SILICOSIS AMONG IMMIGRANT ENGINEERED STONE (QUARTZ) COUNTERTOP FABRICATION WORKERS IN CALIFORNIA.


Investigators describe 52 cases of silicosis, a severe, incurable lung disease, identified from 2019-2022 among engineered stone countertop fabrication workers in California.

WHAT IS ENGINEERED STONE, AND WHY IS IT DANGEROUS?
- Engineered stone (also known as quartz) is an increasingly popular material used for kitchen countertops.
- It contains very high levels of silica (>90%, compared to <30% in natural stones like granite or marble).
- Workers who cut, polish, or grind engineered stone can be exposed to hazardous levels of silica dust.

WHO WAS AFFECTED?
- 52 male countertop fabrication workers
- 51 of 52 were Latino immigrants
- Median age 45 years (IQR, 40-49)
- Median work tenure of 15 years (IQR, 10-20)
- 58% were uninsured or underinsured

WHAT WERE THE OUTCOMES?
- 20 (38%) patients had advanced disease (progressive massive fibrosis) at time of diagnosis.
- 10 (19%) patients died; median age of death was 46.
- 3 patients underwent lung transplant, with 1 fatality post-transplant.
- Delays in diagnosis occurred in 30 (58%) patients; most common initial misdiagnoses were bacterial pneumonia and tuberculosis.

WHAT CAN BE DONE?
- Clinicians should take an occupational history and maintain a high index of suspicion for silicosis in this patient population.
- Identified cases should be reported to public health and occupational safety & health authorities.
- Silicosis is preventable with reduction or elimination of silica dust exposure; improved workplace safety measures could protect workers from this serious workplace hazard.

For more information, check out the full article: Silicosis Among Immigrant Engineered Stone (Quartz) Countertop Fabrication Workers in California here.