

# SAFETY MOMENT

4-20-15

## Occupational Noise Exposure



# HOW LOUD IS TOO LOUD?

- Noise is measured in units of sound pressure levels called decibels, named after Alexander Graham Bell, using A-weighted sound levels (dBA).
- The National Institute for Occupational Safety and Health (NIOSH) has recommended that all worker exposures to noise should be controlled below a level equivalent to 85 dBA for eight hours to minimize occupational noise induced hearing loss.

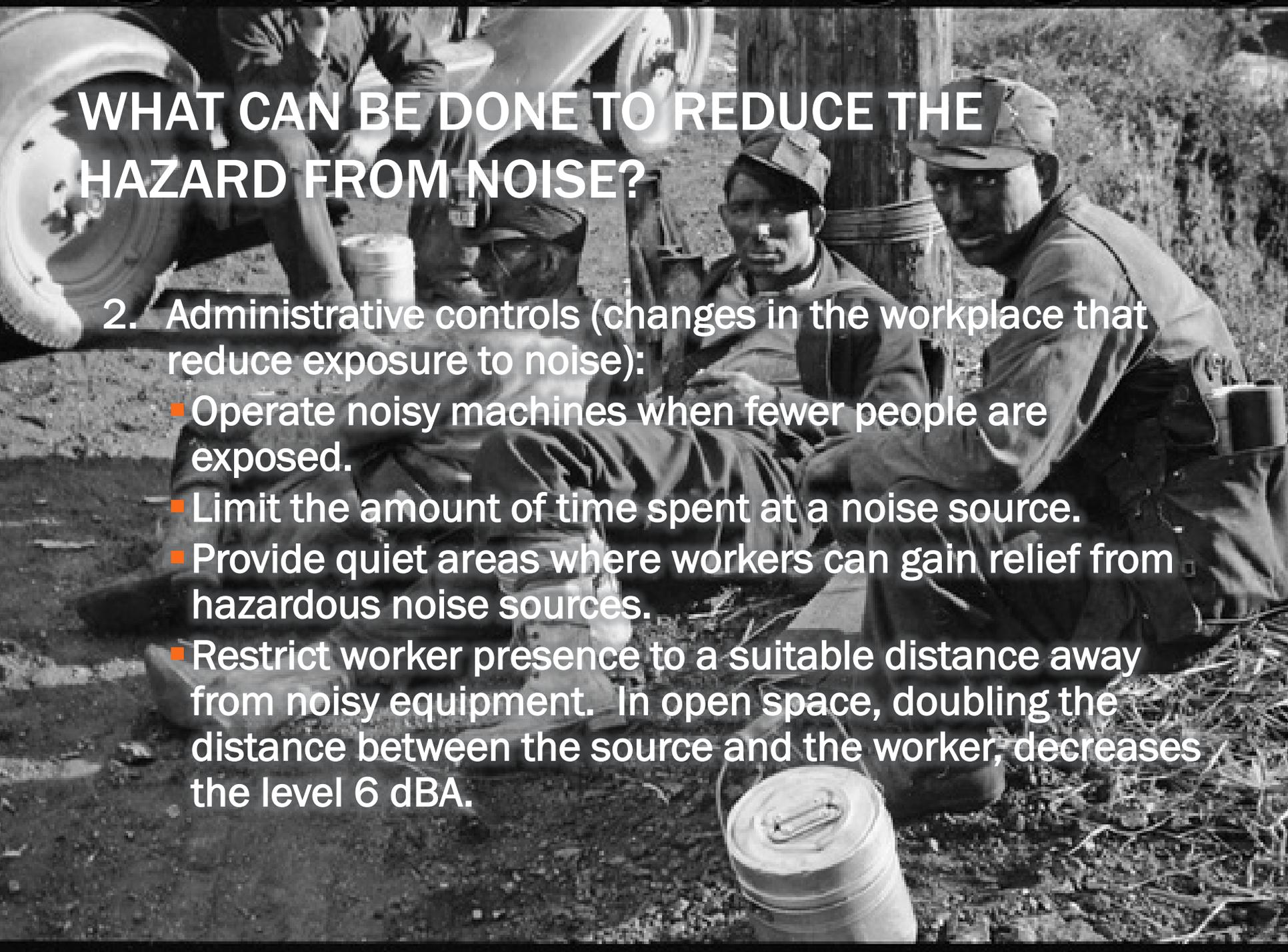


# WHAT CAN BE DONE TO REDUCE THE HAZARD FROM NOISE?

## 1. Engineering Controls:

- Low-noise tools and machinery
- Maintain and lubricate machinery and equipment (e.g., oil bearings).
- Place a barrier between the noise source and the employee (e.g., sound walls or curtains).
- Enclose or isolate the noise source.





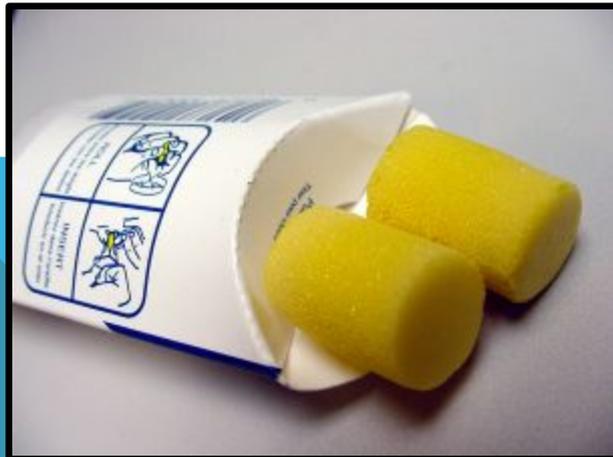
# WHAT CAN BE DONE TO REDUCE THE HAZARD FROM NOISE?

2. Administrative controls (changes in the workplace that reduce exposure to noise):
  - Operate noisy machines when fewer people are exposed.
  - Limit the amount of time spent at a noise source.
  - Provide quiet areas where workers can gain relief from hazardous noise sources.
  - Restrict worker presence to a suitable distance away from noisy equipment. In open space, doubling the distance between the source and the worker, decreases the level 6 dBA.

# WHAT CAN BE DONE TO REDUCE THE HAZARD FROM NOISE?

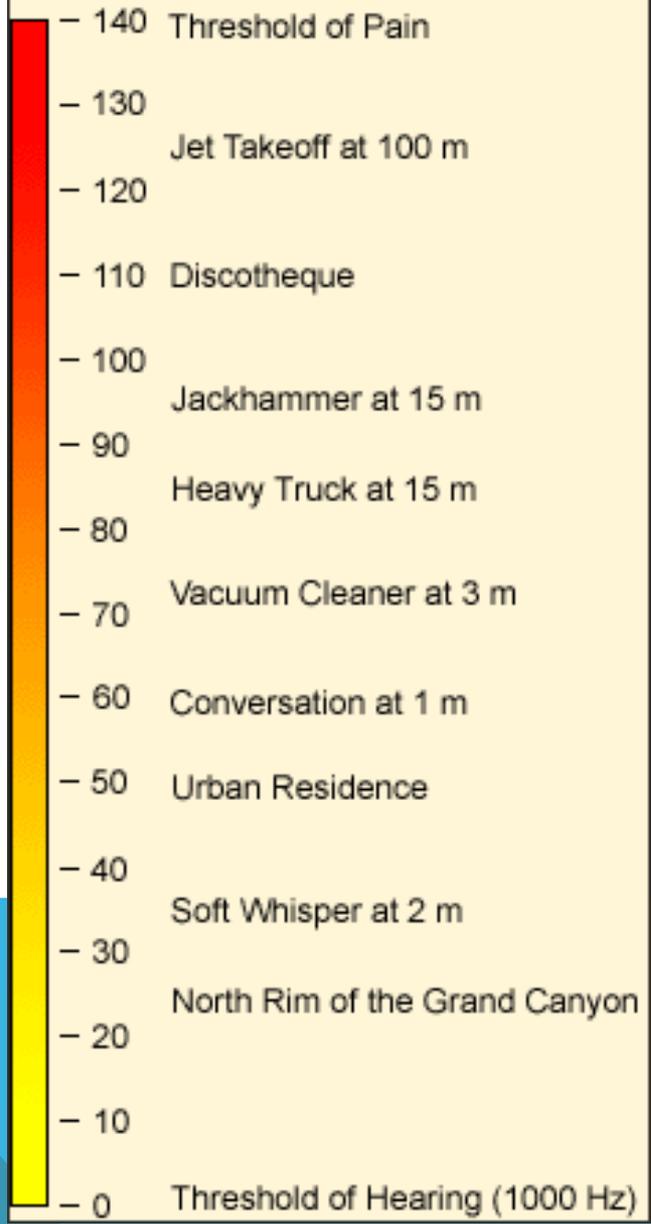
## 3. Hearing protection devices (HPDs), such as:

- Earmuffs and plugs (acceptable, but a less desirable option than 1 or 2 above).
- An effective **hearing conservation program** must be implemented by employers in general industry whenever worker noise exposure is equal to or greater than 85 dBA for an 8 hour exposure.



## Typical A-Weighted Sound Levels

(dB, re: 20  $\mu$ Pa)



# PROTECT YOUR EARS BEFORE IT'S TOO LATE!

