

NOISE SAFETY SEMINAR

1. Introduction 3 min.

Look at noise so as to understand:

- impact on you
- noise standards and allowed exposure
- things to do to reduce impact of noise on you and to attenuate noise sources.

2. Show film(*) 15 min.

- answer questions

3. Show Dow and OSHA Standards 4 min.

- use OH transparency
- also calculate one or two exposure examples

4. Age and Hearing Loss 3 min.

- use handout

5. What can be done 5 min.

- a. Comment on plant noise and noise exposure

- decibel readings of selected areas and 1 of equipment
- typical dosimeter readings
- examples of noise exposure away from work added to work exposure (i.e. guns - hunting - boating - lawn mower, etc.)

- b. Hearing Protection Used for plant and example of protection achieved 5 min.

- also include ear plugs from Medical.

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c. Noise attenuation of equipment

10 min.

- easy to do things
- demonstrate
 - dampening
 - vibration isolation
 - barrier - shield
 - absorption
 - enclosure

6. Summary and Questions

5 min.

TOTAL

50 min.

* Film - "Protect Your Hearing" can be obtained from Industrial Hygiene group. Two other films of possible interest are available from Anne Davis, Safety Department. These include:

(1) Hear: It Takes Two

- Numerous examples are relayed on gradual hearing loss that results from overexposure and the importance of hearing protection.

(2) Hearing Loss: Cause and Prevention

- shows what happens in the inner ear when hearing loss develops and the value of hearing protection.

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<u>NOISE SOURCE</u>	<u>dba 2 FEET FROM SOURCE</u>	<u>ACTION STEPS</u>
STEAM LEAKS	98 - 110	REPAIR ASAP TO ELIMINATE. OFTEN COVERING THE LEAK WILL GREATLY REDUCE THE NOISE -- A BOX OR A CLOTH WILL DO.
STEAM TRAPS	86 - 118	REPLACE TRAP. BLEED DISCHARGE TO CONDENSATE RETURN LINE OR EMPTY INTO WATER.
PUMP	86 - 95	CHECK MECHANICAL CONDITION. INCREASE SUCTION PRESSURE. ENCLOSE.
VACUUM JET	95	LAGGING. ENCLOSE.
FAN	92 - 104	CHECK BALANCE. DECREASE RPM. INCREASE NUMBER OF BLADES.
FAN BELT SQUEAL	98 - 104	CHECK FOR WORN SHEAVE, ALIGNMENT, CHECK TENSION, USE COGBELT, CHECK DESIGN.
CONTROL VALVE	93 - 99	LOWER VELOCITY. CHANGE TO QUIET VALVE. ENCLOSE.
REFLUX LINE	96 - 98	LOWER VELOCITY. AVOID CHANGES IN LINE SIZE AND DIRECTION. LAGGING.

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HEARING PROTECTION ATTENUATION CHARACTERISTICS

	500	1000	4000	7000
AD 1776K	30	40	42	36
SILENT PARTNER	26	31	43	42
SOUND-BAN	19	24	44	43
STRAIGHTAWAY	29	37	39	31
MOTOROLA	25	36	35	37

ALLOWABLE EXPOSURES

SS — E HRS.

90	4
95	2
100	1
105	30 MINUTES
110	15

ADJUSTED LEVELS FOR C-2 (ASSUMING 1000 Hz)
AT HIGHEST LEVEL (110 dBS)

AD 1776K	70
S. PARTNER	79
S-BAN	86
-AWAY	73
MOTOROLA	74

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