Carbon monoxide (CO) has been identified as a major air toxic in bushfire smoke. When inhaled, it forms carboxyhemoglobin (COHb), which hinders delivery of oxygen to the body. Elevated COHb levels in the blood (>5%) can cause headaches, dizziness, fatigue, confusion, disorientation, reduced reaction times and work capacity, impaired judgement, decreased vigilance, and therefore potentially pose a significant safety issue on the fire ground. Exposure to high levels of CO can also exacerbate heart or respiratory illnesses. People at higher risk include people with pre-existing heart and respiratory conditions.

How high are CO exposure levels?

Some of the activities with high CO exposures include patrol downwind of smoke, suppression activities and pump operation.

What causes high exposures?

- Task rotation
- Extended time away from smoke
- Regular monitoring of COHb levels

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