

By: Vozyakova Ekaterina

# Rabies



# Vocabulary

- Rabies |'reɪbiːz| – бешенство
- Inflammation – воспаление
- Acute – острый, критический, неотложный
- Tetanus |'tet(ə)nəs| - столбняк
- Endemic |en'demɪk| - свойственный данной местности; эндемический
- Lyssavirus – лиссавирус; вирус бешенства
- Saliva |sə'laɪvə| – слюна
- Exposure to smth – подвергание, контакт
- Tingling – зуд, покалывание
- Confusion – потеря ориентации; волнение; затемнение сознания
- Loss of consciousness – потеря сознания
- Inoculation |ɪˌnɒkjʊ'leɪʃn| - прививка
- Maximal virulence |'vɪrʊləns| – максимальная вирулентность (вакцины)
- Incubation period – инкубационный период
- Supportive treatment – поддерживающее лечение
- Spray and neuter animals – стерилизовать животных

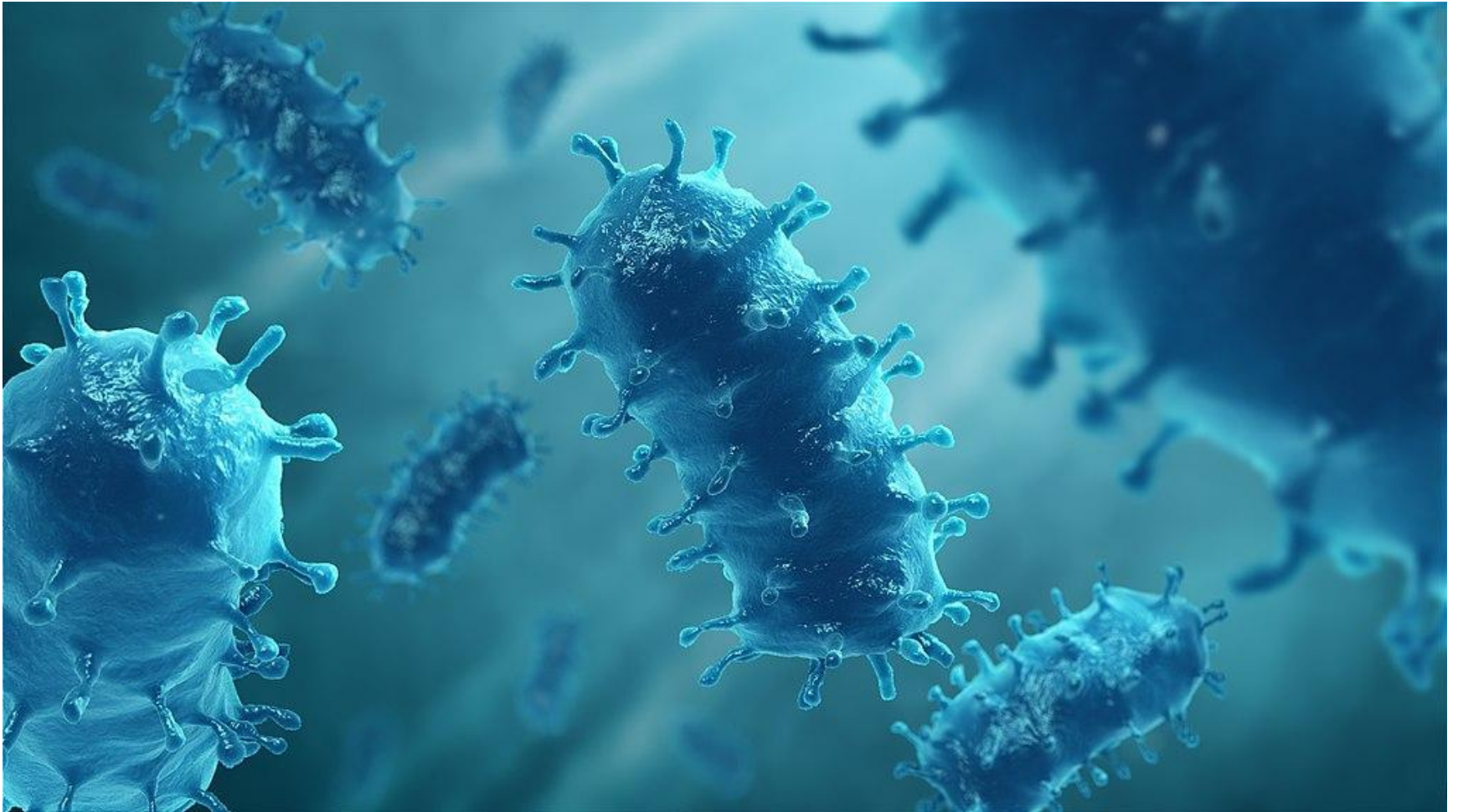
# Facts

- Rabies is one of the most dangerous infectious diseases, causes an acute inflammation of the brain. Along with HIV, tetanus and other diseases, it is endemic in parts of America, Europe, Asia and Africa.
- Rabies is caused by lyssaviruses. It is spread with the saliva, when an infected animal bites or scratches a human or other animal.
- Dogs are the most common animal involved. In the Americas, bat bites are the most common source of rabies infections in humans.

# Facts

- Rabies kill up to 59,000 people each year (or 160 people a day). About 15 million people undergo treatment after exposure to animals with rabies.
- Early symptoms can include fever and tingling, later followed by violent movements, aggressiveness, uncontrolled excitement, fear of water, an inability to move parts of the body, confusion, and loss of consciousness.
- Rabies cannot be cured once the symptoms appear and almost always ends in death. It is necessary to consult a doctor and start medical treatment immediately.
- Rabies is a vaccine-preventable viral disease, but in some cases immediate washing of the wound with soap and water after contact with a rabid animal can save lives.

# Rabies Virus: Lyssaviruses image





# Rabies carries



# Symptoms

- Anxiety
- Stress
- Tension
- Drooling
- Muscle spasms
- Swallowing difficulty
- Loss of muscle function



# Rabies in History

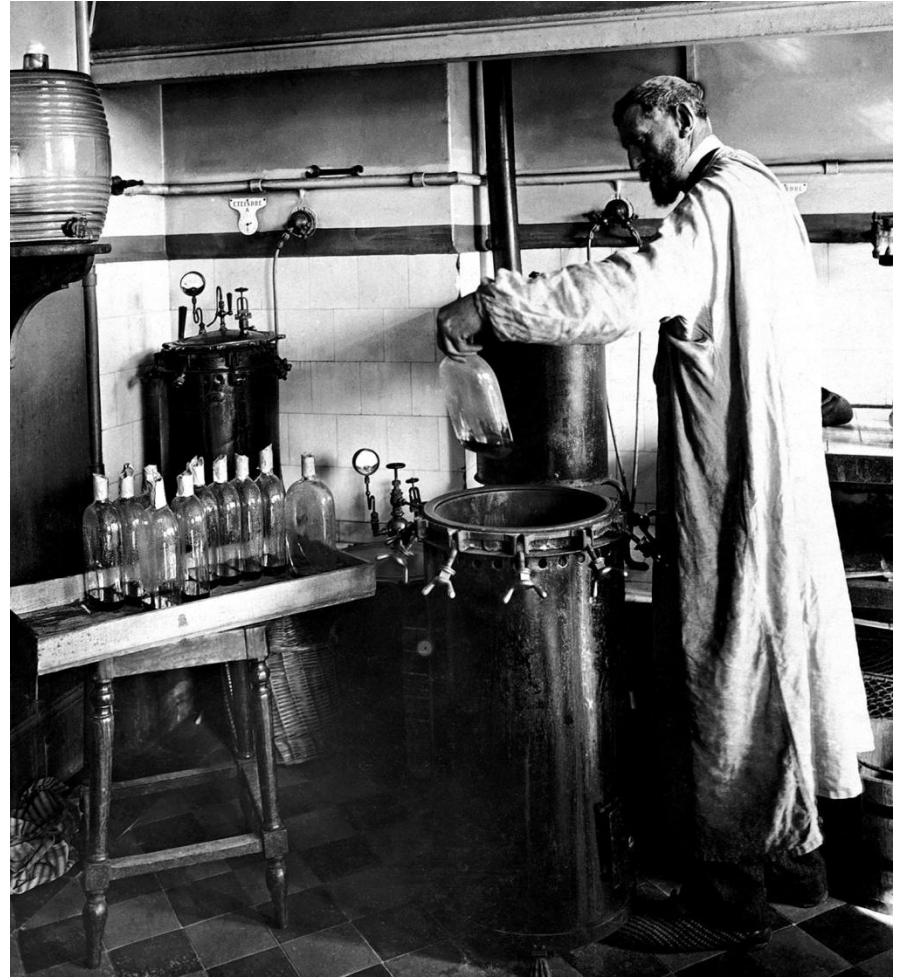
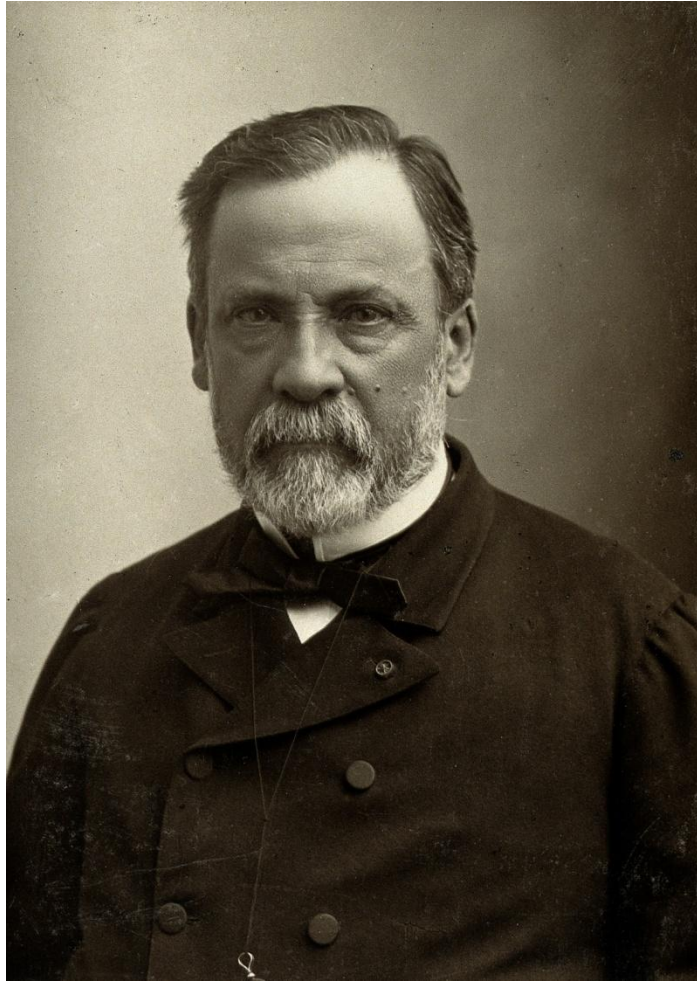
- Rabies cases have been reported since before 2300 BC.
- 1<sup>st</sup> century AD a Roman scholar named Aulus Cornelius Celsus gave the first accurate description of the disease
- 1<sup>st</sup> scientist to test rabies infection through inoculation of saliva was a German scientist named Zinke in 1804



# Pasteur's Contribution

- In 1885 a French biologist Louis Pasteur published a method for protecting dogs against rabies;
- A dog exposed to rabies was protected by inoculation with an emulsion prepared from the dried spinal cord of a diseased rabbit;
- Pasteur had the chance to test this same method on humans when Joseph Meister, a nine-year-old boy who was bitten by a rabid dog was brought to him in July of 1885;
- Joseph was injected over several days with the emulsions;
- After 2 weeks, Joseph was given an injection of virus that had maximal virulence when tested in a rabbit ;
- Joseph survived as did thousands of others treated by the same procedure.

# Louis Pasteur



# Methods of Cure

- Rabies Vaccine: A killed virus vaccine (Human Diploid Cell Vaccine, HDCV) grown in human fibroblasts is available for safe use in humans.
- The unusually long incubation period of the virus permits the effective use of active immunization with vaccine post-exposure.
- If rabies has not been diagnosed and the victim is not treated with a vaccine, it is nearly always fatal, and treatment is typically supportive.



# Control and Prevention

- Vaccination
- If you are exposed to a possible rabid animal:
  - Wash wound with soap and water
  - Seek medical attention immediately
- Be a responsible pet owner
  - Keep vaccinations up to date
  - Keep pets under direct supervision
  - Spay and neuter pets
- Enjoy wild animals from far away
- Don't adopt wild animals
- "Love your own, leave others alone" policy

# World Rabies Day

- World Rabies Day takes place each year on September 28, the anniversary of the death of Louis Pasteur who, with the collaboration of his colleagues, developed the first efficacious rabies vaccine.

