

INDIVIDUAL AND COLLECTIVE PROTECTIVE EQUIPMENTS. ACTIONS OF THE POPULATION IN FIRES AND EXPLOSIONS IN THE MANUFACTURES.

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INDIVIDUAL AND COLLECTIVE PROTECTIVE EQUIPMENTS

- What is the state “protection equipment”?
- The Requirement for PPE
- The Hazard Assessment
- How can we protect our self's?

TYPES OF DANGEROUS

- Hazards exist in every workplace in many different forms: sharp edges, falling objects, flying sparks, chemicals, noise and a myriad of other potentially dangerous situations. So we should protect our self's and all society from that threats.

HOW CAN WE DO THAT?

- Personal protective equipment (PPE) refers to protective clothing, helmets, goggles, or other garments or equipment designed to protect the worker from injury, health impairment, or infection.



MAIN TYPES OF EQUIPMENTS

- ❑ **Respirators**
- ❑ **Skin protection**
- ❑ **Eye protection**
- ❑ **Hearing protection**
- ❑ **Protective clothing and ensembles**
- ❑ **Ensembles of different protective equipments**





Safety helmets must be worn where appropriate



Foot protection must be worn where appropriate



Use ear protection where appropriate



Wear eye protection where appropriate



Use hand protection where appropriate



Face masks must be used where appropriate



THIS PROTECTIVE EQUIPMENT



HARD HAT



SAFETY SHOES



HI-VIS VEST



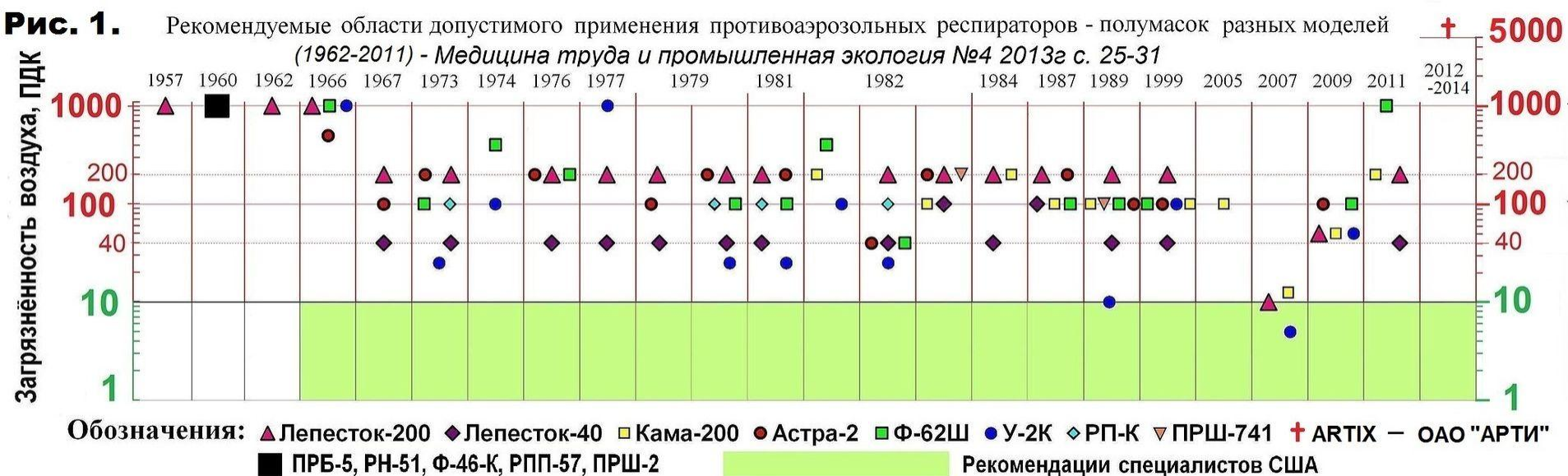
SAFETY GLASSES

MUST BE WORN ON THIS SITE

NBC SUIT (ОБЩЕВОЙСКОВОЙ ЗАЩИТНЫЙ КОСТЮМ)

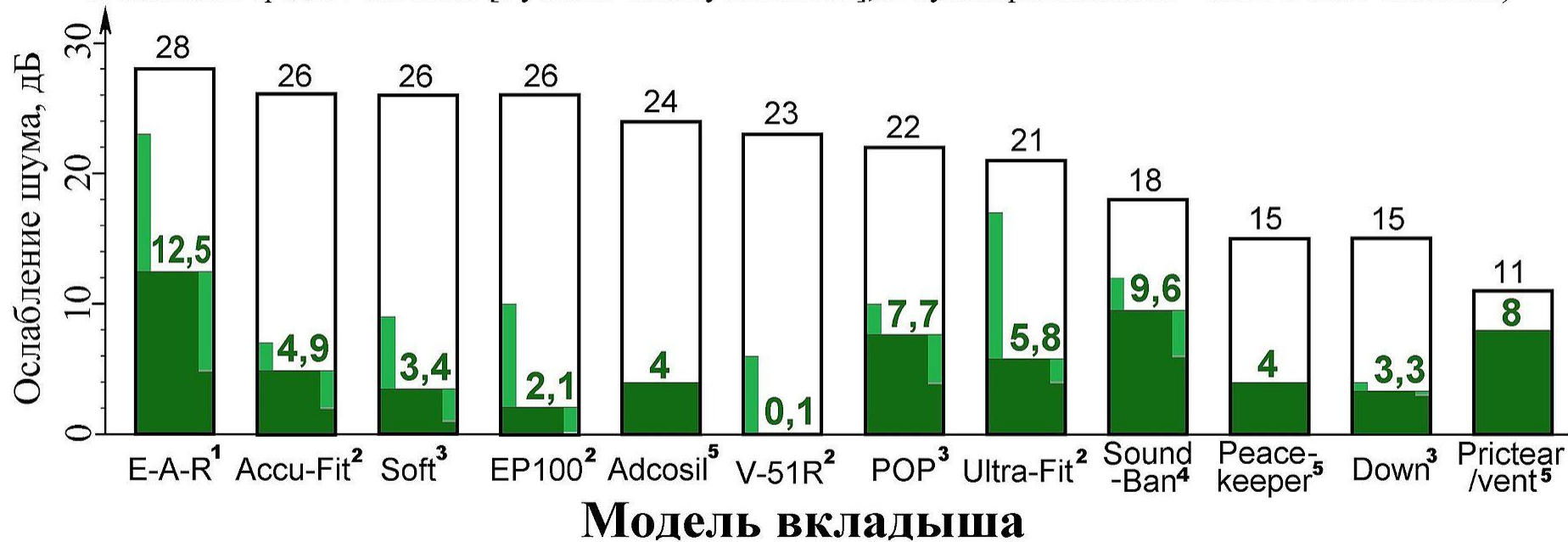
- An **NBC (nuclear, biological, chemical) suit** is a type of military personal protective equipment designed to provide protection against direct contact with and contamination by radioactive, biological or chemical substances, and provides protection from contamination with radioactive materials and some types of radiation, depending on the design. It is generally designed to be worn for extended periods to allow the wearer to fight (or generally function) while under threat of or under actual nuclear, biological, or chemical attack.





Ослабление шума вкладышами, дБ

(Вверху - в лаборатории при сертификации, NRR; внизу - реальное. Если одна модель изучалась в разных исследованиях, то показано среднее значение [с учётом числа участников], и пунктирной линией - макс. и мин. значения)



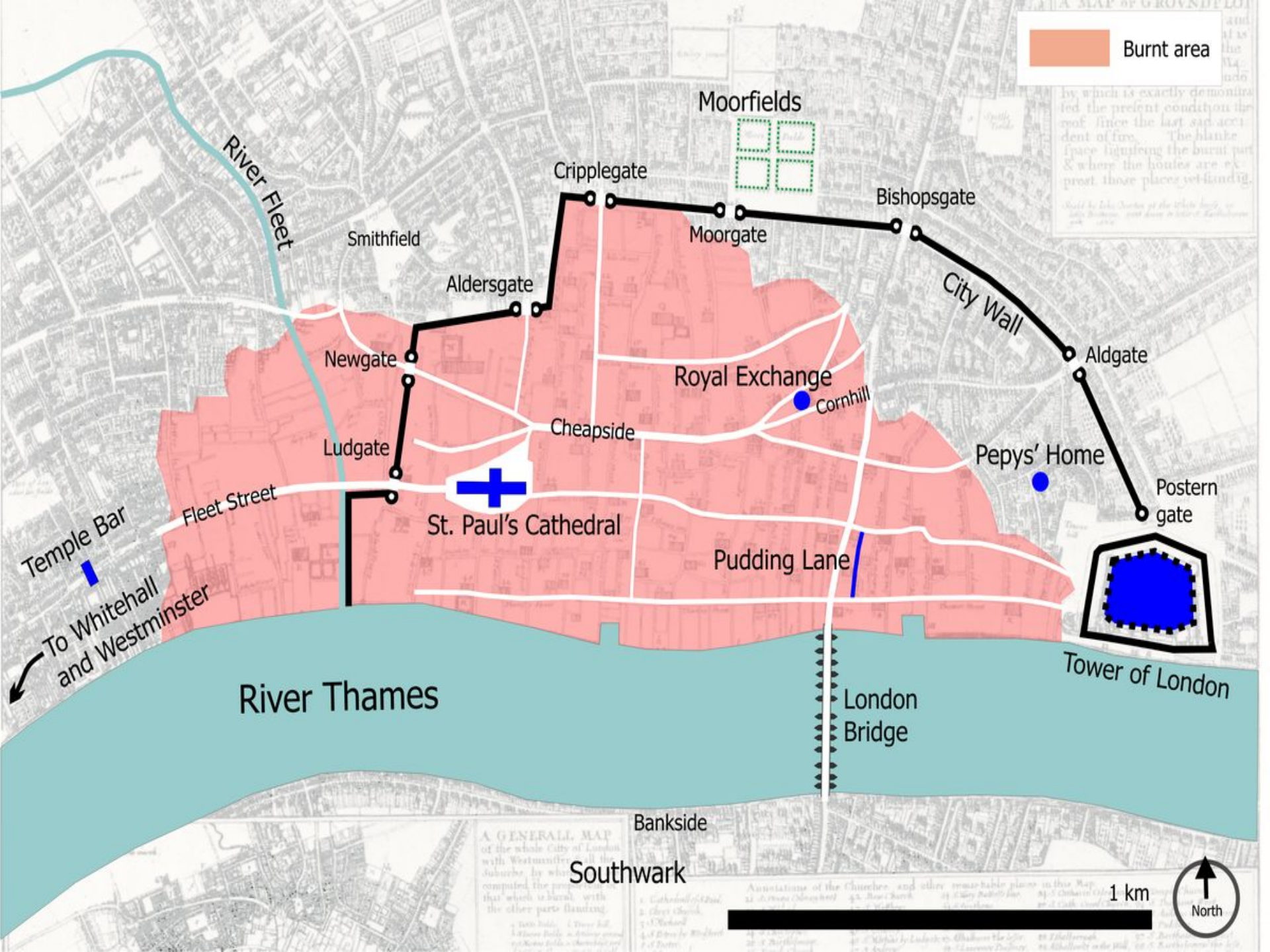
Тип: 1 - эластичный вспененные, 2 - предварительно изготовленные, 3 - из стекловолокна, 4 - закрывающие лишь вход в ушной канал, 5 - изготавливаемые под конкретный ушной канал

ACTIONS OF THE POPULATION IN FIRES AND EXPLOSIONS IN THE MANUFACTURES.

- Fire – it is uncontrolled process of burning, which destroys material values and creates danger for life and health of people.
- Explosion – it is burning with the release of big amount of energy in some fixed volume for a short time period. Explosion creates a blast wave.
- Causes: defects in electrical network, violation in safety rules and accident prevention.

Great fire in London

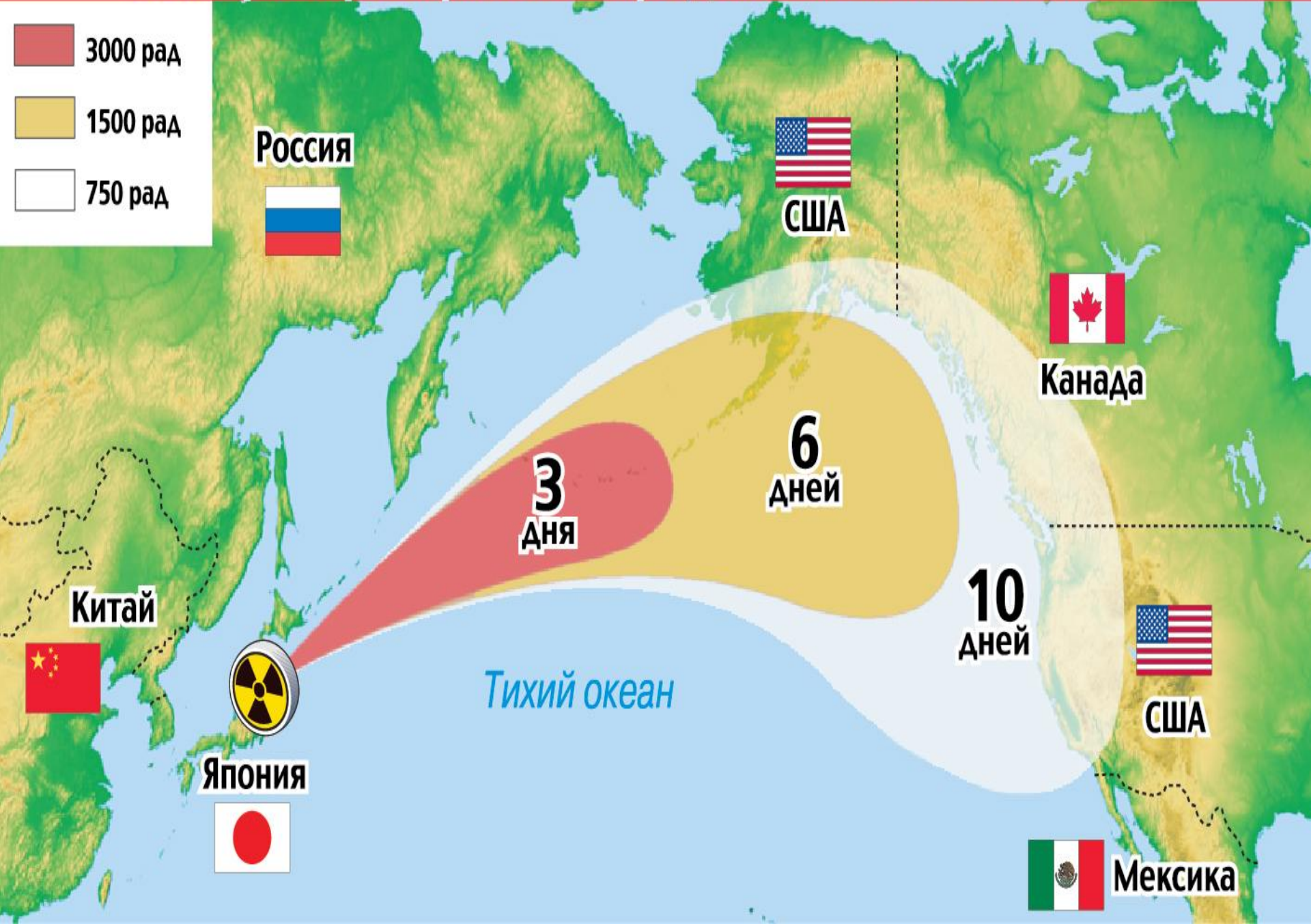




Explosion on Fukushima NPP



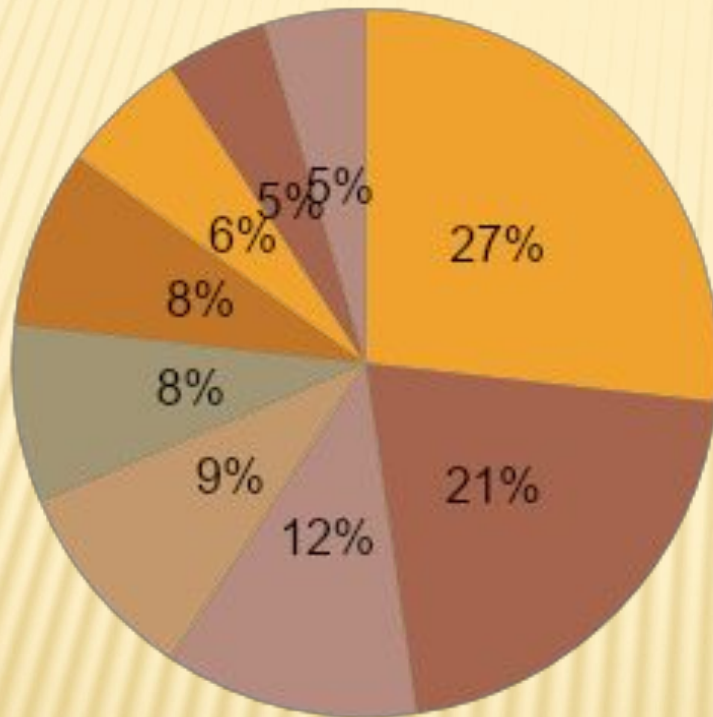
Зона распространения радиоактивного облака



SOME STATISTICS

According to researches which were provided in USA

Cause of fires and explosions on manufacture



- Defects in electrics
- Smoking
- Overheat because of friction
- Overheat of combustible material
- Defects in boilers, bakes
- Contacts with open fire
- Contacts with sparks
- Spontaneous combustion
- Metal welding

PREVENTION

- To prevent fires and explosions is necessary to exclude the possibility of formation of combustible and explosive environment, as well as prevent the occurrence of these environments ignition sources.

PREVENTION

Fire prevention tasks can be divided into three broad but closely related set of measures:

1. training, including dissemination of knowledge about fire-safe behavior (the need to install home smoke of indicators and storage of lighters and matches out of reach of children);
2. fire control, providing for the development of state fire safety regulations and building codes, as well as verification of their implementation;
3. provision of equipment and technical development (installation of portable fire extinguishers and manufacture of safe use of lighters).

ACTIONS IN CASE OF FIRE

Security comes down to the following key tasks:

1. prevent an explosion;
2. quickly put out the fire of arisen;
3. prevent the spread of fire to adjoining rooms;
4. evacuated from the danger zone for children and adults;
5. if you can not stop the burning, to evacuate;
6. inform the fire brigade;
7. fight the fire before firefighters arrived.

CONCLUSION

- From the material presented it follows that the fires and explosions accompanied by the destruction of material values, endanger human life and health, the environment. The fast-paced society, science and technology, the more urgent becomes the problem of fires and to ensure fire safety. Therefore, prevention of emergency situations involving fires and explosions can be considered achieved if everyone will know the causes and consequences of fires and explosions, and be able to prevent them.

BIBLIOGRAPHY

□ Studopedia.

http://studopedia.ru/2_8012_deystviya-lyu-dey-pri-pozharah-i-vzrivah.html

Sponsor of presentation

