



## Toolbox Talk:

Maintaining Safe Airflow  
with Effective Ventilation

### Fresh Air Is Vital

Your team cannot survive  
without a constant  
supply of clean fresh air.



### Exposures

Without clean fresh air,  
workers could be exposed  
to **dangerous levels** of:

- Dust
- Fumes
- Gases
- Vapours



### Important

If you are going to be working in an enclosed area with no fresh airflow, it is **essential** to conduct a risk assessment and ensure that you have **suitable ventilation** in place.

### Serious Health Risks

Symptoms from  
**inadequate fresh air**  
includes:

- Nausea
- Dizziness
- Loss of consciousness



Continuous overexposure  
can lead to serious  
long-term health  
problems such as:

- COPD
- Cancer



And acute toxicity can be  
instantly **fatal**.

### Enclosed spaces- Hazardous Activities

If you are creating dust or fumes, it is likely that you will need an LEV system to extract the contaminants at source, as well as general ventilation to dilute residual contaminants and maintain good quality air.

### Open Ended Tunnels

The most basic way to ventilate the entire length of an open-ended tunnel is to have a large axial fan placed inside the tunnel.



A centrifugal fan system could work even better, providing the airflow, pressure and positioning is correct.

### Basements

Top-down construction is a methodology used to excavate a basement before building a superstructure on top.

To maintain good air quality, it is advisable to use diesel exhaust filter kits on the machinery, as well as supplying fresh air ventilation to the furthest point of each level to displace the contaminated or stale air.



### Ventilation Shafts

If you are working in a tunnel or structure that has a ventilation shaft, it might be possible to create a venturi up the shaft.



### Effective Solutions:

RVT supply temporary ventilation solutions for:

- Tunnel Boring
- Confined Spaces
- Warehouses
- Aqueducts
- Utility Tunnels
- Railway Tunnels
- Culverts
- Welfare rooms

And much more. An experienced ventilation expert, such as an RVT consultant, will be able to help assess your work area and calculate the ventilation requirements.



**PLAY NOW**

This Toolbox Talk  
is available  
as a video,  
[watch it  
online now!](#)



RVT Group Copyright© - Published June 2024