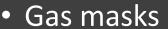
Individual respiratory organs protective e devices

Practice for 2 gr students



- Respirators
- Self-rescue devices
- Some primal means

Recent respirators are available to ensure appropriate protection for respiratory organs and eyes from harmful impact of poisoning agents.

Types of gas masks according to their working principle

- ✓ filtering protective mask air purifying respirator
- ✓ self-contained breathing apparatus

Air-purifying respirator

ne purpose – to defense spiratory organs and eyes om harmful impact of erosols, chemical bisoning agents, dioactive materials

ne working principle of airarifying respirator based on the working principle of ter box.

ter box: absorbent coal antismoke filter



The structure of air-purifying respirator

- Filter box and face part
- Hopcalite cartridge
- 5 heights of face helmets:

63 sm - 0 size

63,5-65 sm – 1 size

65,5-68 sm - 2 size

68,5-70,5 sm-3 size

71,5 and more – 4 size

3 ways of absorption

- 1) adsorption is the adhesion of molecules of gas to some solid surface (activated coal in respirators)
- 2) chemisorption chemical adsorption is the absorption of poisoning agents with chemical reaction
- 3) catalysis is the process of modifying a chemical reaction with the use of a catalyst.

Self-contained breathing apparatus

solates respiratory organs from outer air. The act of breathing arise from disengaging air from oxygen cylinder

2 types:

eumatogen: regenerating rtridge and reservoir bag

eumatophore: balloons with mpressed air compound



Self-rescue device

- Short-term protection from warfare poisoning agents during emergency escape from contaminated area
- regenerating cartridge and reservoir bag with pressure isolation valve



Respirator

- Defense from aerosols and dust
- Disposable and re-usable

