



# Construction Dust The Silent Danger







**A lack of understanding  
can often be the  
challenge...**



# HEALTH & Safety

Approximately 13,000 workers  
died from work related disease  
in 2021

**99% Health**

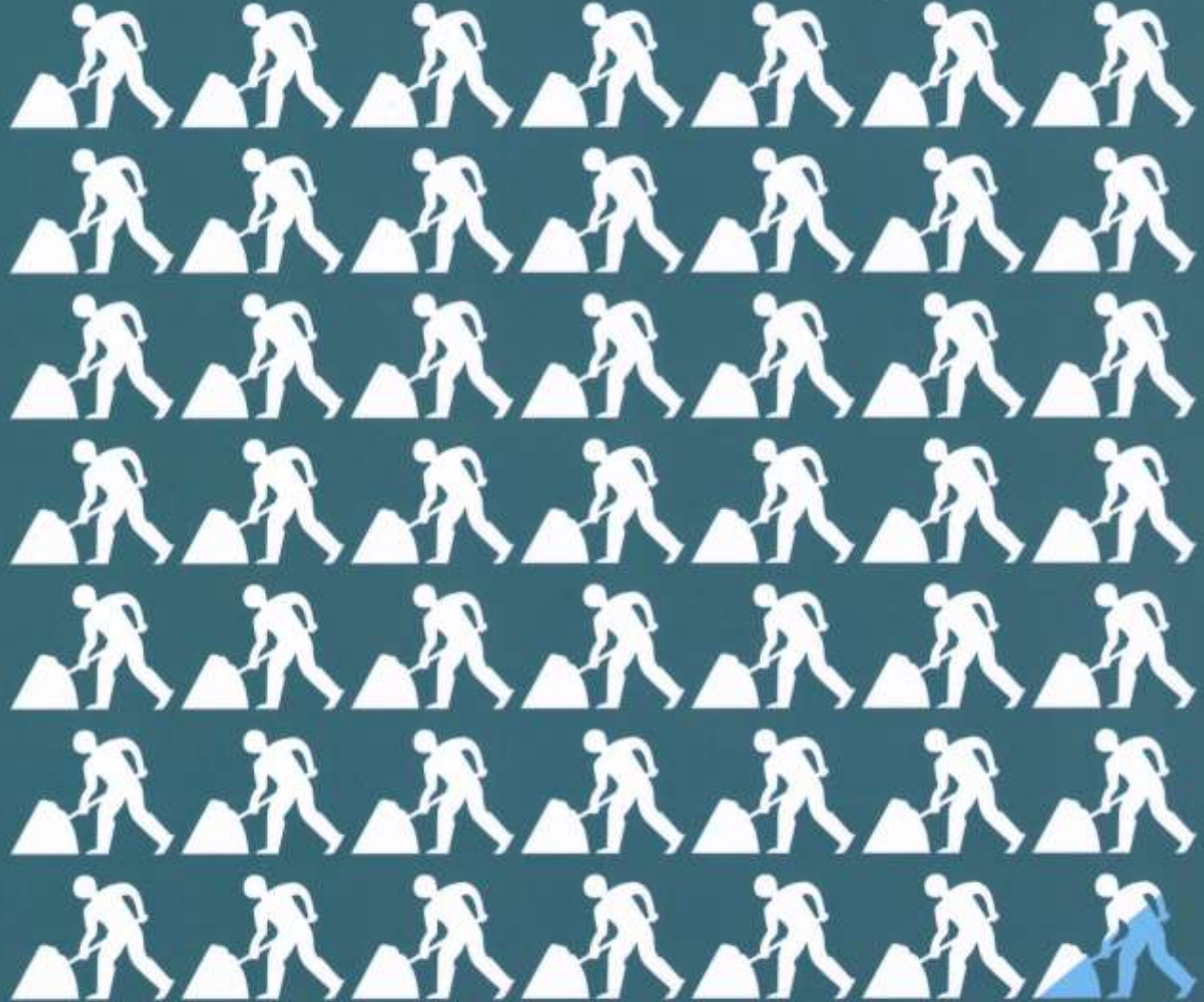
133 workers died in accidents  
at work during the same year

**1% Safety**



99% health

Approx 13,000 died from work related disease



1% safety

133 workers died in accidents at work



# What's The Problem with Buses ?

Seated 78

Standing 5  
(downstairs only)

x4 Buses = 332  
Passengers



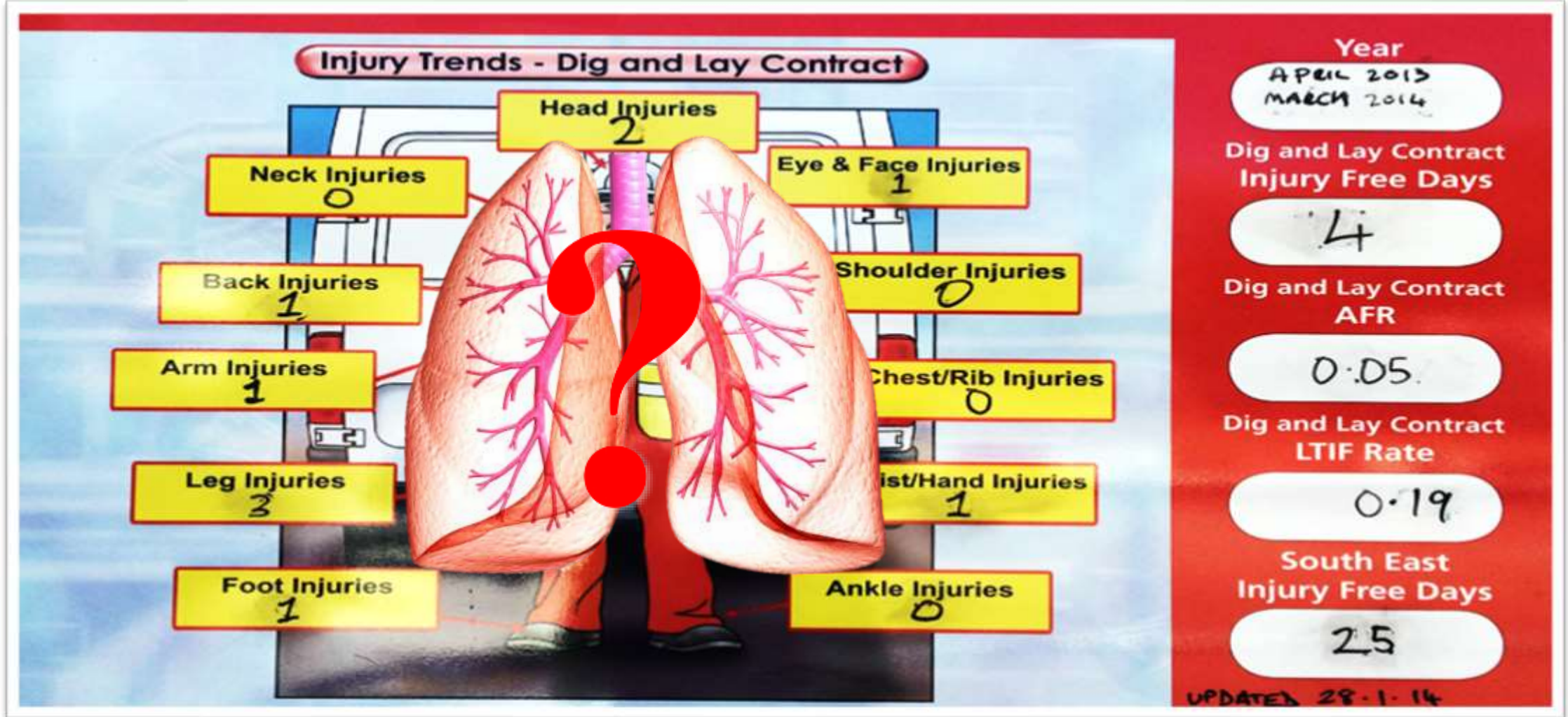
Number of UK deaths per month from work  
Related Respiratory Diseases



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# Reporting Injuries



# Exposures

Working conditions can lead to the following exposures:

- Silica dust
- Wood dust
- Engineered wood dust
- Diesel exhaust fumes
- Asbestos
- Welding fume
- Solvents
- Cleaning up



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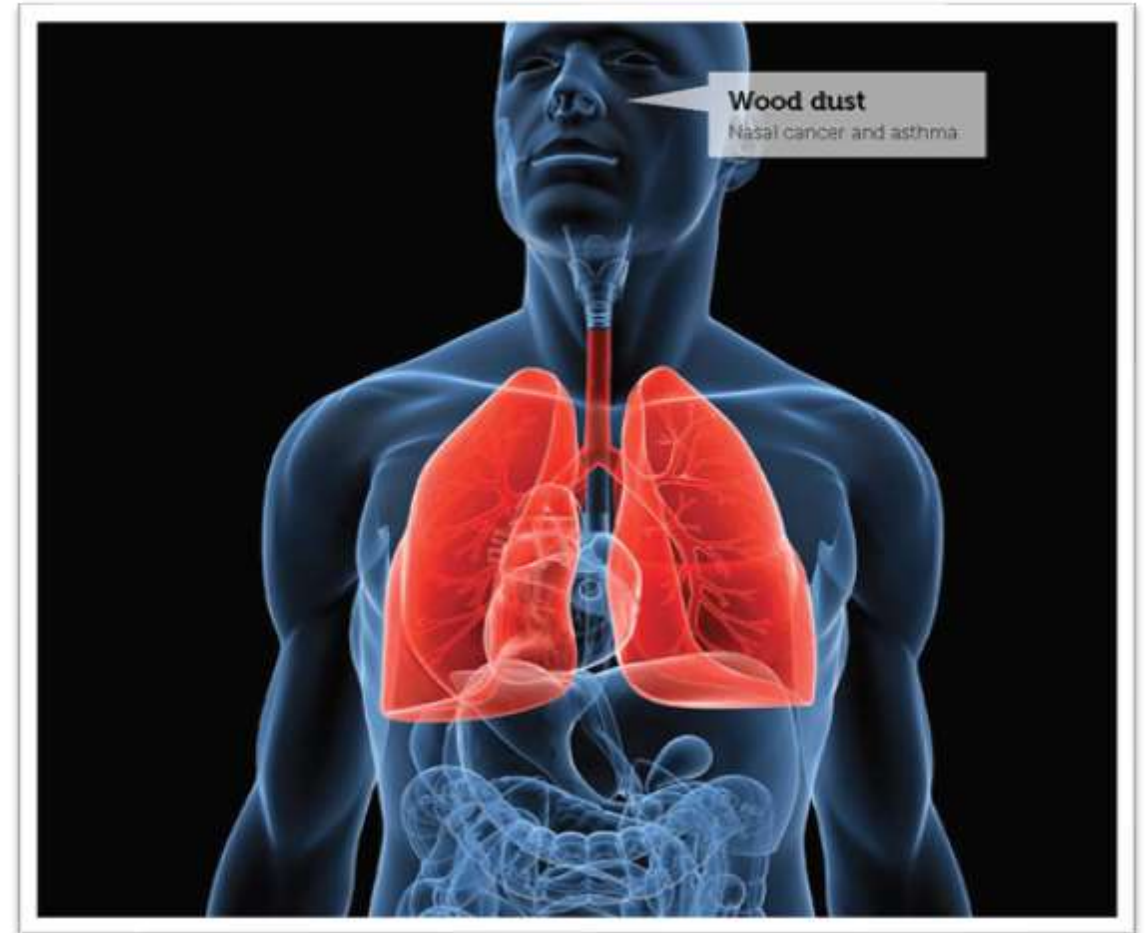


# The Effects

## Inhalable dust

Larger sized dust particles that you can generally see with the naked eye.

These dusts reach the upper sections of your lung.



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# The Effects

## Inhalable dust

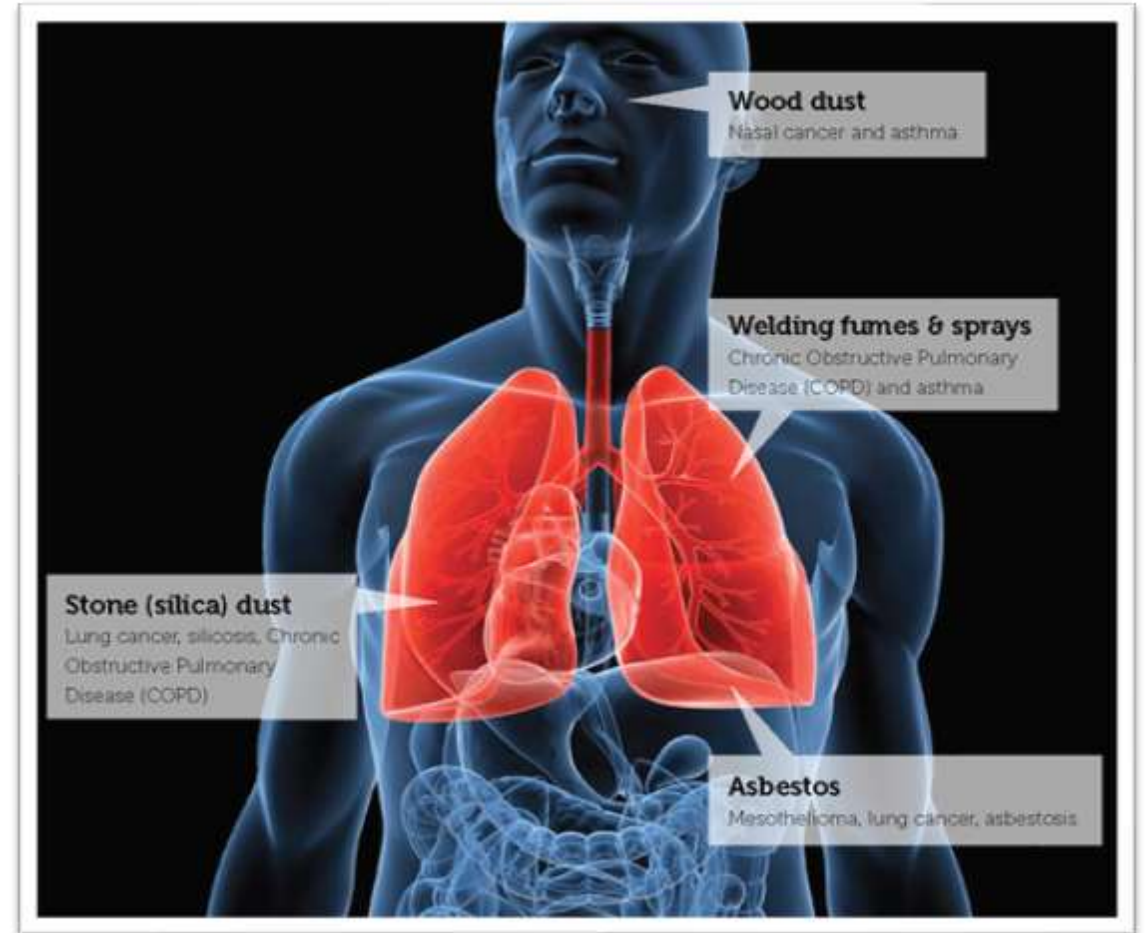
Larger sized dust particles that you can generally see with the naked eye.

These dusts reach the upper sections of your lung.

## Respirable dust

Smaller sized dust particles that can be invisible to the naked eye.

This gets trapped in the lower sections of your lung.





# The Effects of Silica – Worksafe BC



  
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# The Effects

**Lung cancers**

**Silicosis**

**COPD** (Chronic Obstructive Pulmonary Disease)

**Asthma**



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# Silica Dust – Exposure Limits



Daily Maximum Exposure Limit

# The Effects

Breathing in hazardous substances can also cause diseases elsewhere in the body...

**Nervous system  
disorders**

**Bladder  
cancer**



**Heart  
disease**

**Damage to  
reproductive  
system**



# The COVID Legacy – Unacceptable!



Face coverings like these do **NOT** provide protection against Silica dust.

It is important to switch to an Adequate and Suitable respirator when carrying out hazardous tasks.



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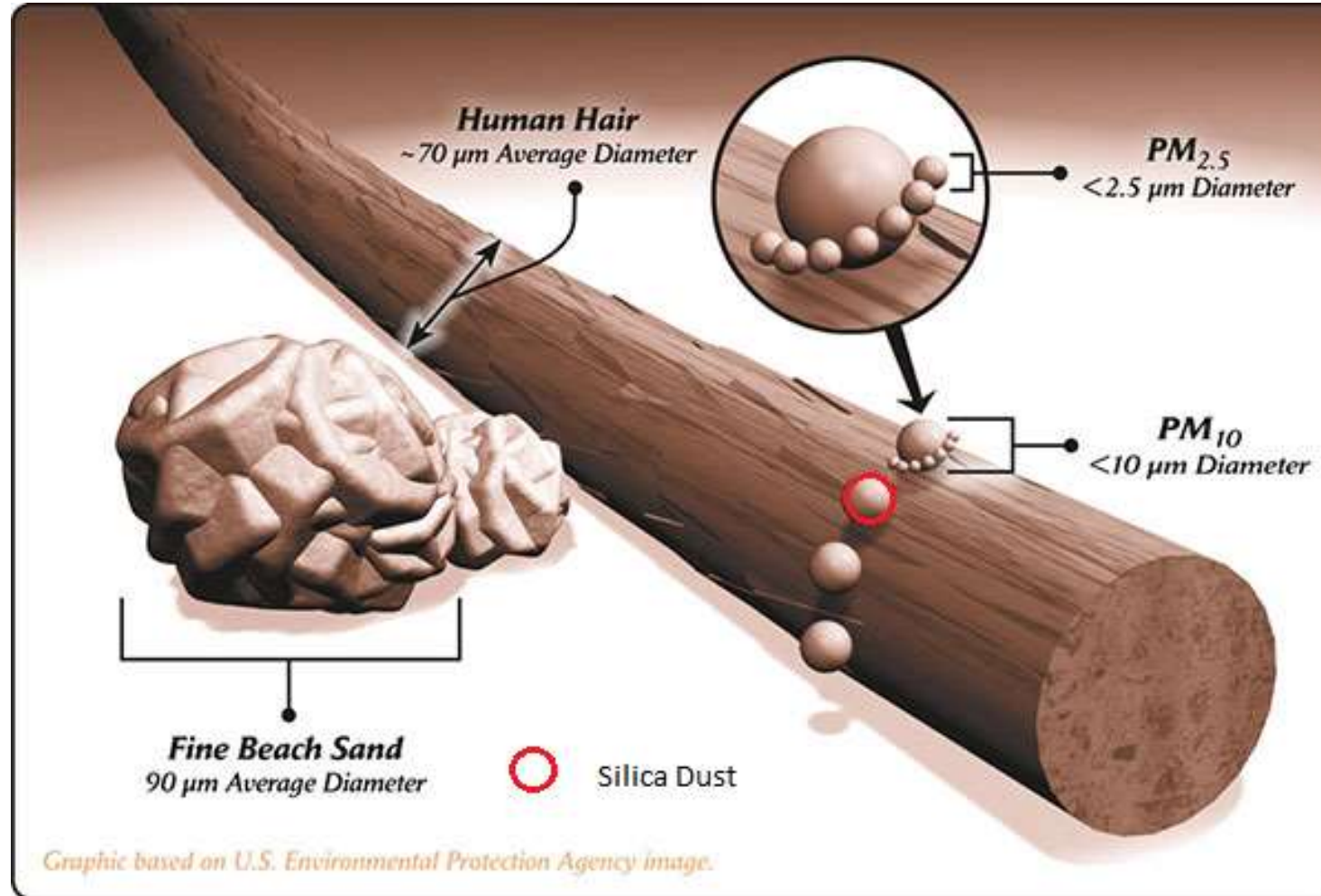
# Tight Fitting Respirators



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# Silica Dust- How small are the particles?



# What is clean shaven? The Definition.

“unshaven means hair which has not been shaved within the previous 8 hour period prior to the work shift” HSE – RR1052

<http://www.hse.gov.uk/research/rrpdf/rr1052.pdf>





# The Effects of Facial Hair On Face Fit Testing



  
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# Face Fit Testing – Qualitative Method

- Reliant on taste of a bitter or sweet tasting solution
- No Eating or Drinking 30 mins prior to test
- Straight Fit or No Fit result
- Reliant on trust
- Consists of 7 Exercise designed to stress Seal
- Half Mask only



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# Face Fit Testing



## For **FILTERING FACEPIECE (FFP)** (disposable mask)

- ✓ Clean shaven at start of your shift
- ✓ Always check the fit before every use:
  - fit around the nose/nose clip where applicable
  - fit around the chin
  - check the position of straps
- ✓ Carry out a 'fit-check'

# Face Fit Testing




## For **HALF-FACE** mask

- ✓ Clean shaven at start of your shift
- ✓ Always check the fit before every use:
  - fit around the nose
  - fit around the chin
  - check the position of straps
- ✓ Carry out a 'fit-check'

# Disposable Filtering Face Pieces (FFP)

## EN 149 FFP3



 Made in the UK



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# Half Mask

EN 143, Force<sup>®</sup>8  
PressToCheck<sup>™</sup>



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# Silica Dust – Exposure Limits



Daily Maximum Exposure Limit

# Silica Dust – Exposure Limits





# JSP PPE Compatibility

## Force<sup>®</sup>8 Half-Mask and EVO<sup>®</sup>VISTALens<sup>®</sup>



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# Facial Hair



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# Powered Air Systems (PAPR)



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## EN 12941 Jetstream Constructor Kit



- EVO®5 safety helmet complete with sealed polycarbonate visor
- No Face Fit Required
- Flexible hose
- PSL dust filters



# Powered Air Systems

## EN 12941, Powercap® Infinity® - All In One Protection



- Conforms to EN 397, EN 12941:1998 + A2:2008 TH3P, EN 166.1.B and EN 352-3
- No Face Fit Required
- Head, respiratory, face and hearing protection
- 4 in 1 protection



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# PowerCap® Infinity® PAPR



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**Thank you for your attention...**

**Any comments or questions ?**







**One final question from me....**

**Will you be shaving in the morning or  
queuing for that bus?**

