

# Occupational services & screening

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# Objectives of lecture

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At the end of lecture, students will identify:

- Activities of occupational health services
- Screening of occupational health hazards
- Impairment & disability
- Rehabilitation and its types
- Occupational Health Team

# Activities of Occupational Health Services

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- 1- Maintenance of healthful work environment
- 2- Diagnosis and treatment of occupation diseases
- 3- Promotion of workers' health.
- 4- Prevention of occupational health hazards.
- 5- Control of occupational health hazards.
- 6- Rehabilitation and compensation of the disabled workers.
- 7- Provide special care for vulnerable groups of workers
- 8- Keep good health recording system

# 1- Maintenance of Healthful Work Environment:

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- ❑ Perform periodic inspection of the different departments of the factory and
- ❑ Evaluate the work environment in order to detect and appraise health hazards.
- ❑ Appropriate recommendation to improve the control measures

## 2-Diagnosis and treatment of occupation diseases:

- A detailed occupational history of exposure to hazardous agent or process should be taken
- Symptoms and signs of the disease must coincide
- Measures and samples taken from the environment indicate that the causative agent is present in a sufficient concentration to produce the disease.
- The manifestations are improved when the worker gets out from the work place and are aggravated by getting back to the work place.
- The same manifestations are prevailed among other workers
- The disease should be registered on the list of occupational diseases.

# 3. Promotion of workers' health

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## A. Improvement of the health and working capacity of workers

1- Adequate nutrition (for every type of occupation) either by

Nutrition Education and support

Prevention and control of parasitic diseases.

2- Socioeconomic development through

Improving workers' income.

Guidance for proper expending of this income.

# 3. Promotion of workers' health

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## 3- Social welfare through:

Management of family problems.

Making good social relations at work.

Encouragement of sport activities.

## 4- Health education and keeping good medical records

# **(B) Improvement of work environment:**

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**Good sanitation of work place**

**Good design of the machines.**

**Suitable housekeeping.**

**Proper lighting and ventilation.**

**Good control for physical hazards as heat, radiation and noise.**

**Supplying work place with washing facilities and suitable transportation means.**

# 4- Prevention of occupational health hazards

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**a) Medical prevention:**

**b) Engineering prevention:**

**c) Hygienic prevention**

# Medical prevention

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- **Pre-employment medical examination**
- **Pre-placement examination:**
- **Periodic medical examination**
- **Health education**
- **Immunization of workers and chemoprophylaxis**

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## **i. Pre-employment medical examination**

for all persons to choose the suitable worker to the job which suits his physical capacities and mental abilities,

## **ii Pre-placement examination:**

medical examination must be done by the occupational physician of the plant to which the worker is joined to put the suitable worker in the suitable process that suits his health condition.

Each employee is subjected to a pre-placement examination before joining a new job

# Periodic medical examination ( screening)

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For Early Detection of any health hazards arises from exposure to an offending agent at workplace

**Done at certain intervals**

Every six months or every two years

These intervals vary according to:

- Type of the hazards
- Duration
- Severity
- level of exposure

# screening

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**1- Survey (questionnaire):** inquires about history of exposure to any hazardous substance or process at work place and any abnormal symptoms or complains.

**2- Clinical examination.**

**3- Laboratory investigations as:** chest X-ray, pulmonary function tests, audiometric evaluation.

**4- Biologic monitoring;** by examination of blood, urine and exhaled air

**screening aimed to early detection of any disturbed physiologic function or toxic substance level**

# Engineering prevention

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- 1- Mechanization of heavy work process to lighten the physical strain.**
- 2. Substitution of hazardous substance or operation by non hazardous one**
- 3. Enclosure: machine guarding**
- 4. Isolation:**  
**isolation of hazardous process inside the work place (radiation).**
- 5. Segregation of hazardous process away from work places.**
- 6. Good ventilation:**

# Hygienic prevention

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**1- Providing good sanitary facilities as washing, changing clothes**

**before and after work, skin and mouth hygiene.**

**2- Supplying protective equipment(PPE)**

**as respirators, protective clothes, and ear muffs or plugs.**

**3- Work environment monitoring for detection and evaluation of environmental**

# Hygienic prevention Cont.

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- ❑ Work environment monitoring for detection and evaluation of environmental pollutants, threshold limit value (TLV) of a chemical substance.
- ❑ Ensuring that work legislations are applied as: work and rest hours,
- ❑ Setting rules for employment of women and children and
- ❑ Investigation for detection of the cause of workers' absenteeism.

# Rehabilitation and compensation

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Rehabilitation of disabled workers aims to:

Minimize or prevent the disability.

Retraining the disabled worker for a new job suitable for his new physical and mental capacities.

Compensation of the disabled workers after evaluation of the disability resulted from occupational disease or accident and giving him some privileges.

# Disability limitation

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**disease**



**impairment**



**disability**



**handicap**

# Impairment

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**Impairment is “any loss or abnormality of psychological, physiological or anatomical structure or function.”**

# Disability

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**Disability is “any restriction or lack of ability to perform an activity in the manner or within the range considered normal for the human being.”**

# Handicap

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**Handicap is termed as “a disadvantage for a given individual, resulting from an impairment or disability, that limits or prevents the fulfillment of a role in the community that is normal (depending on age, sex, and social and cultural factors) for that individual.”**

# Rehabilitation

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**Rehabilitation is “ the combined and coordinated use of medical, social, educational, and vocational measures for training and retraining the individual to the highest possible level of functional ability.”**

# Rehabilitation

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graph TD; A[Rehabilitation] --> B[Medical rehabilitation]; A --> C[Vocational rehabilitation]; A --> D[Social rehabilitation]; A --> E[Psychological rehabilitation];
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**Medical  
rehabilitation**

**Vocational  
rehabilitation**

**Social  
rehabilitation**

**Psychological  
rehabilitation**

## Rehabilitation types include

### **A- Psychosocial services** :تأهيل نفسي وإجتماعي

Family counseling.

Social, psychiatric and recreation services.

All these tasks are carried by **psychologist and psychiatrist**

### **C- Vocational services**: تأهيل مهني

- Vocational assessment and attitude exploration
- Vocational training.
- Placement in a suitable job.

### **B- Medical services**: تأهيل طبي

- Diagnosis
- Treatment
- Follow up

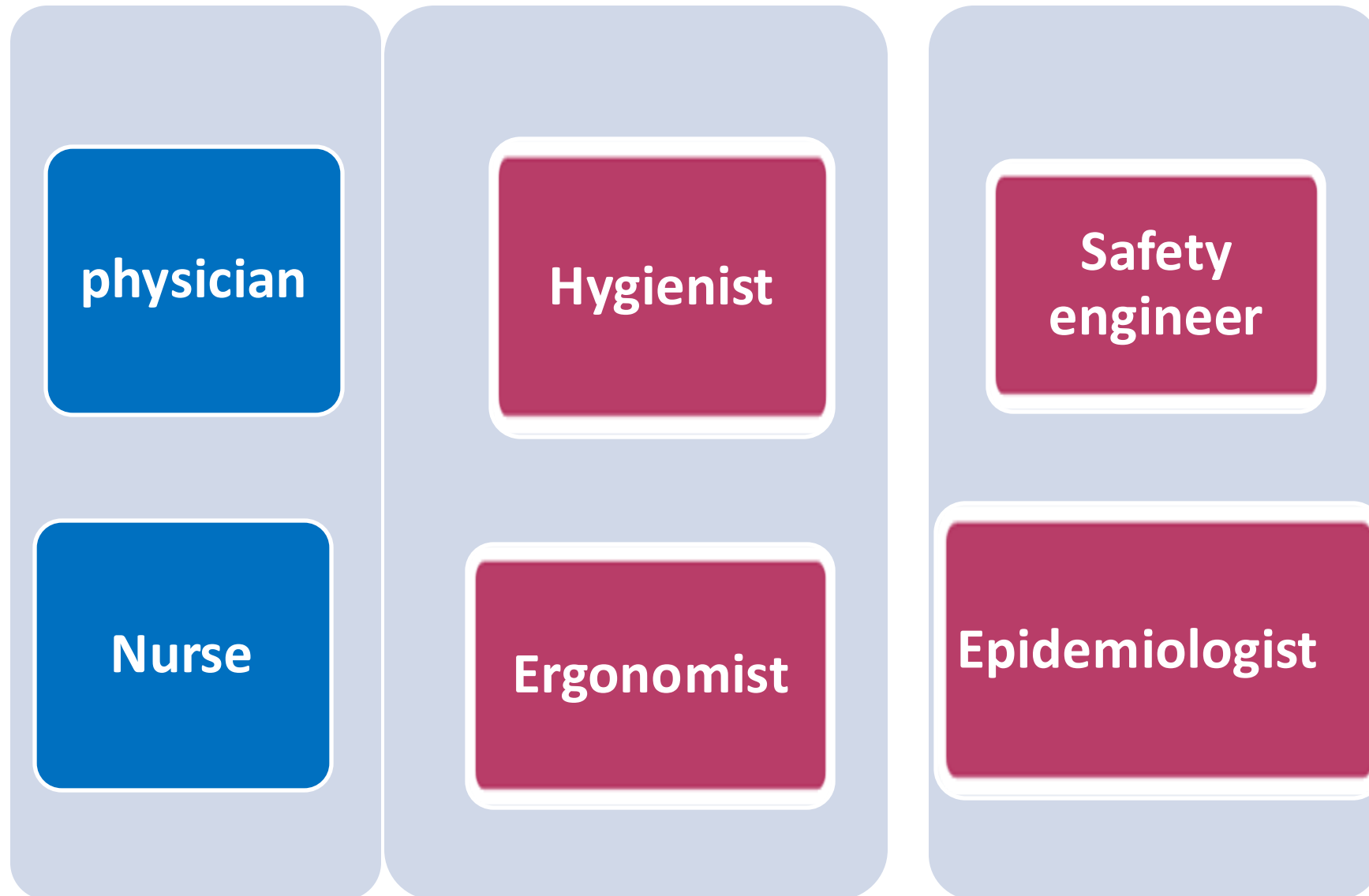
All these tasks are carried by  
**industrial doctor.**

## Keep Good Health Recording System:

- ❖ Every employee should have an **accurate & complete medical** report from the time **of his first employment** examination.
- ❖ The records must **be detailed enough** to provide adequate information for **job placement health maintenance workmen's compensation and rehabilitation** .

*Health record is the seeing eye of the industrial physician and industrial health team.*

## Occupational Health Team:



## **Industrial Physician:**

- 1- Perform the pre-placement examination.**
- 2- Perform the periodic examination.**
- 3- Emergency treatment and/or first aid of accidents**
- 4- Diagnosis and treatment of occupation disease.**
- 5- Rehabilitation of diseased workers.**
- 6- Assessment of the degree of disabilities**
- 7- Referral of chronic-non occupational diseases to a specialist.**
- 8- Health education.**
- 9- First aid treatment of emergent non-occupational conditions**

## ❖ Occupational nurse:

- Assist the physician in providing medical services
- Assist in supervising the work environment
- Educate workers
- keep medical records.

THANK

YOU