
A Breath of Fresh Air: Confluence Health Teams Work in Wide Variety of Areas to Improve Care for Community to Combat Wildfire Smoke

North Central Washington: As the weather turns warmer and drier, every resident of North Central Washington knows that fire season is just around the corner along with its unfortunate cousin: wildfire smoke. As the number of fires and the severity of the smoke have increased, both from local fires and others further afield, various departments and teams at Confluence Health have been working to care for the community to help mitigate the health effects.

“As wildfires become more common in North Central Washington, it is important for us to prepare for the known health effects of wildfire smoke,” commented Dr. Bindu Nayak, an endocrinologist and the co-medical director of health equity at Confluence Health.

With the incidence of wildfires increasing, Dr. Nayak and fellow Confluence Health physician Dr. Saba Lodhi, who specializes in pulmonology, were recently asked by the American Medical Association (AMA) to contribute to [an article](#) discussing climate change, the affect it has on fires and smoke, and how the public can best care for their health. The article was part of a series called *What Doctors Wish Patients Knew* that aims to provide a space where physicians share what they want patients to understand about today's healthcare headlines.

In the article, Dr. Lodhi discussed how the impact on public health comes “in two main ways: By changing the severity of existing health problems and by creating new unanticipated health problems.” The changes in temperature, along with air and water pollution, can have negative impacts on public health by increasing heat-related illnesses and cardiovascular diseases, and even the transmission of infectious diseases. One area of particular concern, which is of little surprise to anyone who has tried breathing on particularly smoky days, is the impact on the lungs.

“Exposure to this particulate matter [from wildfire smoke] increases respiratory and cardiovascular hospitalizations, clinic and emergency department visits, and medication dispensations for asthma and COPD,” added Dr. Lodhi.

“Children are more sensitive to the effects of wildfire smoke and children with asthma are one of the most vulnerable groups with regards to wildfire smoke exposure,” continued Dr. Nayak. “From our hospital data, we observed that Hispanic children with asthma in our community were affected with higher number of emergency department visits due to breathing problems during the wildfire season. We know that addressing health inequities proactively can help tremendously. For example, we saw that proactive work with promoting increased vaccination for the Latino community in North Central Washington helped to eliminate the disparity in COVID-19 hospitalizations locally that had occurred early during the pandemic. We want to work proactively to address the inequity for children with asthma during wildfire season. Preparing families of children with asthma by giving them steps that they can take to protect their children from the harmful effects of wildfire smoke can make a huge difference for them and prevent breathing problems when wildfire smoke causes poor air quality again in our region.”

In recognition of this identified need and health inequity, Confluence Health launched a pediatric asthma disparity action project to address this concern for asthma and restrictive airway disease (RAD) patients to maximize their health by giving education and an asthma action plan to every child with these lung conditions, and their parents, to help them to better prepare for wildfire season, know the risks, and, most importantly, know how to be as safe as possible. The project sought to standardize developing action plans at regular asthma visits and medication reviews, provide

education to patients through both electronic medical records and printed booklets in both English and Spanish, and to share this and more education on wildfire smoke action plans to not only other areas of outpatient care at Confluence Health, but to other healthcare and community organizations as well.

“To date, this project has been very successful as we have started to develop these action plans by putting pen to paper and outlining what can be done, while also getting feedback along the way on how to improve,” explained Dr. Ellen Mateo, a pediatrician at Confluence Health and one of those on the project team. “We have also reached out to community organizations, such as CAFÉ and local health fairs, as a part of our education efforts. Additionally, we have made a concerted effort to regularly follow up with asthma patients to keep their plans up to date and their asthma under control.”

While much has been accomplished, Dr. Mateo added that there was still much left to be done. Among other goals, the team hopes to integrate and expand on the education available digitally to patients as well as continuing to educate other departments across the healthcare system on how to best follow up and help patients presenting with lung conditions. They also hoped to finish their initial trial of the asthma and wildfire smoke action plans and, taking the lessons learned and feedback received, refine the process before spreading it to other areas of Confluence Health. Though much is left to be done, the team knows that, especially for our region, this work and improvement is vital.

“Wildfire smoke can be very hazardous, especially to the young, elderly, and those with lung disease,” remarked Jill Gustafson, a pediatric outpatient case manager at Confluence Health and another member of the ongoing project. “There are ways to prepare ahead of time to minimize and control its negative impacts on your family’s health. One of the most important steps is to contact your doctor’s office for an appointment to review and manage your lung health before illness or smoke strikes. Be proactive. You can control your asthma, so don’t let it control you!”

In addition to working with your healthcare provider to review your care plan, there are several online resources where patients or anyone concerned about the healthcare effects of smoke and wildfires can learn more. AirNow, home of the U.S. Air Quality Index, is an excellent resource for monitoring air quality in your zip code and can be found at www.AirNow.gov. The American Lung Association, founded originally in 1904 to combat tuberculosis, also operates www.Lung.org which has a wide array of information in multiple languages to learn more about lung health and how to best protect airways. On the local front, the Chelan-Douglas Health District website at www.CDHD.wa.gov provides information on wildfire smoke resources in the area, including information on how to make or get air filters for your home, masks, or other methods to mitigate the risk and be prepared.

About Confluence Health

Confluence Health serves the largest geographic region of any healthcare system in Washington State, covering over 12,000 square miles of Okanogan, Grant, Douglas, and Chelan counties. Confluence Health is one of only two locally-lead healthcare systems in the state with the purpose of maintaining availability and access to high-quality, cost-effective healthcare services for North Central Washington. The Confluence Health Board of Directors provides governance for Confluence Health and includes nine community board members and six physician board members.

For More Information

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