

Hazard Fact Sheet – Wind & Dust Hazards

What is the Hazard?

Wind and dust hazards occur when strong winds, dry conditions, or disturbed ground create airborne dust, reduced visibility, flying debris, and unstable working conditions. Wind can affect manual handling, lifting, plant operation, working at height, and general site movement. Dust can impact breathing, eye health, and visibility, increasing the risk of incidents.

Types of Injuries / Health Effects

- Eye injuries from airborne dust or debris
- Respiratory irritation or illness from dust inhalation
- Struck-by injuries from wind-blown materials or unsecured objects
- Slips, trips, and falls due to poor visibility
- Fatigue, heat stress, or dehydration in hot and windy conditions
- Loss of control of loads or tools during lifting or handling

Causes / Scenarios

- Strong wind gusts during manual handling of long or light materials (panels, tubing, insulation)
- Dust storms or dry soil being lifted by wind, reducing visibility across the site
- Unsecured items (ply, packaging, rags, tools) becoming airborne
- Crane, EWP, or telehandler operations continuing in unsafe wind speeds
- Cutting, grinding, or drilling disturbing soil and increasing dust
- Workers not using respiratory protection when required
- Wind gusts causing doors, gates, or mobile plant attachments to move unexpectedly

Control Measures

- Check weather forecasts and wind speeds daily and avoid performing dusty or high-wind tasks when conditions are severe or unsafe.
- Always wear safety glasses or goggles and a dust mask to protect your eyes and lungs from dust and flying debris.
- Secure all loose materials, tools, and rubbish around your workspace to prevent them being blown away or becoming hazards.
- Use water sprays or hoses to dampen dusty areas when available and avoid stirring up dust by limiting fast movement on bare soil.
- When handling lightweight or long materials like panels or tubing, work with a partner and be extra cautious of sudden gusts of wind.
- Seek shelter during dust storms or strong winds and resume work only once conditions improve and visibility is safe.
- Communicate regularly with coworkers about changing wind or dust conditions and watch out for each other's safety.



Case Example:

Dust Storms Reducing Visibility and Air Quality
Solar Farms have reported that dust storms and heavy aerosol events can severely reduce visibility and coat surfaces with grime. While this mainly affects power output, similar events during construction make it harder to see hazards and can cause breathing or eye irritation for workers.

Key Lessons Learned:

- If visibility drops, slow down and pause work. You must be able to see hazards clearly.
- Wear eye protection and a dust mask when dust is blowing across site.
- Avoid working downwind of dust sources whenever possible.

https://www.safeworkaustralia.gov.au/safety-topic/hazards/working-outside/working-hazardous-weather

Safe Work Australia – Working in hazardous weather