



## A CUP OF HEALTH WITH CDC

### *Occupational Asthma*

*Asthma Mortality Among Persons Aged 15-64 Years – United States, 1999-2015*

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*[Announcer] This program is presented by the Centers for Disease Control and Prevention.*

[Dr. Kathleen Dooling] Welcome to *A Cup of Health with CDC*, a weekly feature of the *MMWR*, the Morbidity and Mortality Weekly Report. I'm your host, Dr. Kathleen Dooling.

Deaths from asthma in adults have decreased by about 10 percent over the past 15 years, but the breathing disorder still affects millions of people in the U.S., including in the workplace.

Dr. David Weissman is with CDC's National Institute for Occupational Safety and Health. He's joining us today by phone to discuss asthma in the workplace. Welcome to the show, David.

[Dr. Weissman] Thank you. It's good to be here.

[Dr. Dooling] David, how many people in the U.S. have asthma?

[Dr. Weissman] Asthma's a really common disease. It affects about eight percent of people in the U.S. That works out to be about 24 million people altogether—18 million adults and around six million kids.

[Dr. Dooling] What are the symptoms?

[Dr. Weissman] People with asthma frequently have wheezing, they frequently complain of chest tightness or the feeling that they can't get enough air into their chest. Sometimes they have problems with coughing and they also can have problems with shortness of breath, for example, if someone goes out to exercise in cold air. One thing that's unique about symptoms in asthma is that they typically occur in attacks, and people with asthma can often be fine between those attacks. Another thing about asthma that's unique is that those attacks of asthma, those symptoms, can be triggered by things that wouldn't affect people without asthma. For example, people with asthma can be set off by things like second-hand smoke or cold air or by respiratory infections or, if they have allergies to things like cats or house dust, they can also be set off by those.

[Dr. Dooling] What causes asthma?

[Dr. Weissman] That answer can be different for different people. In many people, allergy plays a really important role in asthma and allergy is when people breathe in things like pollens or house dust or a pet allergen and they have an immune response to it, an allergic immune response, and then, when they're re-exposed to those things, they can develop chronic allergic inflammation in the airways and that can block up the airways. It can cause the airways to swell and plug up with mucous and can cause smooth muscle contraction in the airways. And all of those things obstruct the airways and result in the symptoms that we talked about. Another thing

that can set off asthma, even without allergy, are exposure to respiratory irritants like chlorine gas exposures at work, either low level exposures over time or one big exposure can set off asthma.

[Dr. Dooling] What is work-related asthma?

[Dr. Weissman] Work-related asthma is when someone who never had asthma before develops it because of an exposure at work or when someone who already has asthma gets attacks triggered by exposures at work. In the first situation where someone never had asthma before and then they develop it because of a work exposure, it can either be because they develop an allergy to something at work or because they have a big irritant exposure, like in an industrial accident, that results in asthma. And then, people who already have asthma and get attacks triggered by work can be triggered by things like vapors or gasses or dusts or fumes that are encountered in industrial settings, but people can also be set off in non-industrial settings by things like perfumes or second-hand smoke.

[Dr. Dooling] What measures have been most effective at preventing or controlling work-related asthma?

[Dr. Weissman] So, the most important thing is to minimize exposures of workers to agents that can cause asthma and, if a worker becomes allergic to something at work, to remove exposure to that allergen. And a great example of that was in the 1990s and 2000s, there was an outbreak of latex allergy and latex asthma in healthcare workers who used powdered latex gloves. And since that time, we've been able to almost completely eliminate that outbreak by stopping the use of powdered latex gloves and switching to non-latex alternatives. It's also really important for people with work-related asthma to have access to good comprehensive asthma care. And that's important for anyone with asthma to work in partnership with their healthcare provider so that, if their asthma gets worse, they can communicate and step up treatment, if necessary, to stay out of hospitals and to stay out of emergency rooms because of very bad asthma.

[Dr. Dooling] Where can listeners get more information about work-related asthma?

[Dr. Weissman] Listeners can go to [cdc.gov](http://cdc.gov) and, in the search box, just type in the words "work related asthma" and that will take them to the NIOSH work-related asthma website.

[Dr. Dooling] Thanks, David. I've been talking today with Dr. David Weissman about managing asthma in the workplace.

Effective prevention measures and improvements in disease management have been the main factors in decreasing asthma-related deaths. Removing exposure to asthma-causing agents in the workplace can not only prevent asthma, but potentially save lives.

Until next time, be well. This is Dr. Kathleen Dooling for *A Cup of Health with CDC*.

[Announcer] For the most accurate health information, visit [www.cdc.gov](http://www.cdc.gov) or call 1-800-CDC-INFO.