

WellBeing International

WBI Studies Repository

4-12-2021

Do School Closures Cause a Surge in Dog Bites to Children?

Harold Herzog

Follow this and additional works at: https://www.wellbeingintlstudiesrepository.org/hw_onehealth



<https://www.psychologytoday.com/us/blog/animals-and-us/202104/do-school-closures-cause-surge-in-dog-bites-children>

Do School Closures Cause a Surge In Dog Bites to Children?

Will reopening schools reduce the number of kids bitten by dogs?

Posted April 12, 2021



Source: Photo by Joerg Huettenhoelscher

My son Adam is a trauma nurse. I recently asked him how many children are treated for dog bites at the ER where he works. "It happens all the time," he said. "Usually, it's a young kid or a toddler. Usually, they are bitten on the face, and usually, the dog is the family pet." Then he tells me the dog is as likely to be a lab or golden retriever as a pit bull. He says the parents often blame themselves. They think they were not paying enough attention to their kid, and some of them are worried about what to do with the dog.

Adam's experiences in the ER ring true. In the United States, 2.5 million children are bitten by dogs each year. [Studies have found](#) that young children are at the greatest risk and their injuries typically involve bites to the face, head, and neck.

Pets and the Pandemic Blues

In the wake of COVID lockdowns, dog adoptions jumped nearly 50 percent in parts of the United States. The pet products industry pushes the idea that getting a pet will alleviate loneliness and depression caused by the pandemic.

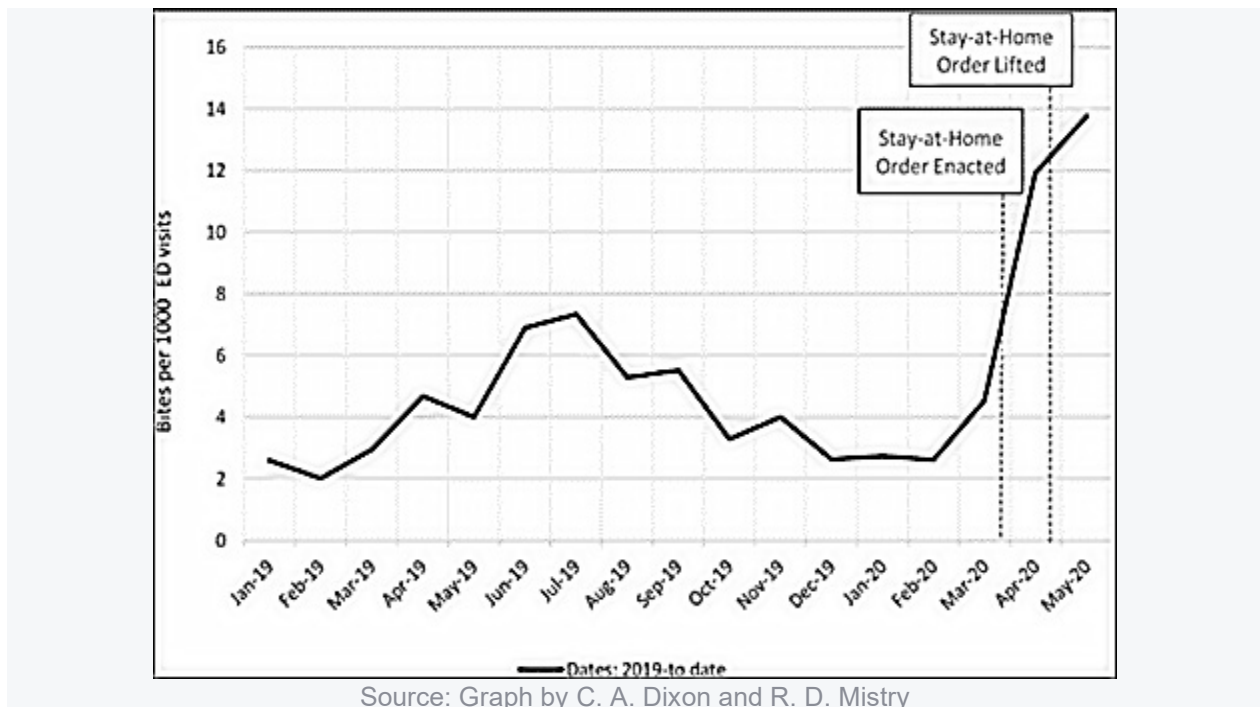
(See [How The Human-Animal Bond is Improving Lives During COVID-19](#) .)

Many people who acquired a pet in the wake of COVID-19 stay-at-home orders are happy to have a companion animal in their lives. But life with a “pandemic pet” is not always sweetness and light. Jennifer Applebaum and her colleagues found that more than half of the 2,254 [pet owners they studied](#) experienced some type of difficulty or stressor during the pandemic related to having a pet. And the psychological benefits of pet ownership are routinely exaggerated by the industry marketing departments. For example, [a new study](#) by Tufts University psychologist Megan Mueller and her colleagues reported that having a pet during the pandemic had no impact on loneliness in teenagers.

There is now evidence of another potential problem with pet ownership during the pandemic—surges in dog attacks on children.

An Epidemic of Dog Attacks on Children in Colorado

[A study](#) by Drs. Cinnamon Dixon and Rakesh Mistry examined the number of kids treated for dog bites in the emergency department at Children’s Hospital in Aurora, Colorado. This graph shows the number of bites per 1,000 ER visits between January 2019 and May 2020. It reveals two important trends. First, dog bites are seasonal. In 2019, before the pandemic hit the United States,



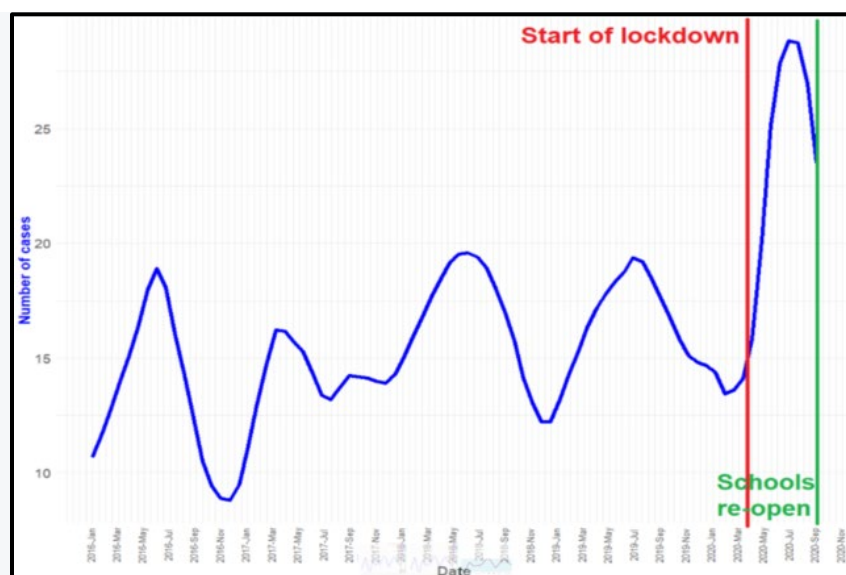
more kids with dog bites were admitted to the emergency department in the summer months than in the fall and winter.

The second trend is more important. On March 26, 2020, the governor of Colorado issued a stay-at-home order. Almost immediately, dog bite injuries in the emergency department began to shoot up. By May, the number of kids seen for dog bites had more than tripled compared to May 2019. When their data collection ended at the end of May, the number of children bitten was still heading north steeply. But would this trend continue upward or would it, like the seasonal flu, peter out?

The Liverpool Emergency Department Study

This question was answered by a research team headed by John Tulloch at the University of Liverpool. Like the Colorado investigators, they tracked the number of kids treated for dog bites in a hospital emergency department before and after the spring 2020 lockdown. Their study, however, covered a longer period of time than the Colorado study. (You can read the full text of the study [here](#) .)

Between January 1, 2016 and September 2020, 919 dog bite cases were seen in the emergency department in Liverpool's Alder Hey Children's Hospital, one of Europe's largest pediatric hospitals. This graph shows the number of emergency department visits each month for the treatment of dog bites. As in Colorado, dog bites in the UK are a seasonal phenomenon.



Source: Graph by John Tulloch

In Liverpool, dog bites were most common in the spring and summer, with about 20 cases per month, dropping to a dozen or so in the late fall and winter.

On March 26, 2020, the British government instituted lock-downs and school closures. Within a month, dog attacks on children began to skyrocket. In the previous four years, on average 18 kids were taken to the hospital during July for dog bite injuries. In July 2020, however, 44 kids with dog bites showed up in the Alder Hey Hospital emergency department. Further, the proportion of all emergency department attendances quadrupled, and more than one in 100 attendances were due to dog bites.

The researchers also found sex differences in the patterns of dog bites. They wrote, “ COVID-19 public health measures were independently associated with a 66% increase in dog bite attendance rates in females and 78% increase in males.”

Why Did COVID-19 Cause a Surge in Dog Bites to Children?

The Liverpool researchers suggested several factors that may have caused the sudden increase in dog bites.

- During the lockdown, kids were exposed more to dogs in close settings because they were spending more time indoors.
- The behavior of dogs may have been affected by changes in their normal routines associated with the lockdown.
- During the peak of summer, government stay-at-home restrictions were relaxed. Children began to spend more time outdoors, which may have caused them to come into contact with dogs that were not their family pets.
- The impulsive acquisition of “pandemic puppies” and the closure of dog behavior training facilities and classes could have resulted in more poorly socialized dogs living around children.

Dog Bites and School Reopening

In the United States, there is no national policy dictating when schools should close down or reopen. Whether kids can go to school is determined at the state, city, and county levels. This is not true in the UK where the government opened schools on September 1, 2020. Tulloch and his colleagues attribute

the decline in the number of children bitten by dogs to the easing of the lockdowns and the reopening of schools. They wrote, “ August and September saw declining dog bite (emergency department) attendances and the percentage of attendances due to dog bites lowered, both measures returned to the normal range in September coincident with schools reopening.”

As John Tulloch wrote to me in an email, subtle factors can influence changes in the frequency of dog bites. But I suspect the researchers are correct in linking the decline in bites they observed to the reopening of schools. If so, the risk of being bitten by a dog is a surprising addition to the list of reasons for kids to return to school as soon as possible.

Facebook image: Helen Sushitskaya/Shutterstock

References

Tulloch, J. S., Minford, S., Pimblett, V., Rotheram, M., Christley, R. M., & Westgarth, C. (2021). Paediatric emergency department dog bite attendance during the COVID-19 pandemic: an audit at a tertiary children’s hospital. *BMJ Paediatrics Open*, 5(1), e001040.

Dixon, C. A., & Mistry, R. D. (2020). Dog bites in children surge during coronavirus disease-2019: a case for enhanced prevention. *The Journal of pediatrics*, 225, 231-232.

Mueller, M. K., Richer, A. M., Callina, K. S., & Charmaraman, L. (2021). Companion animal relationships and adolescent loneliness during COVID-19. *Animals*, 11(3), 885.

Applebaum, J. W., Tomlinson, C. A., Matijczak, A., McDonald, S. E., & Zsembik, B. A. (2020). The concerns, difficulties, and stressors of caring for pets during COVID-19: Results from a large survey of US pet owners. *Animals*, 10(10), 1882.