



Health Alert Network

Tri-County Health Department

Serving Adams, Arapahoe and Douglas Counties

Phone 303/220-9200 • Fax 303/741-4173 • www.tchd.org

Follow us on Twitter @TCHDHealth

John M. Douglas, Jr., M.D. Executive Director

The pages that follow contain information critical to protecting the health of your patients and the citizens of Colorado.

HAN ADVISORY

Number of pages including cover: 3

Subject: **Advisory - Silicosis in stone fabrication workers - Oct. 2, 2019**

Message ID: 10/3/2019 10:00:00 AM

Recipients: HAN Community Members.

From: TRI-COUNTY HEALTH DEPARTMENT

Adams, Arapahoe and Douglas County, Colorado

Recipient Instructions: **Tri-County Health Department is forwarding you the attached HAN. You may have already received this broadcast if you are on the CDPHE distribution list, however, we wanted to ensure you did not miss this important information. No response is required.**

=====

You have received this message based upon the information contained within our Health Alert Network Notification System. If you have a different or additional e-mail or fax address that you would like us to use, or if you have additional questions, call 720-200-1477.

Categories of Health Alert Network Messages:

Health Alert: Conveys the highest level of importance; warrants immediate action or attention.

Health Advisory: Provides important information for a specific incident or situation; may not require immediate action.

Health Update: Provides updated information regarding an incident or situation; unlikely to require immediate action.

Info Service/Public Health Brief: Provides general information that is not necessarily considered to be of an emergent nature.

You may download a copy of this HAN from the TCHD website at
<http://www.tchd.org/259/Health-Alert-Network>



Advancing Colorado's health and protecting the places we live, learn, work and play

HEALTH ALERT NETWORK BROADCAST

MESSAGE ID: 10022019 13:30

FROM: CO-CDPHE

SUBJECT: HAN Advisory: Silicosis in Stone Fabrication Workers

RECIPIENTS: Local Public Health Agencies / IPs / Clinical Labs / EDs / ID Physicians

RECIPIENT INSTRUCTIONS: Local Public Health Agencies - Please forward to healthcare providers

HEALTH ADVISORY | Silicosis in stone fabrication workers | Oct. 2, 2019

Health care providers: Please distribute widely in your office

Key points

- Seven Colorado workers were diagnosed with silicosis, an incurable and potentially fatal lung disease, between June 2017 and December 2018. Eleven additional workers were diagnosed in California, Texas, and Washington, including two fatalities. These workers' jobs exposed them to silica dust through activities such as cutting, grinding, and polishing engineered or natural stone. Several had autoimmune diseases and latent tuberculosis infection as a result of silica exposure.
- Because public health surveillance of silicosis is limited, it is likely the disease is underrecognized among workers in stone fabrication and other industries where silica exposure occurs.
- Silicosis is preventable. These cases highlight the importance of early disease recognition in stone fabrication workers so that further exposure to silica dust can be prevented.
- Health care providers are urged to take occupational histories to determine if patients have worked in the stone fabrication industry and other industries with potential exposure, and to report cases of silicosis to the Occupational Safety and Health Administration (OSHA) and to CDPHE's Disease Reporting Line at 303-692-2700.

Background information

In January 2019, a Colorado physician specializing in occupational lung disease observed an increasing number of silicosis cases in her practice and undertook a systematic review of electronic medical records for patients she had seen during June 2017-December 2018 with a silicosis diagnosis. Seven Colorado workers were diagnosed with silicosis during that time period. Silicosis is an incurable and potentially fatal scarring disease of the lung. All had worked in the stone fabrication industry, with job duties that included polishing, cutting and grinding natural and engineered stone or dry-sweeping silica dust. Engineered (artificial) stone may contain high amounts (>90%) of crystalline silica that, when cut or polished, releases hazardous concentrations of silica dust into workplace air. Eleven additional stone fabrication workers have also been diagnosed with silicosis in California, Texas, and Washington, including two fatalities. Silicosis

was confirmed in all 18 workers by chest computerized tomography (CT) scan, lung biopsy findings, or autopsy. Many of the workers had severe, progressive disease, and some had autoimmune diseases and/or latent tuberculosis infection associated with silica exposure. One worker with severe progressive silicosis has been referred for a lung transplant evaluation.

Clusters of cases have been reported internationally among stone countertop fabrication workers, but only one U.S. case in this industry has been reported previously. Since 2012, outbreaks of silicosis have been reported among engineered stone workers in Israel, Spain, and Australia. In 2018, there were nearly 9,000 establishments with approximately 100,000 workers in the U.S. stone fabrication industry. It is likely that additional cases of silicosis among U.S. stone fabrication workers have occurred but are unrecognized. Exposure to crystalline silica dust can also cause lung cancer, chronic obstructive pulmonary disease (COPD), autoimmune diseases, and kidney disease, and is a causal factor in some cases of tuberculosis.

Employers must ensure that workers are protected from exposure to crystalline silica and must comply with federal Occupational Safety and Health (OSHA) standards. Exposure to respirable silica dust can be minimized through effective engineering controls such as wet methods and ventilation. Work practice controls, including appropriate housekeeping procedures, can be used along with engineering controls to protect employees. National Institute of Occupational Safety and Health (NIOSH)-approved respiratory protection may be provided to employees if exposures cannot be reduced with engineering controls and work practices.

Recommendations / guidance

- Obtain an occupational history from patients, and ask specifically about exposure to silica dust and about work in industries where silica exposure can occur. Some important industries include:

Stone fabrication	Foundry work	Brick and stone cutting
Concrete mixing and cutting	Construction	Hydraulic fracturing
Sandblasting	Mining	Pottery manufacturing
- If a patient's work history indicates possible exposure to silica dust, screening for silicosis will require a chest X-ray with a specialized interpretation called a B-reading for pneumoconiosis (dust disease of the lung).
- Additional diagnostic testing is often needed. Information on medical screening for silicosis is available from the Silicosis Center at National Jewish Health (877-255-5864).
- Health care providers who diagnose patients with silicosis and other silica-related conditions are encouraged to report these cases for public health follow-up and coordination with OSHA.

For more information

- Information about silicosis: <https://www.cdc.gov/niosh/topics/silica/default.html>
- MMWR article: <https://www.cdc.gov/mmwr/volumes/68/wr/mm6838a1.htm>
- For questions about medical screening for silicosis, contact the National Jewish Health Center of Excellence on Silicosis and Its Prevention at 877-255-5864.
- **CDPHE Disease Reporting Line: 303-692-2700**