**Life** | Tue Mar 1, 2016 10:21pm GMT

Related: [HEALTH](http://uk.reuters.com/news/health)

U.S. deaths from guns, cars and run-ins with law vary by state

BY [LISA RAPAPORT](http://uk.reuters.com/journalists/lisa-rapaport)

(Reuters Health) - Injuries that kill people across the U.S. vary widely from one state to the next, with certain regions far exceeding the national average for fatalities tied to guns and cars, a recent study suggests.

Seven states in Appalachia and the Southwest, for example, had unintentional firearms deaths roughly two to four times the national average, researchers report in the journal Injury Prevention.

At the same time, five states on the West Coast had rates of what’s known as legal intervention deaths – when police kill someone or officers are killed in the line of duty – up to 3.5 times higher than the U.S. average.

“States might have different rates of injury deaths because methods of classifying injury deaths vary by state, because some states have geographic characteristics or industries that make certain types of injury deaths more likely, or because of differences in policy and culture,” said lead study author Sara Heins, a researcher at Johns Hopkins Bloomberg School of Public Health in Baltimore.

“When a state has high death rates due to this last category, to me it highlights a target for prevention efforts,” Heins added by email.

To assess injury death rates by state, Heins and colleagues mined data from the U.S. Centers for Disease Control and Prevention for injuries in all 50 states and the District of Columbia from 2004 to 2013.

They compared average death rates in each state to national averages to discern the most unique causes of fatalities in different parts of the country.

Fires and homicides were higher than average in Michigan, for example, while machinery accidents were unusually common causes of death in Iowa.

Drowning and suicide were more typical than the national average in New Jersey, while bicycle and vehicle deaths stood out in Florida.

Nature played an outsize role in fatalities in Oklahoma and Wyoming.

Montana, South Dakota and Nebraska had unusually high death rates from motor vehicle crashes.

The states with higher than average rates of unintentional firearms deaths were Alabama, Arkansas, Kentucky, Louisiana, South Carolina, Tennessee and West Virginia. None of these places are among the 18 states with legislation on the safe storage of guns, also known as child access prevention laws, the researchers note.

States with unusually high rates of fatalities involving interactions with police were California, Oregon, Nevada, New Mexico and Utah. While these data on these deaths isn’t always accurate, one previous study of fatalities from 2010 to 2014 found these five states accounted for almost one third of so-called legal intervention deaths in the U.S. even though they only make up 16 percent of the population.

Often, injury rates are relatively high compared to the national average but still account for a small number of fatalities, the researchers note.

Other limitations of the study include the potential for states to inconsistently record data on causes of injuries or fatalities as well as overly broad categories for some types of deaths, the authors add. For example, drug overdose records don’t distinguish between prescription medications and illegal narcotics.

Still, the data may offer states a road map for injury or fatality prevention, said Dr. Eric Fleegler, a specialist in emergency medicine at Boston Children’s Hospital who wasn’t involved in the study.

Some states, for example, have high gun ownership and high gun fatality rates, while other states with a lot of gun owners don’t have as many deaths related to firearms, Fleegler said by email.

“Even though there may be high levels of gun ownership in your community, it doesn’t mean that you can’t make efforts to prevent deaths,” Fleegler said.

This kind of regional variation in injury or death rates can highlight the idea that the risk of harm from different sources can depend on where people live.

“That’s a call to public health and medical organizations to say, 'hey, we need legislation and campaigns that speak to this,'” Fleegler added.

SOURCE: [bit.ly/1LTfFHc](http://bit.ly/1LTfFHc) Injury Prevention, published online January 24, 2016.