



From Evidence to Action: Silica Regulation in California

Robert Harrison, MD, MPH
UC San Francisco
and
California Department of Public Health

Custom Countertop Solutions

Quartz
Cuarzo

Choose Your Color

A B C D
134 135 136 137

A B C D
138 139 140 141

Choose Your Edge Profile

A B C
142 143 144

A B C
145 146 147

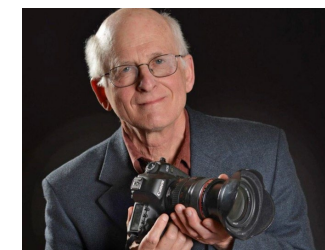
A B C
148 149 150

Ask an Associate or Visit
www.customcountertopsolutions.com

StoneMart Granite

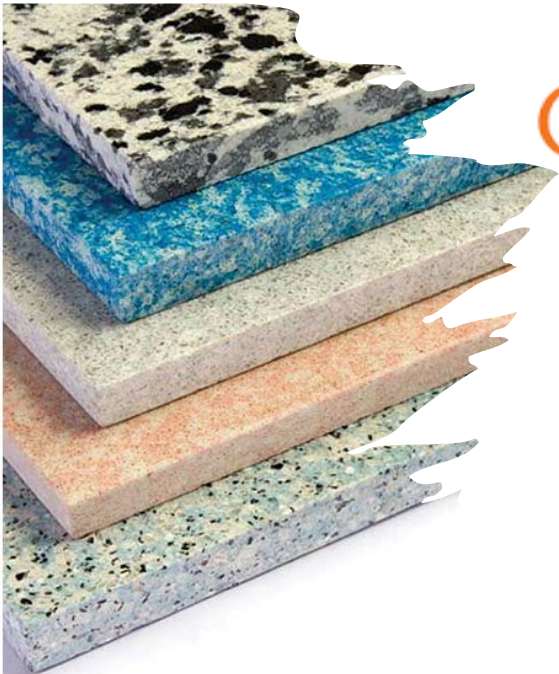
STONE
SERVICES

Backsplash Solutions



Engineered Stone: An Emerging Threat

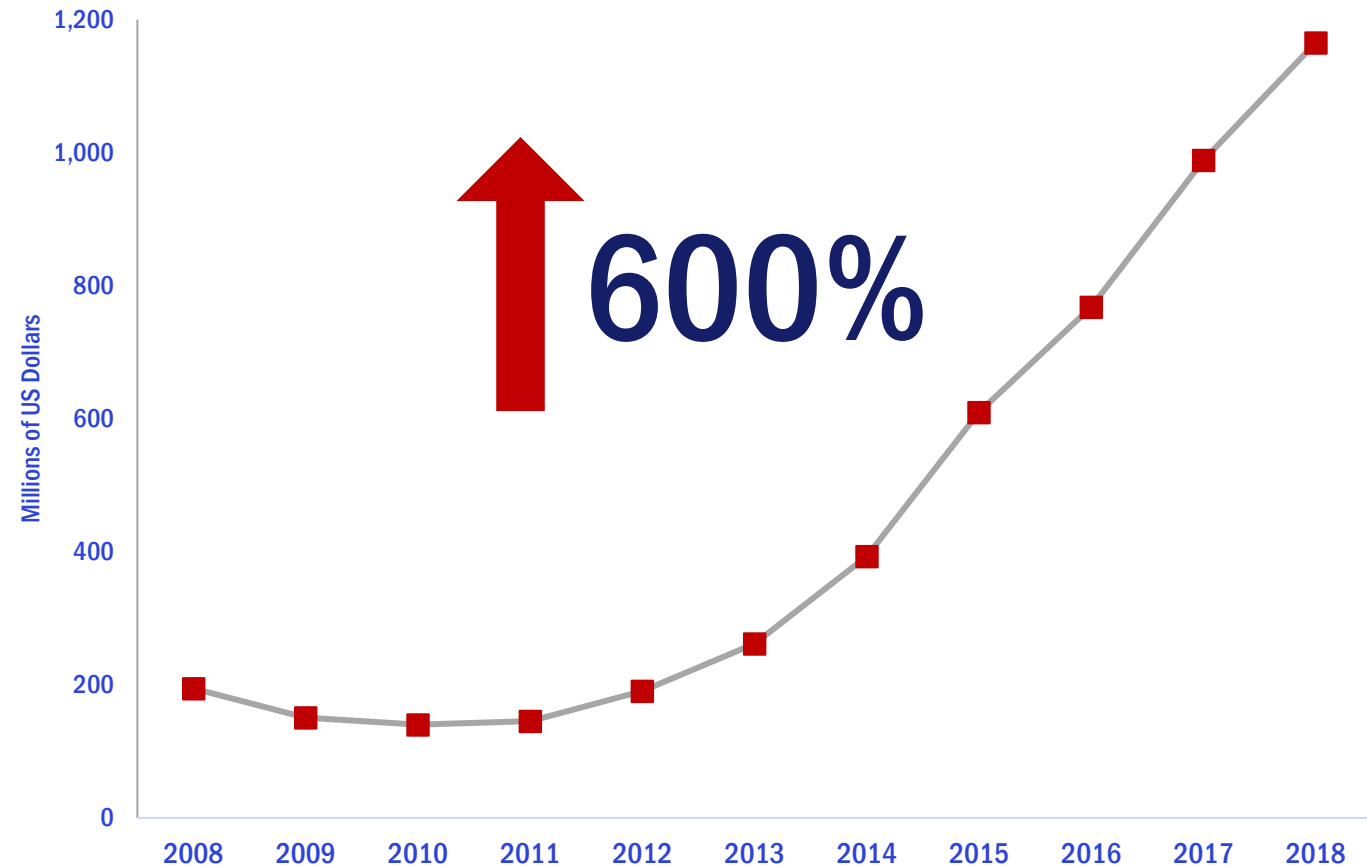
SILESTONE®
by COSENTINO



 **caesarstone®**

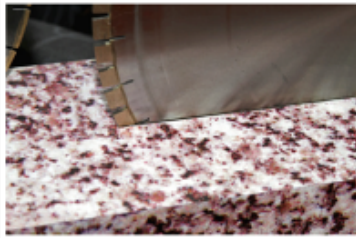


Quartz surface imports to the United States, 2008-2018



Silica Hazards from Engineered Stone Countertops

March 11, 2014 by Karen Worthington, MS, RN, COHN-S; Margaret Filios, SM, RN; Mary Jo Reilly, MS; Robert Harrison, MD, MPH; and Kenneth D. Rosenman, MD



A new engineered stone countertop product known as “quartz surfacing,” was created in the late 1980s by combining quartz aggregate with resins to create a product for use in home building and home improvement. Manufacturing of this material, including products such as CaesarStone™, Silestone™, Zodiaq™, or Cambria™ is a fast growing industry. First made in Israel and Spain, production of these materials has grown world-wide, driving quartz slab imports to the U.S. up 63% between 2011 and 2012 and 48% between April 2012 and April 2013

(Schwartzkopf 2013, StatWatch 2013). Quartz surfacing materials may contain up to 93% crystalline

Popular Quartz Countertops Pose a Risk to Workers

By BARRY MEIER APRIL 1, 2016



As sleek “engineered stone” countertops grow in popularity, safety experts are warning that workers who handle them are at particularly high risk from an old workplace hazard — silica, the mineral tied to [silicosis](#), a debilitating and potentially deadly lung disease.

The countertops are made from processed quartz, a material containing silica levels as high as 90 percent, or twice the amount found in granite.

Morbidity and Mortality Weekly Report (MMWR)

[MMWR](#)



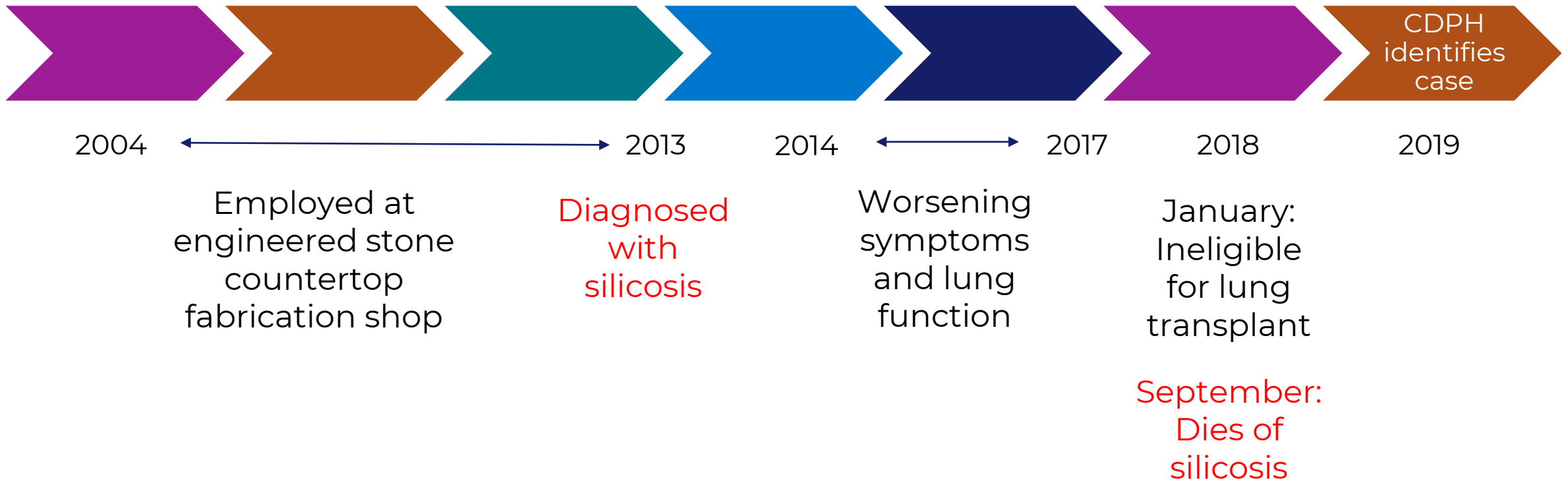
Notes from the Field: Silicosis in a Countertop Fabricator — Texas, 2014

Weekly

February 13, 2015 / 64(05);129-130

Gary K. Friedman, MD¹, Robert Harrison, MD², Heidi Bojes, PhD³, Karen Worthington, MS⁴, Margaret Filios, MSc⁵ (Author affiliations at end of text)

Sentinel California Case Identification Timeline





Morbidity and Mortality Weekly Report (*MMWR*)

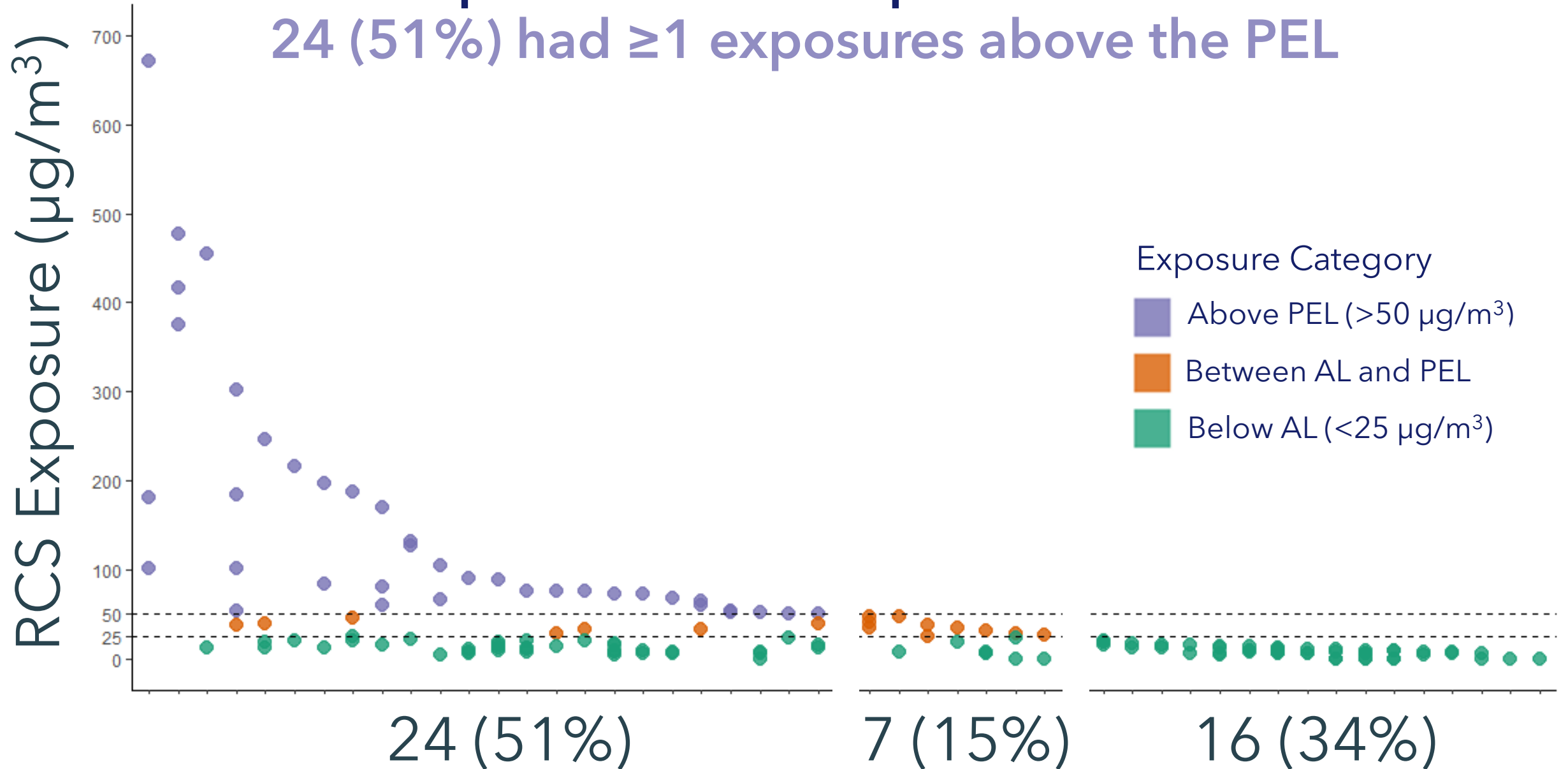
Severe Silicosis in Engineered Stone Fabrication Workers — California, Colorado, Texas, and Washington, 2017–2019

Weekly / September 27, 2019 / 68(38);813–818

[Print](#)

Cecile Rose, MD^{1,2*}; Amy Heinzerling, MD^{3,4*}; Ketki Patel, MD, PhD⁵; Coralynn Sack, MD^{6,7}; Jenna Wolff¹; Lauren Zell-Baran, MPH^{1,8}; David Weissman, MD⁹; Emily Hall, MPH⁵; Robbie Sooriash, MD⁵; Ronda B. McCarthy, MD¹⁰; Heidi Bojes, PhD⁵; Brian Korotzer, MD¹¹; Jennifer Flattery, MPH³; Justine Lew Weinberg, MSEHS^{3,12}; Joshua Potocko, MD¹³; Kirk D. Jones, MD¹⁴; Carolyn K. Reeb-Whitaker, MS¹⁵; Nicholas K. Reul, MD^{6,7,16}; Claire R. LaSee, MPH, MSW¹⁵; Barbara L. Materna, PhD³; Ganesh Raghu, MD⁶; Robert Harrison, MD³ ([VIEW AUTHOR AFFILIATIONS](#))

47 companies with ≥ 1 exposure measurements
24 (51%) had ≥ 1 exposures above the PEL



JAMA Internal Medicine | Original Investigation

Silicosis Among Immigrant Engineered Stone (Quartz) Countertop Fabrication Workers in California

Jane C. Fazio, MD; Sheiphali A. Gandhi, MD, MPH; Jennifer Flattery, MPH; Amy Heinzerling, MD, MPH; Nader Kamangar, MD, MS; Nawal Afif, DO; Kristin J. Cummings, MD, MPH; Robert J. Harrison, MD, MPH



Israel (1997-2010) & California (2010-2022)

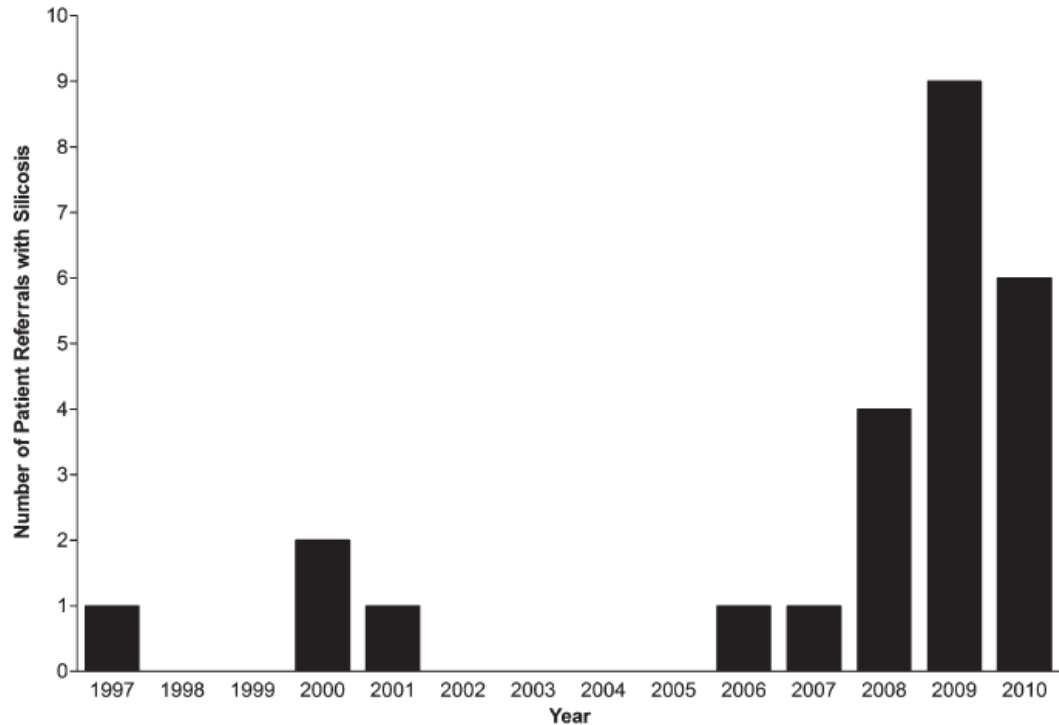
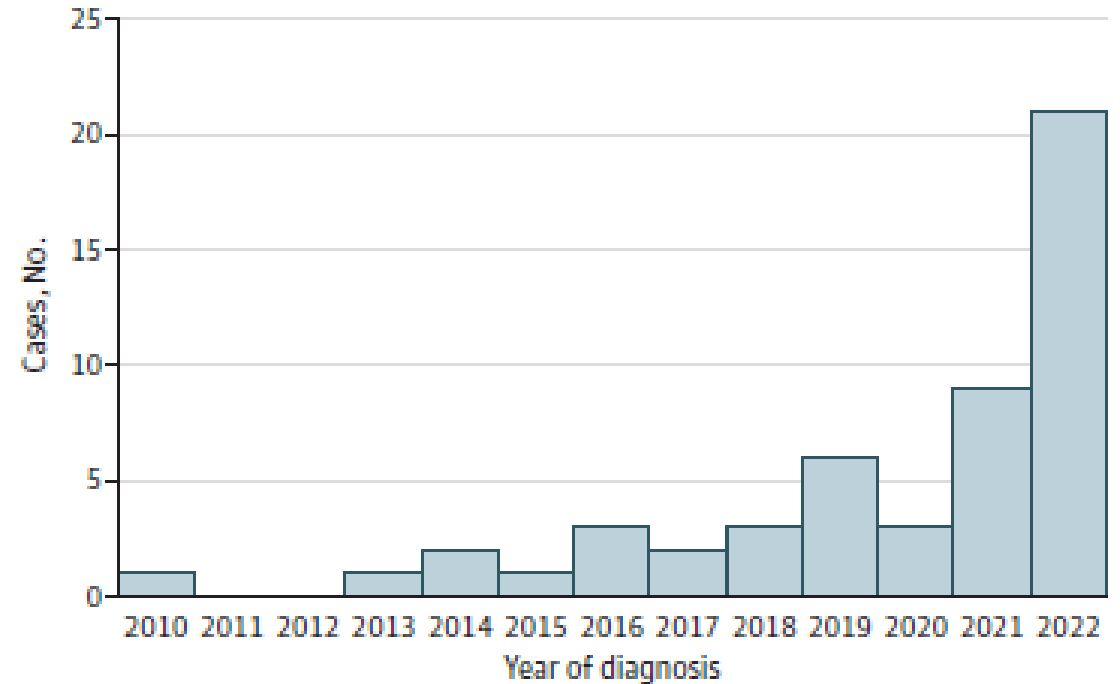


FIGURE 1. Reported cases of silicosis due to engineered stone among lung transplant candidates in Israel.

Kramer et al. *CHEST*. 2012.

Figure 1. Yearly Case Counts for 52 Patients With Engineered Stone-Associated Silicosis in California, 2010-2022



Fazio et al. *JAMA IM*. 2023.

California Engineered Stone (ES) Silicosis Surveillance Dashboard

Date last updated: 10/22/2026

671

Confirmed ES Silicosis Cases

35

Deaths

46

Median Age at Diagnosis

52

Median Age at Death

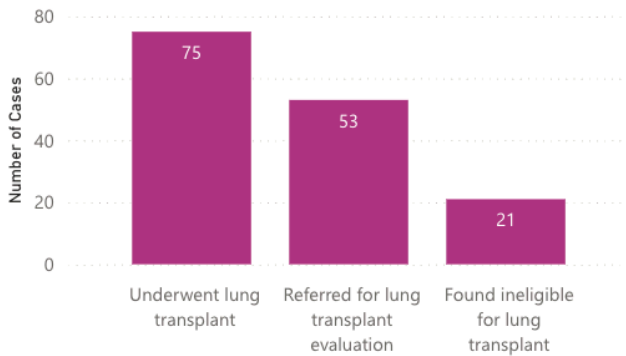
99.9%

Percent of all cases male

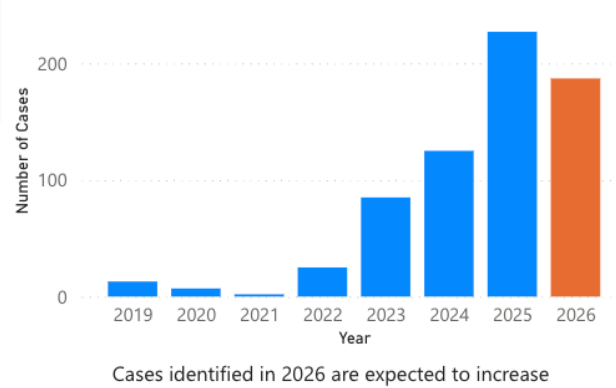
98%

Percent of all cases Latino

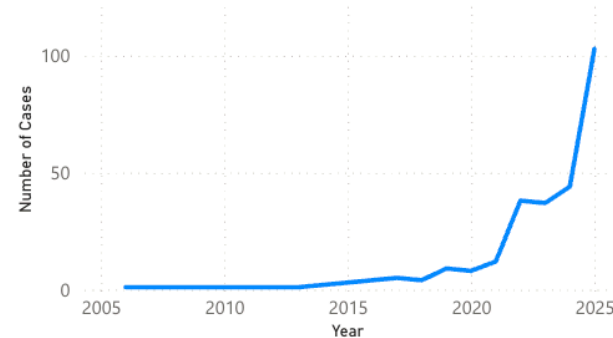
Last known transplant status for confirmed ES Silicosis cases



Year confirmed ES Silicosis cases identified by CDPH



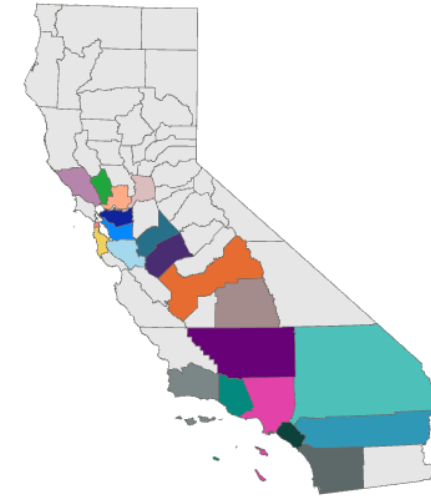
Year of diagnosis* for confirmed ES Silicosis cases



*Known years of diagnosis are displayed through 2025; data for more recent years are incomplete due to reporting lags. Diagnosis year is missing for some cases.

Confirmed ES Silicosis cases have been identified in the following counties:

- Alameda
- Contra Costa
- Fresno
- Kern
- Los Angeles
- Merced
- Napa
- Orange
- Riverside
- Sacramento
- San Bernardino
- San Diego
- San Francisco
- San Mateo



County of residence

All

County	Count
Alameda	16
Alpine	No known cases
Amador	No known cases
Butte	No known cases



<https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/OHB/Pages/essdashboard.aspx>

Australia makes world-first decision to ban engineered stone following surge in silicosis cases

By the Specialist Reporting Team's [Leonie Thorne](#) and national consumer affairs reporter [Michael Atkin](#)

Posted Tue 12 Dec 2023 at 11:20pm, updated Wed 13 Dec 2023 at 3:33am



Engineered stone has become a popular product in kitchens for its affordability and durability. (Unsplash: Christian Mackie)

Multiple Choices of Alternative Materials



Western Occupational & Environmental Medical Association



December 12, 2025

To: Joseph Alioto
Chair, Occupational Safety and Health Standards Board

Re: Petition to Revise 8 CCR § 5204 (Occupational Exposures to Respirable Crystalline Silica) to prohibit all fabrication and installation tasks on engineered stone that contains more than 1% crystalline silica

STATE OF CALIFORNIA
DEPARTMENT OF INDUSTRIAL RELATIONS
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
2520 Venture Oaks Way, Suite 350
Sacramento, California 95833
(916) 274-5721

In the Matter of a Petition by:)
)
Western Occupational and)
Environmental Medicine)
Association (WOEMA))
)
_____) Applicant.)

PETITION FILE NO. 609

The Occupational Safety and Health Standards Board hereby adopts the attached
PROPOSED DECISION.

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD



JOSEPH M. ALIOTO JR., Chairman

DAVE HARRISON, Member

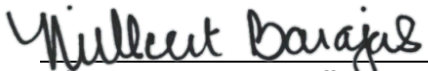


NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member



DEREK URWIN, Member

By: 

Millicent Barajas, Executive Officer

DATE: May 21, 2026
Attachments