Sheet no. : 12  
refer to slide no. : 9   
done by : Elaf Alomoush & Nisreen Alkouz

Corrected by: Elaf & Nisreen   
  
  
 note: this sheet contains an extra information & its not enough at all .. you have to study slides .. good luck.  **occupational safety & health**  
  
**-means**: how our career can affect our life ... unfortunately, this career need mental & physical effort .  
  
-your health is at risk of four hazards mainly :   
a. Infection hazards:

b. Physical hazards:

c. Chemical hazards:

d. Ergonomic Hazards:  
  
-The main causes of death among dentists in Britain, USA and other industrialized countries are

cardiovascular disease, cancer and suicides.  
  
  
- **Occupational Health**: It represents a dynamic equilibrium between the worker and his occupational environment.

-**main infectious agent** : bacteria , viruses, prions.  
  
-**Cross-Infection in dentistry:**

* Transmission:
* Dental instruments:
* Exposure-prone procedures: procedures that put you in the risk and exposure you to infection .  
    
    
  - **the non exposure prone procedures** : is very few , like :   
  extra oral examination & radiograph, intra oral examination by mirror only ,examination an edentulous patient , taking impression for edentulous, placing dentures .  
    
   **cross infection in the dental surgery :** (like slides)  
  - chlorhexidine , rinse patients mouth control to minimize bacterial load by 97% for 2h.  
    
  **Protocol for management of a Needle-Stick Injury**: (lika slides)  
  - induce bleeding or put alcohol is not useful and there is no study support this .  
  - inspect anti-HBs antigen , if its not enough they will give you a poster .  
    
    
  **The incident form includes:**  
  - record also your patients medical history and how long were you exposed .  
  - usually , followers in hospital will follow you every 2-3 month to predict any active infection especially HBV.  
    
   **chemical hazards**  
    
  - it can be dangerous by inhalation, contact with skin, eye …..   
  - chemicals can cause serious hazards and some are flammable and can exclude so you cant work with acrylic near a flame because the monimer is flammable .  
    
  **prevention :**- **scavenging system** , system that pull out excess gas .  
  - (M.S.D.S.) **material safety sheet** , special sheet for each material include information about it like expiry date , physical & chemical properities , contents .. etc .

-adequate general ventilation is required; but in ju hospital in -2…. ☺☺

-material safety data sheet summarize most of data we need; you have to study it .

-**protocol:**

1-**chemical spill**: you always have to wear googles, lab coat and know how to get rid of chemicals.

2-**amalgum**: you should not put amalgam waste in regular/normal waste because it will end up in drinking water.

There is special container called amalgam waste and another one for capsules.

Special kit for mercury is yellowish in colour.

**-About amalgam carrie**r: sometimes amalgam get stuck inside, and some people in order to get it out🡪 they heat it; which is very toxic and dangerous🡪 some studies say that amalgam itself isn’t toxic but its vapor is the toxic one.

\***ween you work with amalgam you have to use**:

- high volume suction.

-rubber dam

-amalgam chunking --> remove amalgam in one chunk to decrease the amount of amalgam getting out.

- “ plyer pearl” -not sure- some thing in the clinic wrought on it how to deal with amalgam. You should read it for the sake of exam."أي شيء موجود داخل العيادة نحن مطالبين فيه حتى لو لم يشرحه الدكتور في المحاضرة"

3-**Methyl Methacrylate:** havespecial odor,very flammable, you should deal with it in the Fume cabinet.

**Physical Hazards**

-even if you are an expert; if you dont look to what you are doing - when you work you may need to talk to someone or do another job- you may harm your patient. ex.: if you are doing composite polishing to anterior teeth, you may cut the lip if you dont do good retraction!

**- burn:**

while taking impression if it is too hot, in endo lab while cutting gutta perca.

**ergonomic hazards**

**Carpal tunnel syndromes**: vibration in the hand and fingers due to dental movement; it may be simply cured by taking cortisol or sometimes it need surgery.

**-**it is more in female**.**

-Hygienists: persons work in hospitals.

\*WMSDs: work leader musculoskeletal disorder.

-**factors contribute to WMSDs**:

1-repetative movement

2-static posture; you have to change your posture from time to time; don’t stay in one posture for long time 🡪 when you will work in your clinic in the future “إن شاء الله” you may have 3 endo cases after each other…

3- vibrating hand specially for who work in the lab.

# to minimize all these:

-We can play with the shape, size of the instrument; you can use the hollow one to decrease its weight.

-hand pieces: lighter and angled one is preferred.

-Syringes / injectors: many designs and shapes**.**