#### Federal State Budgetary Educational Institution of Higher education "North Ossetian State Medical Academy" Ministry of Health of the Russian Federation (FGBOU VO SOGMA MINISTRY OF HEALTH OF RUSSIA)

#### **DEPARTMENT OF INTERNAL MEDICINE № 2**

# To perform independent extracurricular student work

**Methodical materials** 

the main professional educational program of higher education - the specialty program in the specialty <u>31.05.01 General medicine</u>

Vladikavkaz

Methodical materials intended for teaching 4th year students (7 semester) of the Faculty of Medicine of FGBOU VO SOGMA in the discipline "Occupational Diseases".

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# TOPIC: INTRODUCTION TO THE CLINIC OF PROFESSIONAL DISEASES. PNEUMOCONIOSIS.

- **1.** What are occupational hazards?
- **2.** List the main harmful production factors that occur in industrial enterprises and in agriculture.
- **3.** What is the purpose of preliminary and periodic inspections, and in what cases are they carried out?
- **4.** List the medical records filled out during preliminary and periodic medical examinations of workers.
- 5. List the main features of the diagnosis of occupational diseases and intoxication.
- **6.** What documents are required to resolve the issue of the connection between the disease and the profession?
- 7. In what industries and professions are workers exposed to dust factors?
- **8.** What properties of a dust particle determine its fibrogenic effect? What types of dust have the most fibrogenic activity?
- **9.** What factors of the working environment and characteristics of the organism determine the rate of development and progression of silicosis?
- **10.** State the basic theory of silicosis.
- **11.** Describe the structure of the silicotic nodule.
- 12. What complaints and objective data are characteristic of uncomplicated silicosis?
- **13.** Describe the main radiographic symptoms of silicosis.
- **14.** List the main indicators of the function of external respiration and describe the nature of their changes in silicosis.
- **15.** List the most common complications of silicosis.
- **16.** What options for the course of silicosis do you know?
- 17. What non-professional diseases are silicosis diagnosed with?
- 18. What are the basic principles of silicosis treatment?
- **19.** Name the medications used to treat silicosis and its complications.
- **20.** What are the basic principles of the examination of the working capacity of patients with silicosis?
- 21. What are the main directions of medical prevention of silicosis?
- **22.** What are the features of the expert approach to patients with silicosis and other pneumoconiosis?

#### **TOPIC: DUST BRONCHITIS**

- 1. In what industries and professions are workers exposed to dust? What types of industrial dust do you know?
- 2. What properties of dust determine its ability to cause dust bronchitis? What factors of the working environment and characteristics of the organism contribute to the development of this disease?
- 3. List the complaints typical of patients with dusty bronchitis. Are there any complaints specific to dust pathology?
- 4. What are the objective symptoms of dust bronchitis? Are there averages that are specific?
- 5. What instrumental research methods are used to diagnose dust bronchitis?
- 6. List the criteria for the etiological diagnosis of dusty bronchitis (substantiate the connection between the disease and exposure to industrial dust).
- 7. List the basic principles of treating patients with dust bronchitis.

- 8. What are the rules of medical and labor expertise for dust bronchitis?
- 9. What are the directions of technical, sanitary-hygienic and medical prevention of dust bronchitis?

## TOPIC: OCCUPATIONAL BRONCHIAL ASTHMA.

- 1. What industrial factors can cause the development of occupational bronchial asthma? What are some examples of substances with sensitizing, irritating and combined effects?
- 2. What are the differences in the pathogenesis, clinical picture, course and prognosis of "primary" and "secondary" occupational bronchial asthma?
- 3. Describe the nature of changes in the main indicators of the function of external respiration in bronchial asthma.
- 4. Based on what data is the genesis of bronchial asthma considered professional?
- 5. What determines the prognosis of occupational bronchial asthma in each specific case?
- 6. What are the principles of the examination of the work capacity of patients with occupational bronchial asthma?

## **TOPIC: CHRONIC LEAD INTOXICATION**

1. Name the main professional groups where lead contact is possible.

2. What factors and working conditions contribute to the development of occupational lead intoxication?

3. Name the ways of penetration of lead into the body and highlight the most dangerous of them.

4. What are the transformations of lead in the body? Is it possible to deposit lead in the body? What are the main ways of release of lead and show the practical significance of this process.

5. What is "carriage" of lead and can it be considered a disease?

6. What factors contribute to the increased release of lead from the depot? How should this process be treated?

7. List the "cardinal" syndromes of Saturnism and explain the mechanism of occurrence and diagnostic significance of each of them.

8. List the main clinical syndromes of Saturnism.

9. Is there any sequence of shifts on the part of the central nervous system during Saturnism? 10. What is lead colic?

11. Conduct a differential diagnosis of "lead colic" from acute inflammatory processes emanating from the abdominal cavity.

12. Carry out differential diagnosis of anemic symptom in lead intoxication from anemia in other diseases.

13. What is the current classification of lead intoxication?

14. Using the classification of lead poisoning, solve the issue of clinical and labor prognosis for different severity of the pathological process.

15. List the methods of treatment of lead intoxication, describe the mechanisms of action of complexing agents. Name them.

16. How to properly organize hygienic prevention of lead poisoning at work?

#### TOPIC: INTOXICATION WITH AROMATIC HYDROCARBONS (BENZENE, TOLUENE, XENOL AND OTHERS) INTOXICATION WITH MANGANESE AND MERCURY

1. In what occupations are workers exposed to aromatic hydrocarbons?

2. What are the ways of benzene and its homologues entering the organism?

3. What organs and systems are affected by benzene and its homologues?

4. What is known about the pathogenetic mechanisms of intoxication?

5. Describe the clinical picture of acute benzene intoxication.

6. What qualitative and quantitative changes in peripheral blood are characteristic of benzene intoxication?

7. What neurological symptoms are observed in the clinic of benzene intoxication?

8. Treatment of chronic intoxication with benzene.

9. Treatment of acute intoxication with benzene.

10. Prevention of benzene intoxication.

11. Issues of examination of working capacity in acute and chronic benzene intoxication.

12. The influence of benzene on a woman's health. Adverse effects on the fetus

13. List the industries where there is contact with manganese, and the ways of its entry into the body.

14. What is the pathogenesis of manganese intoxication?

15. Describe the clinical picture of intoxication. What are the features of the course of the first stage?

16. Name the methods of treatment of manganese intoxication.

17. What are the features of the examination of the ability to work in case of manganese intoxication?

18. What is the prevention of this disease?

19. Name the production, work in which is associated with the impact of mercury on the body.

20. Describe the ways in which mercury enters the body.

21. In which organs is mercury deposited?

22. What are the cardinal symptoms of micromercurialism and classic mercury intoxication?

23. What is the modern classification of chronic mercury intoxication?

24. List the main clinical syndromes of the disease.

25. Name the methods of treatment of mercury intoxication.

26. What are the methods of preventing mercurialism? What is demercurialization?

27. List medical contraindications that prevent employment in contact with mercury.

#### **TOPIC: VIBRATION DISEASE**

1. Name the main professional groups of workers who may be exposed to local and general vibration.

2. What are the main vibration parameters? What is their role in the development of the disease?

3. Outline the classification of vibration sickness.

4. What are the main clinical syndromes in vibration sickness in those working with a hand-held power tool?

5. Give a characteristic of the clinical syndromes of vibration disease developing from the impact of general vibration.

6. What are the features of clinical manifestations in the early stages of vibration disease?

7. Describe the functional diagnostic methods for vibration disease.

8. Describe the differential diagnosis of vibration disease.

9. What are the main methods of treatment and features of medical and labor expertise in vibration disease?

10. List the main measures of medical and hygienic prevention of vibration disease.