

WORK AND HEALTH

SPECIFIC OBJECTIVES FOR DENTISTS

ORAL MARKERS OF OCCUPATIONAL RISKS

- TEETH ABRASSION- MOLARS (dust)
-INCISIVES(musical wind instruments)
- ENHANCED CARRIES (org.dust)
- GREY GUM'S MARGIN (Pb)
- SLAVER (Hg, organofosfates)
- BLEEDING (benzene)

MERCURY

- ELEMENTAR -> INTERSTITIAL PNEUMONIA
- ANORGANIC -> POISONING
- ORGANIC METHYLMERCURY -> POISONING (Minamata, Niigata disease, epidemic in Iraque)

POISONING

- PSYCHIC CHANGES
- TREMOR
- NEUROLOGIC CHANGES – (step-by-step „decapitation“)
- KIDNEY'S COLAPS
- TERRATOGENICITY

AMALGAM

- In EU :
- 1990 – 110.000 KG
- 2000 – 90.000 KG (20 ČR,POL,SLOVIN.)

- DURING 4 HOURS AFTER TREATMENT, 33x HIGHER SALIVARY LEVELS OF Hg
- 1,8x BLOOD LEVELS OF Hg

DAILY EXPOSURE

- WHO: 10,6 – 27,7 ug
- GERMANY: 22 ug + 20 ug (dentists) -> Hg FROM AMALGAM REPRESENTS ALMOST 50% of daily load
- CRITICAL POINTS: DRILLING, BRUSHING

OCCUPATIONAL EXPOSURE

- NURSE: INHALATION of Hg,
- NEW TECHNOLOGY SIGNIFICANTLY REDUCED THE RISK
- DENTIST: INHALATION OF Hg AEROSOL
- IN THE RESPIRATORY ZONE
cca 25 ug/m³ (even 180 ug/m³ - 18 patients)

PREVENTION

- MAXIMAL LIMITS (NPK) in the working place

50 / 115 ug/m³

- USING THE FACIAL SHIELD
- MASK – HIGHER CONTAMINATION NEEDS FREQUENT EXCHANGE
- AMALGAM IN PREGNANCY?

CONCLUSION

- WORKING IS THE ESSENTIAL PART OF HUMAN LIFE
- WORKING IS THE SOURCE OF IMPULS AND ACTIVITY
- But MAY BE ALSO THE CAUSE OF HEALTH DAMAGES