Halloween Means More Pedestrian Deaths - But Don't Freak Out About Absolute Risk

By Hank Campbell — October 31, 2018

The laws of probability should lend themselves to the notion that if you have a lot more people walking, often in dark costumes, and just as many people driving, and more people drinking than would otherwise occur on a Wednesday, pedestrian fatalities go up. And they do.

Yet in that context, Halloween in modern times is actually a really safe evening. New analysis of National Highway Traffic Safety Administration data shows it is more dangerous for pedestrians on Halloween, as common sense suggests. But so slightly it isn't a concern. The number of pedestrian fatalities on Halloween during a 42-year study period, from 1975 to 2016 and between the hours of 5 p.m. and 11:59 p.m., were higher than during the same hours one week earlier (October 24th) and one week later (November 7th).

During that period, 608 pedestrian fatalities happened on Halloween evenings versus 851 total for the two evenings each year used as the control - but we are talking about a population of up to 40 million children, even if we limit Halloween pedestrians to those between ages 4 and 12. And the 608 over four decades include pedestrian adults and will in later analyses include blips like the terrorist who plowed down a bike path in New York City last year [1] and killed 8 people.

That's not a reason to go alarmist and start demanding that Halloween be limited to daylight hours, nor should the American Academy of Pediatrics start advocating that kids not be allowed to trick-or-treat without a suit of bright orange armor. It is instead simply about understanding relative and absolute risk, which more people need to think about - avoid the scary narrative that mainstream media loves, and that suspect academic journals trolling for media attention love to produce, just because the statistical significance was inferred from $P$ values less than 0.05.

So yes the relative risk is slightly higher but that is only four more pedestrian deaths each year, on
average, in a population of 330 million. And the analysis was a long period during which the risk went down. Each decade those numbers declined. The absolute risk most recently was almost half what it was in the first decade of the analysis.

Going out without parents to get some free candy with friends is a good activity during a period when only 3 percent of kids are meeting what are admittedly unrealistic [2] activity level guidelines. The last thing we need is calls to limit activity even more.

Of course, no parent wants their child to be a statistic, so be more cautious with 4-year-olds than you would those ages 8 or 12, but there is no reason to heed calls to have more government traffic cameras fining drivers [3], banning street parking or spoiling costumes by making them all identical, glowing construction worker vests.