



NOISE POLLUTION

- Noise pollution is defined as, *“the unwanted, unpleasant or disagreeable sound that causes discomfort for all living beings.”*
- Sound intensity is measured in decibel (dB).
- Normal conversation sound 35 dB to 60 dB
- Noise 80 dB & Painful 140 dB

Types of noise:

1. **Industrial noise** (drilling sound, mechanical saws)
2. **Transport noise** (bus, trucks, motors, scooters, rail traffic noise)
3. **Neighborhood noise** (Musical instruments, TV, VCR, Radios, telephones, loudspeakers etc)

Effects of Noise pollution:

- This affects human health, comfort and efficiency.
- It causes muscles to contract leading to nervous breakdown, tension.
- It affects health efficiency and behavior.
- Loss of hearing due to excessive noise,
- Impulsive noise also causes psychological and pathological disorders.
- Brain is also adversely affected by loud and sudden noise as that of jet and aero plane noise.
- Ultrasonic sound can affect the digestive, respiratory, cardio vascular system.
- Rate of heart beat decrease or increase depending on the type of noise
- Blood is also thickened by excessive noises.
- Optical system is also affected by noise pollution & lead to colour perception & loss of night vision.



Control and preventing measures:

- ***Source control*** – acoustic treatment to machine surface, design changes, limiting the operational timings.
- ***Transmission path intervention***- the source inside a sound insulating enclosure, construction of a noise barrier or provision of sound absorbing materials.
- ***Oiling*** – Proper oiling will reduce the noise from the machines.
- ***Receptor control***: Protection of the receiver by altering the work schedule, by using ear plugs etc.
- ***Planting trees also act as effective noise barriers***
- ***Different absorptive materials can be used to control interior noise.***