## BEFORE THE TALK PREPARATION TIPS

1. Pass around the Attendance Sheet.
2. Be prepared to discuss:
   - Safe work practices and policies pertaining to combustible dust at your location.
   - Reporting procedures related to combustible dust concerns and hazards.
3. Suggested readings and videos:
   - https://www.osha.gov/Publications/combustibledustposter.pdf
   - https://www.osha.gov/OshDoc/data_General_Facts/OSHAcombustibledust.pdf
   - https://www.ccohs.ca/oshanswers/chemicals/combustible_dust.html

NOTES

## AFTER THE TALK CHECKLIST

- ■ Provided extra training to workers who did poorly on quiz
  Date: _____
- ■ Observed workers
  Date: _____
- ■ Refresher training
  Date: _____
- ■ Other (describe)

_____

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Date: _____

Date: _____

Location: _____

Meeting conducted by: _____

## MEETING WAS ATTENDED BY: Each participant is to sign below, for record kept on file.

| | | |
|---|---|---|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
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Answers to T201701-02 Quiz: **1. False, 2. A, 3. False, 4. True**

# Combustible Dust – It's No Ordinary Dust

## WHAT'S AT STAKE?

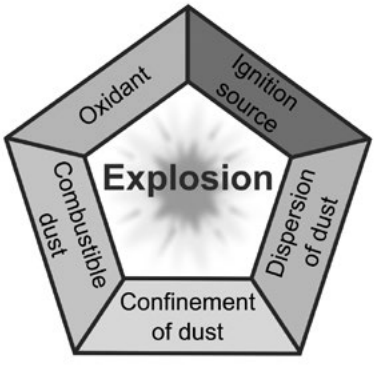
A combustible dust is any fine material that can catch fire and explode when mixed with air. The force from combustible dust explosions can cause multiple deaths, horrific injuries, and massive destruction of property.

## WHAT'S THE DANGER?

Any combustible material can burn rapidly when in a finely divided form. Combustible dusts can come from: sugar, spice, starch, and flour; grain, feed, and tobacco; plastics and rubber; wood, paper, and pulp; pesticides, pharmaceuticals, dyes, and coal, and metals.

If such a dust is suspended in air in the right concentration, under certain conditions, it has the potential to explode. These conditions are known as the "Dust Pentagon"

1. Fuel to burn
2. Oxygen
3. Ignition source (heat, spark, etc.)
4. Dispersion, or suspension of dust particles in the right concentration in the air, and
5. Confinement of the dust cloud. Confinement means the dust is in an enclosed or limited space. This restriction allows pressure to build up, increasing the likelihood of an explosion.




## HOW TO PROTECT YOURSELF

Your employer should conduct a risk assessment and look for combustible dust hazards. You can help by voicing your concerns if you see a potentially hazardous area or process. Other protective measures:

- Control dust by using ventilation and dust collection systems properly.
- Be aware of hidden areas where dust may accumulate, such as behind false ceilings, on beams, and inside equipment. If you notice a buildup report it to your supervisor or safety manager immediately.
- Do your part to control ignition sources and follow hot-work procedures.
- Only use vacuums approved for dust collection – never use brooms or compressed air to clean dust off surfaces.

## FINAL WORD

*Combustible dust presents a serious workplace hazard. You can help prevent a catastrophic explosion by helping to identify potentially hazardous processes and work areas and following safe work practices and housekeeping policies.* ■

**Meeting material to go:** *Safety meeting materials such as presentation tips, PowerPoint presentations, quiz answers and more are downloadable at* ***www.SafetySmart.com***

## TEST YOUR KNOWLEDGE

1. Dissipation of dust is part of the dust pentagon.
   ☐True ☐False
2. Confinement of the dust allows what to happen as it relates to an explosion?
   a. Pressure buildup
   b. Easy clean-up
   c. Spontaneous degradation
   d. None of the above
3. Compressed air is a quick and safe way to get rid of combustible dust.
   ☐True ☐False
4. Sugar can be a combustible dust.
   ☐True ☐False

## What Would You Do?

The dust collection system hasn't been working for over a week now. You've reported the issue to your supervisor but nothing has been done to fix the system and you're growing more and more concerned about the amount of dust in the air and collecting on the surface of equipment and other structures. What would you do?