

# OCCUPATIONAL HEALTH HAZARDS IN HOSPITALS



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# Objectives

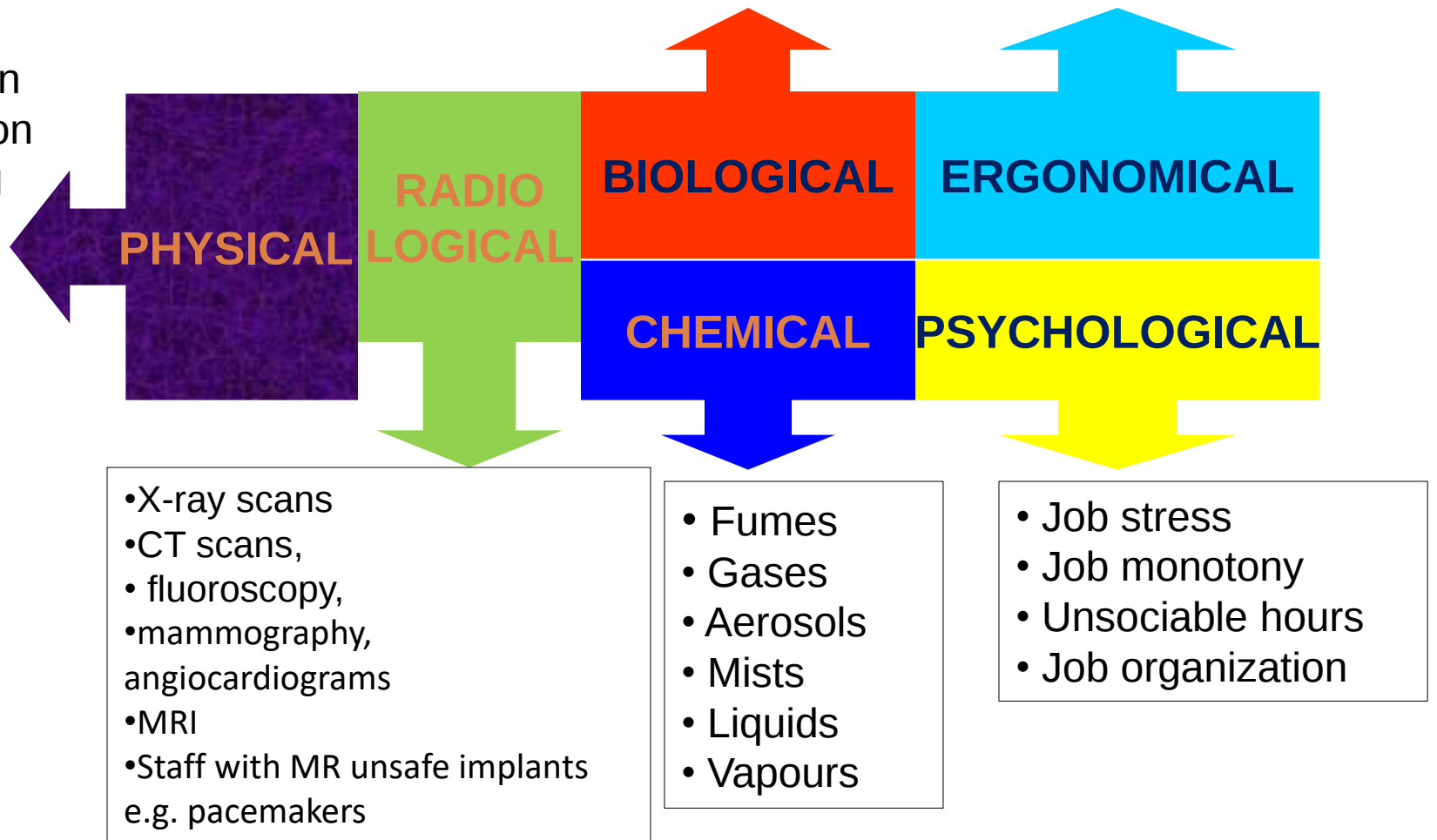
1. Categorizing Possible Occupational Health Hazards in Hospitals.
2. Outline the Work flow for Risk assessment & management.
3. Training of staff

# Occupational Health Hazards

- ❑ are **hazards** of exposure to pollution, noise and vibrations in the working environment. Exposure limits are promoted by the International Labour Organization (ILO). Nov 15, 2001
- ❑ Hospitals have many unique hazards that can potentially affect the health of employees. Exposures to occupational hazards throughout hospital departments are highly variable

# 1. Categorizing Hazards in hospitals

- Noise
- Vibration
- Radiation
- Lighting
- Heat
- Cold
- Fibres
- Dusts



# Potential Areas for Hazards

1. **Clinical areas:** • Blood borne pathogens • Airborne pathogens • Ergonomic • Slips, trips, falls • Sharps
2. **OT :** • Anesthetic gases • Blood borne pathogens • Compressed gases • Lasers • Ergonomic • Latex
3. **Laboratory:** • Infectious diseases • Chemical agents (formaldehyde, toluene, xylene) • Ergonomic • Slips, trips, falls • Sharps
4. **Radiology:** • Radiation • Ergonomics • Airborne pathogens • Blood borne pathogens • Slips, trips, falls
5. **Physical Therapy:** • Ergonomics • Trips, falls • Equipment hazards • Blood borne pathogens
6. **Pharmacy:** • Drug absorption • Ergonomic • Slips, trips, falls • Latex

- 7. Central Supply :** • Compressed gases • Anesthetic gases • Chemical agents (sterilizers, cleaners) • Ergonomic • Burns, cuts
- 8. Laundry :** • Contaminated laundry • Noise • Heat • Lifting • Sharps • Slips, trips, falls • Fire hazard
- 9. Housekeeping:** • Chemical agents • Contaminated objects (infectious agents) • Latex • Sharps • Lifting hazard • Slips, trips, falls
- 10. Dietary:** • Food borne diseases • Heat • Moving machinery • Fire hazards • Slips, trips, falls • Electrical equipment
- 11. Wards :** Blood borne Pathogens • Hepatitis B • Hepatitis C • HIV
- 12. Hazardous Chemicals** • Employee exposure to hazardous chemicals, such as pesticides, disinfectants, and hazardous drugs in the workplace.
- 13. Stress :** • Life threatening illnesses and injuries • Understaffing • Malfunctioning equipment • Patient death • Hierarchy of authority • Demanding patients • Excessive paperwork •

# 1. Safety & Physical hazards



Slip



trip



fall

## 2. Radiation hazards & safety



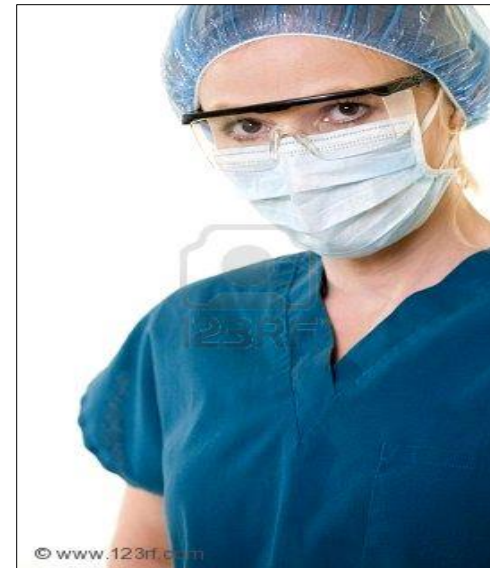
- Show danger light- do not enter when **red light** is on
- Use of TLD badge
- Lead aprons
- Radiation safety signage
- No X rays during pregnancy
- Annual health check up
- Training of staff

# 3. Biological Hazards & safety



- Pre exposure prophylaxis
- Segregation of waste at source and safe disposal
- Safe handling of needles and sharps
- Managing blood spills
- Use of PPE
- Pre employment and Annual health checkup for staff
- Complete your vaccination (3 doses of Hepatitis B vaccination at 0,1 and 6 months)

- Needle stick injury and Post Exposure prophylaxis (PEP) for needle stick injuries and blood or body fluid splashes
- Regular Infection control training programmes
- Teach patients and family members on cough etiquette, hand hygiene and social distancing.



# 4. Chemical Hazards Safety Measures



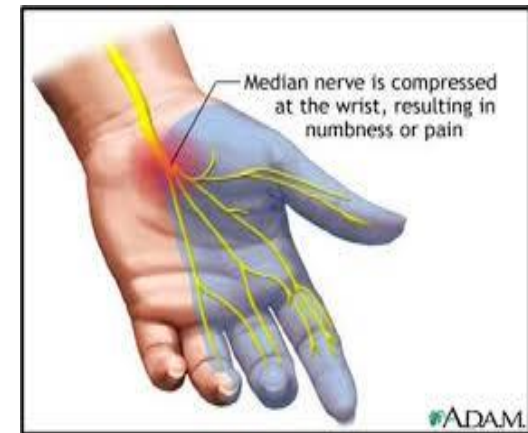
Chemical hazards can result through: • Inhalation • Absorption • Ingestion • Inoculation • Explosion

- Always read the label on chemical bottle
- Follow instructions listed on the labels
- Avoid rough or careless handling. Never use if you are not sure how to protect yourself, use PPE as required.
- Safe storage (especially acids, alkali and other corrosives)
- Managing spills
  - ▣ Soak area with 1% bleach using rag piece for 10 minutes followed by mopping.

# 5. Ergonomic Hazards Safety measures

Ergonomic Hazards includes : • Improper adjusted workstation and chairs • Poor posture Frequent lifting • Repeated activities without adequate recovery time • Having to use too much force, especially if you have to do it frequently • Vibration

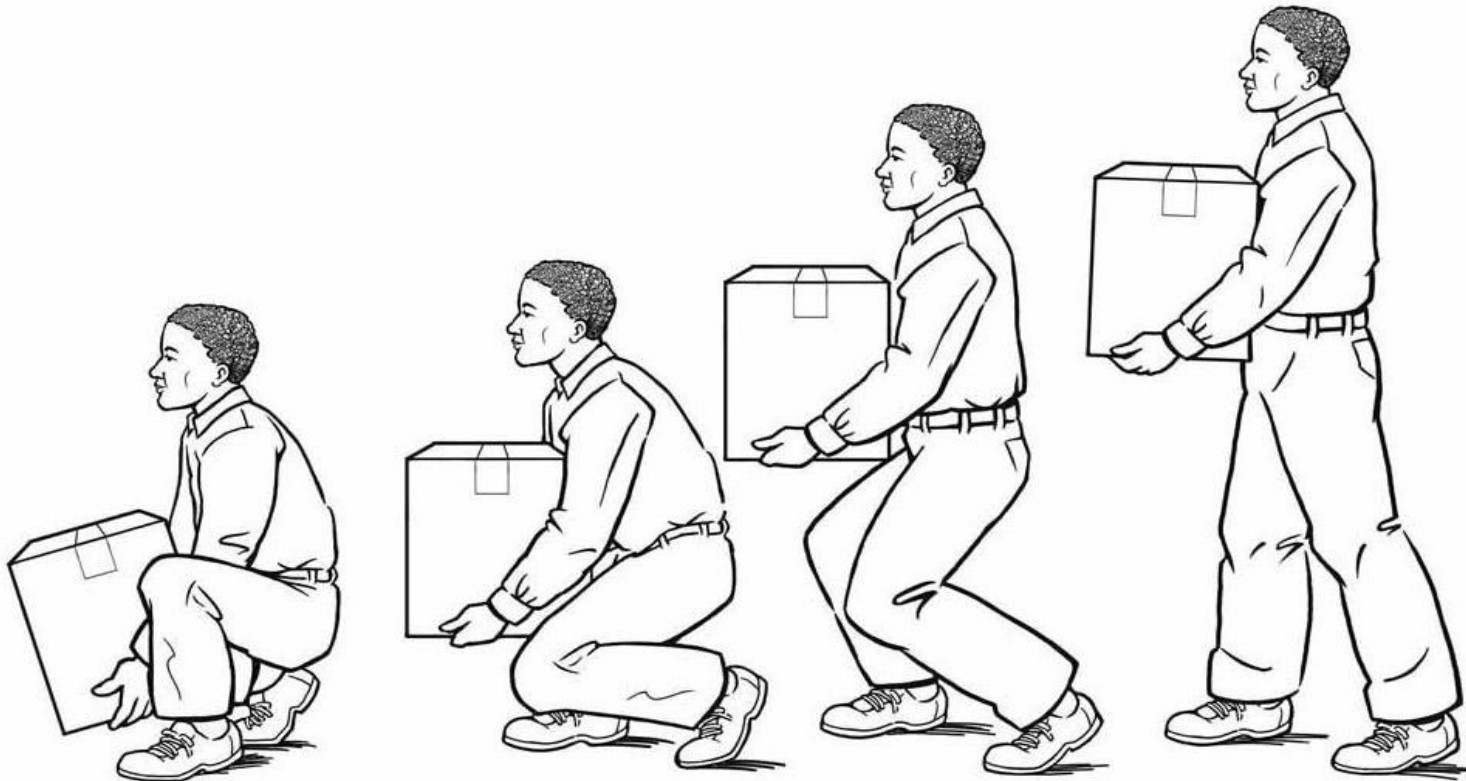
□ Health effects: • Musculo-skeletal disorders • Backache/ back strain/neck strain • Repetitive strain injuries (RSI) • Carpel tunnel syndrome



# Safety measures



# Use proper lifting technique



# 6. Psychosocial Hazards



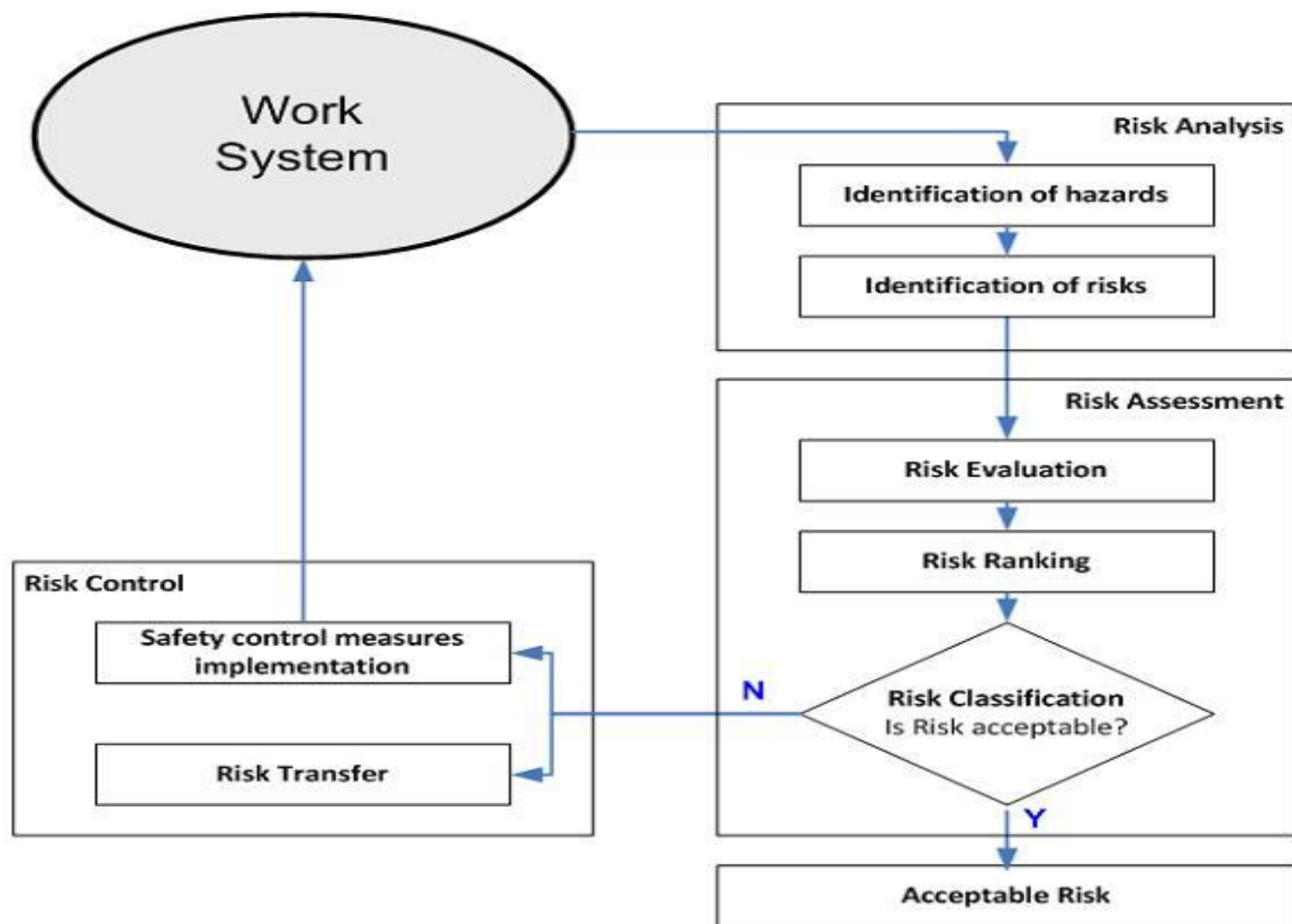
## Health effects:

- Occupational Stress, Anxiety, Depression
- Cardiovascular Disorders, GI Disorders
- Drug abuse, smoking



## **2. Outline the Work flow for Risk assessment & management**

# e 1: Risk management



# Hierarchy of Controls

Most effective

Least effective



Source: NIOSH

# 3. Training

Training of staff :

- At the time of Induction
- Training on possible hazards related to your profession.
- Mock drills at regular intervals.

*(Details in the attached excel sheet)*

# References

1. *Oshwiki.eu/wiki/occupational\_safety\_and\_health\_risk\_assessment\_methodologies.*
2. *Oshwiki.eu/wiki/prevention\_and\_control\_strategies*

THANK  
YOU

