Distribution of Cases by Occupation Subgroup

Eleven occupations were associated with 80% of the 539 NJ silicosis cases for which occupation was known (see Table below). In total, there were 43 different occupations. The leading occupation subgroup cases was that of Machine Operator, accounting for nearly a quarter of cases (n=121, 22%). A variety of machines were operated in the three major industry sectors associated with these cases. No matter the machine type or industry, mechanization greatly increases exposure risk for workers, generating more silica dust particles of finer size, that are able to be inhaled deep into the lungs. When machines operate in enclosed spaces, these risks are compounded. The second leading occupation subgroup, Laborers, increasingly face risks similar to machine operators as more of their work tasks are mechanized, or the laborers perform work in close proximity to machines. Machine maintenance is an important function across industry sectors. While many of the mechanics and machinists with silicosis were formerly employed and exposed at a single worksite, today's mechanics are often contractors roving from one business establishment to another, experiencing exposures to an even wider range of hazards.

Occupations Associated with New Jersey Silicosis Cases 1979-2013

Occupation	N	Industry Settings
Machine Operator	121	Manufacturing, Construction, Mining
Laborer	100	Manufacturing, Construction
Caster	42	Pottery Manufacturing
Sandblaster	33	Manufacturing, Construction
Molder	26	Foundries, Steel Works, Pottery and Glass Manufacturing
Supervisor	26	Manufacturing, Construction, Mining
Stonecutter	20	Stone Monument Cutting and Lettering
Mechanic	18	Manufacturing, Mining
Furnace, Kiln and Oven Operator	14	Foundries, Pottery Manufacturing, Sand Mines
Brickmason and Stonemason	14	Construction, Manufacturing
Machinist	13	Manufacturing, Mining
Truck Drivers	10	Transportation, Construction, Mining and Manufacturing
TOTAL	**437**	