

Safety Hour Discussion Pack

Topic: Respiratory Risk - Silica

Purpose of the discussion:

Consider some of the hazards we face in the workplace that can lead to occupational cancers and the actions we can take to help mitigate the risks and protect ourselves.

Network Rail has recently pledged to IOSH's No Time to Lose campaign which aims to raise awareness and get the causes of occupational cancer more widely understood so that preventative measures can be taken to proactively reduce the risks.

This discussion focuses on the risk caused by Respirable Crystalline Silica (RCS) which can be found in the ballast we use on our track as well as a number of other construction materials such as concrete. It is important to remember it is only a risk if the RCS containing material is disturbed causing the dust to be liberated.

Discussion points: Use below to plan your facilitated discussion. Remember, you don't have to have all the answers – the role of the facilitator is to create an engaging discussion where everyone identifies and commits to solutions.

Discussion points	Supporting notes
<p>Silica is the subject of the No Time to Lose campaign – what is it?</p>	<p>Silica is a natural substance found in material such as stone, rock (ballast), sand, clay, and in products such as bricks, tiles and concrete.</p> <p>When these materials are worked on and or mechanically disturbed, fine dust known as Respirable Crystalline Silica (RCS) is released, which is hazardous when breathed in.</p> <p>When could you be exposed to RCS? RCS can become airborne during activities such as conventional or automated track renewals where ballast tamping, loading / unloading of ballast is required. Drilling and or cutting of concrete can also cause exposure.</p> <p>Where you aware you could be exposed to it?</p>
<p>What should be done when there is a risk of being exposed to RCS during a job?</p>	<p>The Control of Substances Hazardous to Health 2002 (COSHH) requires that all tasks involving a hazardous substance be risk assessed.</p> <p>Do you know your controls? Has the hierarchy of control been considered such as elimination and or reduction which can be achieved via dampening of ballast, standing up wind of dust cloud etc.</p> <p>An additional control may be Respiratory Protective Equipment (RPE). Should a tight fitting RPE be identified as an additional control, it should be a minimum protection factor of 20 or FFP3 and must be face fit tested.</p>

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<p>How long after being exposed to silica could you experience the effects?</p>	<p>This is dependant on the level of exposure. Silicosis, the most common consequence, may occur after 10-20 years of moderate to low exposure, however once developed, it is both disabling and permanent.</p> <p>Symptoms can include :</p> <ul style="list-style-type: none"> • A persistent cough • Persistent shortness of breath • Weakness and tiredness <p>Should you work with silica and experience any of the above, speak with your line manager who may refer you to occupational health.</p>
<p>What can you do to help reduce the risk of exposure?</p>	<p>Are the preventative measures adequate?</p> <p>What can you do now to protect your future health?</p> <ul style="list-style-type: none"> • Be familiar with assessment and controls as mentioned in point 2 • Maintain exclusion zone if you are not required as part of the job • Maintain cleanliness by washing hands before eating or drinking • Raise Close Calls should dust be a concern • Be aware smoking increases the chances of lung diseases • Wear RPE where identified as an additional control, ensuring you are clean shaven if RPE is tight fitting (this increases the level of protection to you and reduces the risk of developing ill health) <p style="text-align: center;">Remember: If it's silica dust, it's not just dust!</p>

For further information:

Download the No Time to Lose campaign resources –

<https://safety.networkrail.co.uk/healthandwellbeing/employee-information/respiratory-hazards/silica-iosh-dual-branded-materials/>

Visit the Respiratory Risk page on Safety Central -

<https://safety.networkrail.co.uk/healthandwellbeing/employee-information/respiratory-hazards/>

Visit the Track Safety Alliance page and watch the “Ballast Dust Story” film -

<http://www.tracksafetyalliance.co.uk/videos/track-safety-matters-2--the-ballast-dust-story/s977/>

Should health surveillance be identified as a requirement following COSHH assessment, this can be completed via the OH Assist referral process – <https://networkrail.ohassist.com/services-available/respiratory/>