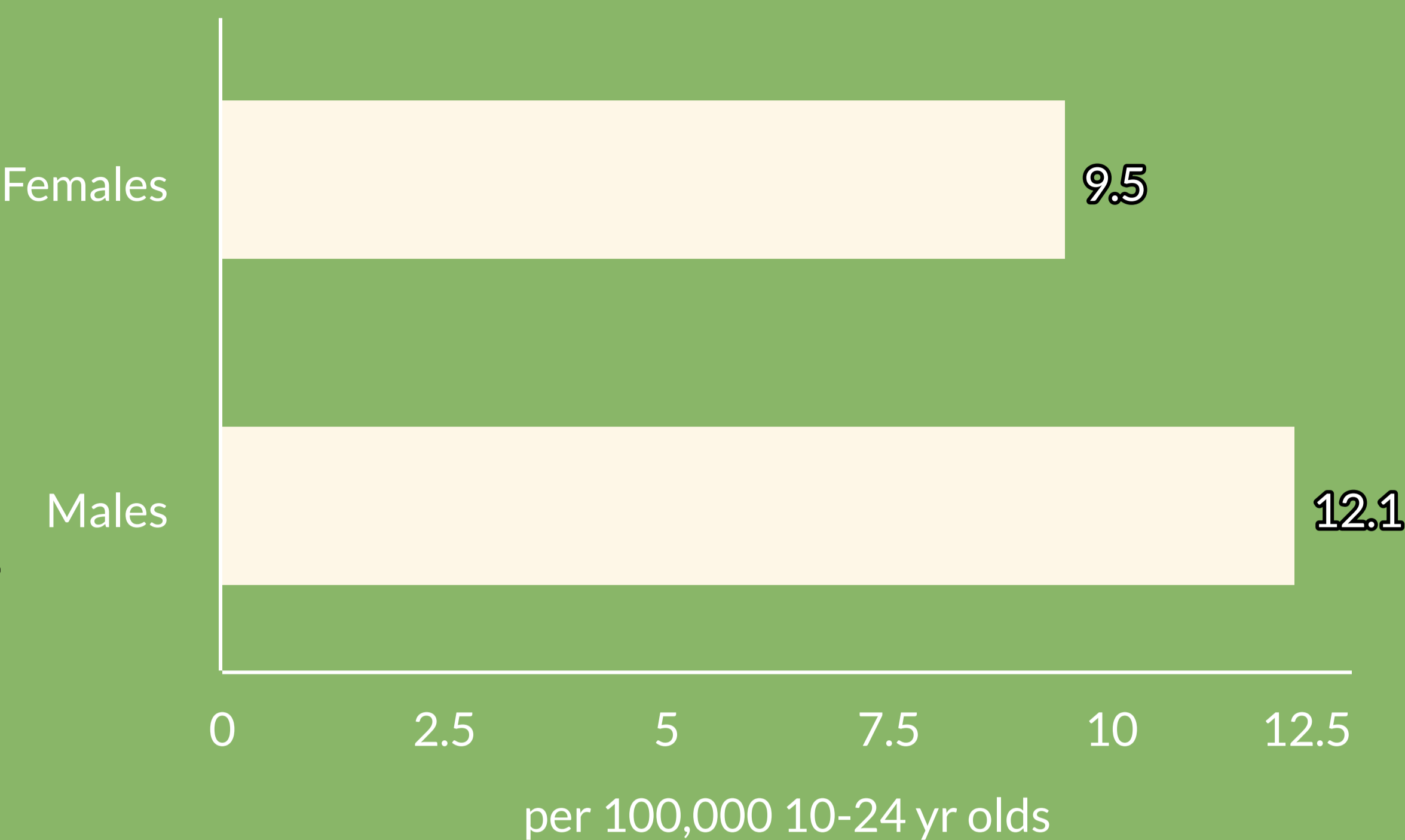


Motor Vehicle Injury Hospitalizations⁷

Wyoming Adolescent and Young Adult Motor Vehicle Injury Hospitalization Rate by Age Group (2017-2021)



Wyoming Adolescent and Young Adult Motor Vehicle Injury Hospitalization Rate by Gender (2017-2021)



* interpret with caution due to small numbers

Males in Wyoming had a higher rate of motor vehicle injury hospitalizations (12.1/100,000) compared to females (9.5/100,000) among 10-24 year olds.

Adolescent and Young Adult motor vehicle injury hospitalization rates in Wyoming were also **highest among 20-24 year olds** (20.4/100,000), followed by 15-19 year olds (9.2/100,000) and then 10-14 year olds (3.0/100,000).

Next Steps...

The Wyoming MCH Youth and Young Adult Health Program is currently working with the Texas A&M Transportation Institute's (TTI) Youth Transportation Safety Program to bring the program *Teens in the Driver Seat* (TDS) into Wyoming schools. The goals of TDS are to reduce teen motor vehicle crashes and motor vehicle related injury by reducing seven of the eight CDC teen driving risk factors.

The 8 CDC teen driving risk factors

1. Driver Inexperience
2. Teen or Young Adult Passengers
3. Nighttime Driving
4. Not Using Seat Belts
5. Distracted Driving
6. Drowsy Driving
7. Reckless Driving
8. Impaired Driving

MCH Epidemiology and the Youth and Young Adult Health Program worked together to have a seatbelt use question added to the Wyoming Prevention Needs Assessment (PNA), as well as distracted driving questions in the new Wyoming Young Adult Survey (YAS). MCH Epidemiology will continue to monitor data around adolescent and young adult motor vehicle mortality and injury, including this new measure around youth seatbelt use.

References:

1. Centers for Disease Control and Prevention (CDC). Web-based Injury Statistics Query and Reporting System (WISQARS). National Center for Injury Prevention and Control, CDC (producer). Accessed: November 15, 2022. <<https://www.cdc.gov/injury/wisqars/fatal.html>>
2. Centers for Disease Control and Prevention (CDC), Teen Drivers and Passengers: Get the Facts <https://www.cdc.gov/transportationsafety/teen_drivers/teendriv_ers_factsheet.html>
3. Wyoming Vital Statistics Service. [2008-2021]
4. National Vital Statistics System.
5. Centers for Disease Control and Prevention (CDC), Motor Vehicle Safety in Rural America <<https://www.cdc.gov/ruralhealth/MotorVehicleSafety.html>>
6. Wyoming Office of Rural and Frontier Health Unit <<https://health.wyo.gov/publichealth/rural/officeofruralhealth/what-is-rural/>>
7. Wyoming Hospital Discharge Data. [2016-2021].

Population estimates were accessed from CDC Wonder: <https://wonder.cdc.gov/>