**Study Summary**

*The delayed effect of wildfire season particulate matter on subsequent influenza season in a mountain west region of the USA*

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**Why was this study conducted?**

Summer wildfires in the western US are becoming more common. This results in more air pollution in the summer. PM2.5 is an air pollutant that comes from wildfires. PM2.5 can cause lung infections, worsening asthma, and hospital stays and ER visits. This study looked for a relationship between PM2.5 from summer wildfires and the number of cases of wintertime flu.

**What was done?**

The study took place at Montana State University and the University of Montana. The study included 51 Montana counties. Flu data came from the Montana Public Health Department. PM2.5 data came from air quality stations and satellites.

**What was found?**

When there were higher levels of PM2.5 from summer wildfires, there were more cases of flu the following winter.

**What do the results mean?**

PM2.5 data may help predict flu outbreaks and help public health agencies increase the number of people who get a flu vaccination. Adding more air quality stations would help scientists learn how air pollution affects lung diseases. His study did not look at social or demographic data, how school closings affect flu outbreaks, vaccination rates, flu strains, or access to health care. Future studies should look at what causes the flu virus and what factors increase the risk of catching the flu.

**Appreciation:** The authors would like to acknowledge the support of the National Institute of General Medical Sciences of the National Institutes of Health (NIH) and the Office of the Director, NIH.

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