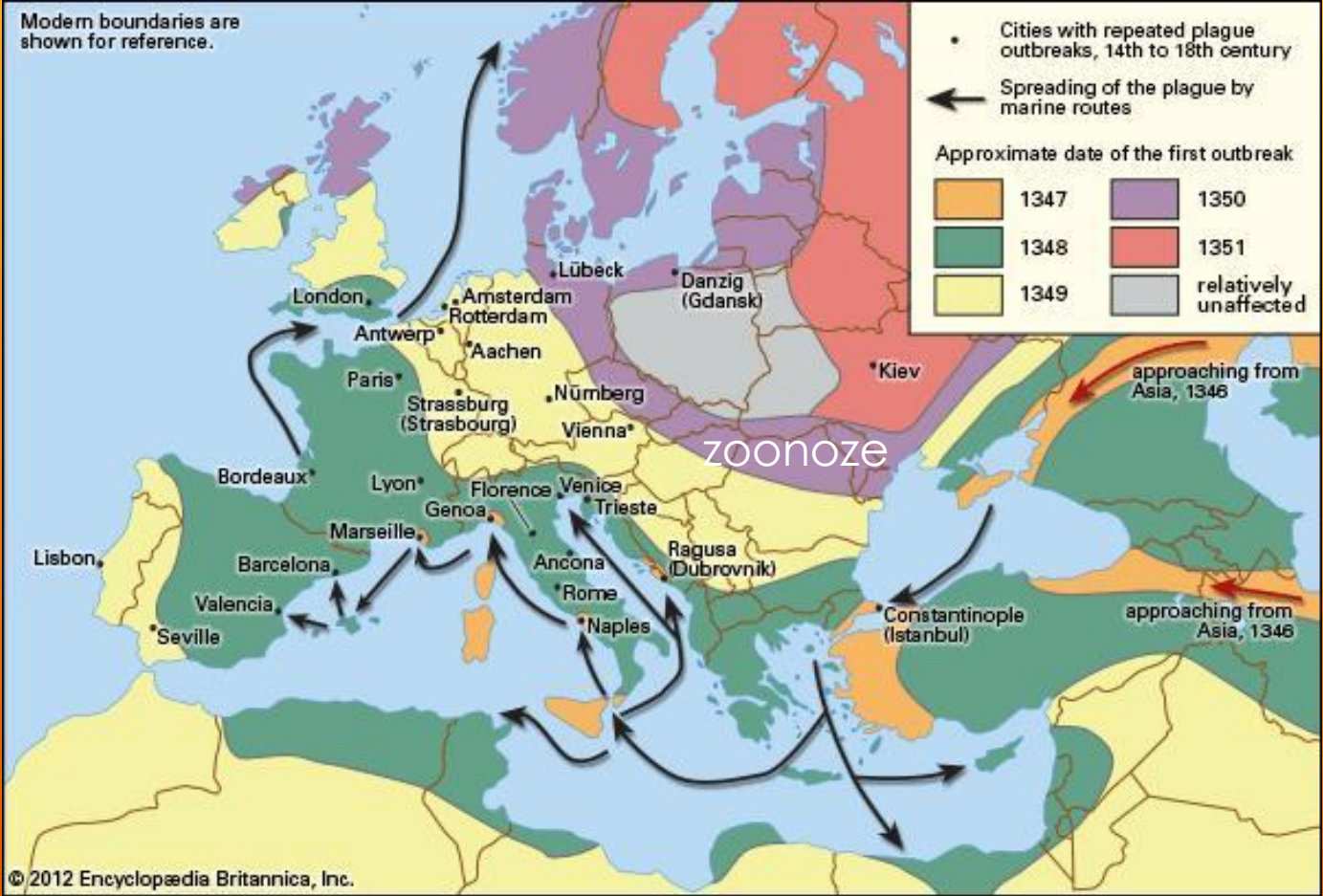
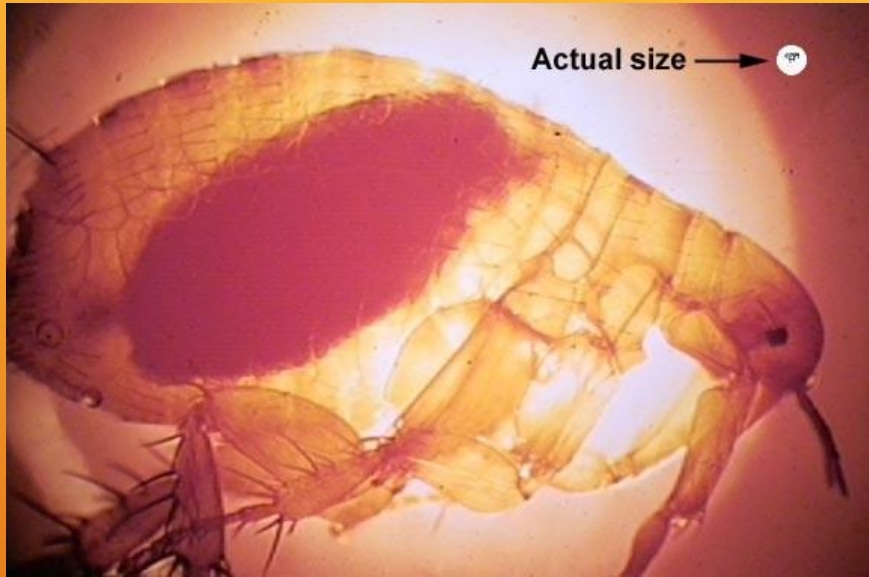
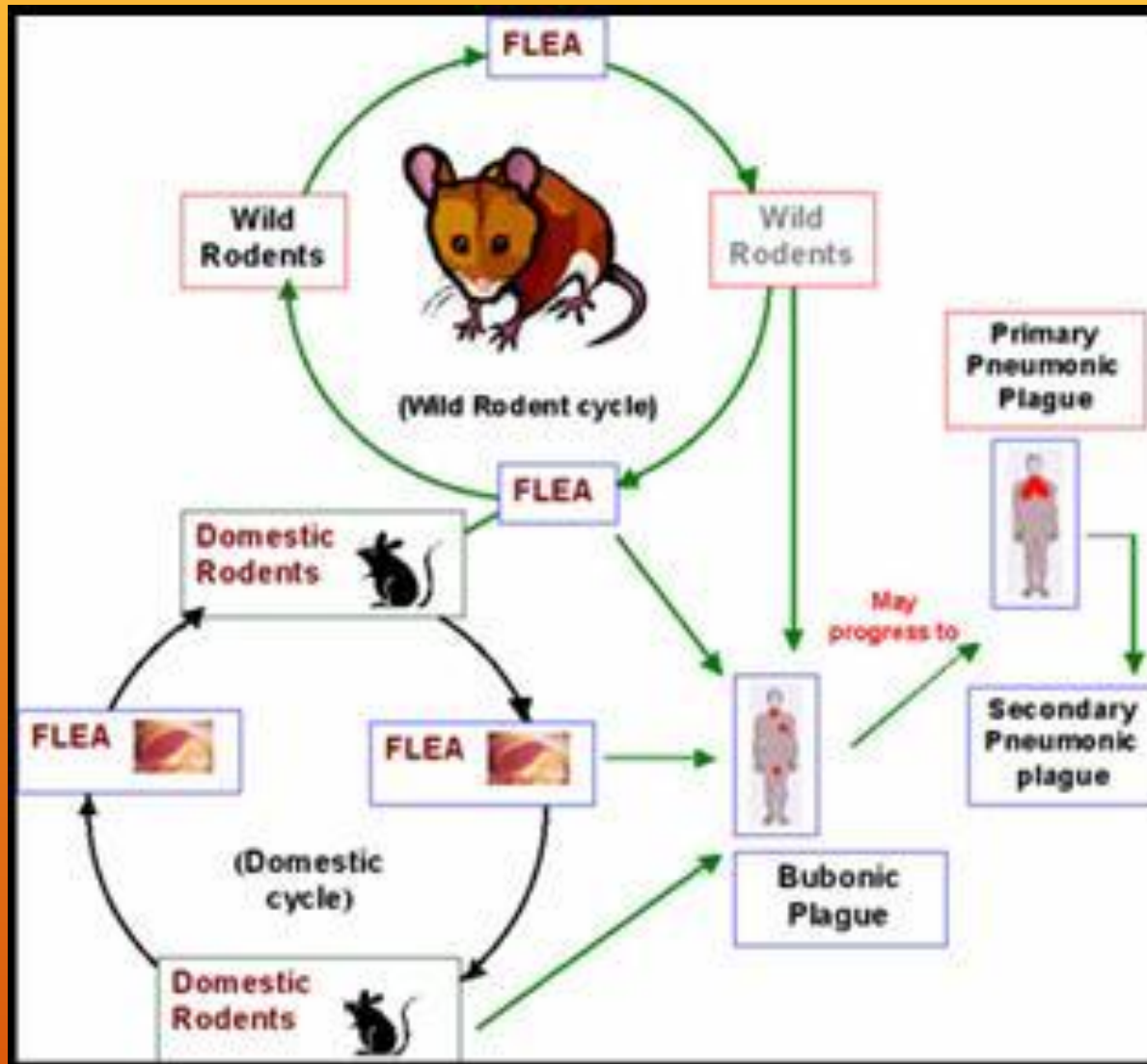


YERSINIA PESTIS BLACK DEATH









PLAGUE IS A DISEASE THAT AFFECTS HUMANS AND OTHER MAMMALS



Bubonic plague

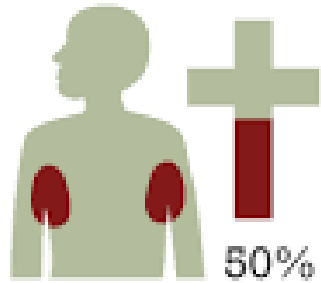


Septicemic plague

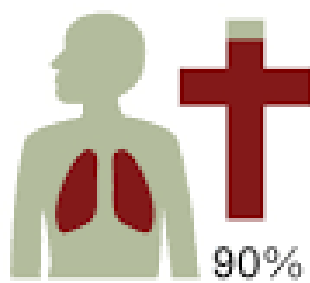


Pneumonic plague

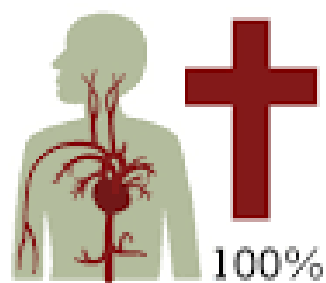
Bubonic Plague



Pneumonic Plague



Septicaemic Plague



Key

† Mortality rate

BUBONIC THE BITE OF AN INFECTED FLEA

Fever onset

symptoms usually manifest 3-6 days after contracting the organism but may appear in the first day or be delayed for longer than a week.

painful lymphadenopathy (bubo)



SEPTICEMIC



Main symptoms of Pneumonic plague

Systemic:

-Fever

Central:

-Headache

Respiratory:

-Cough

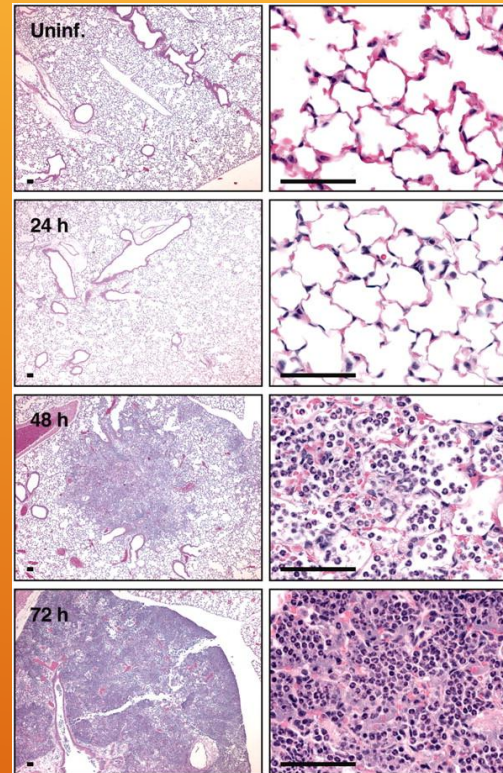
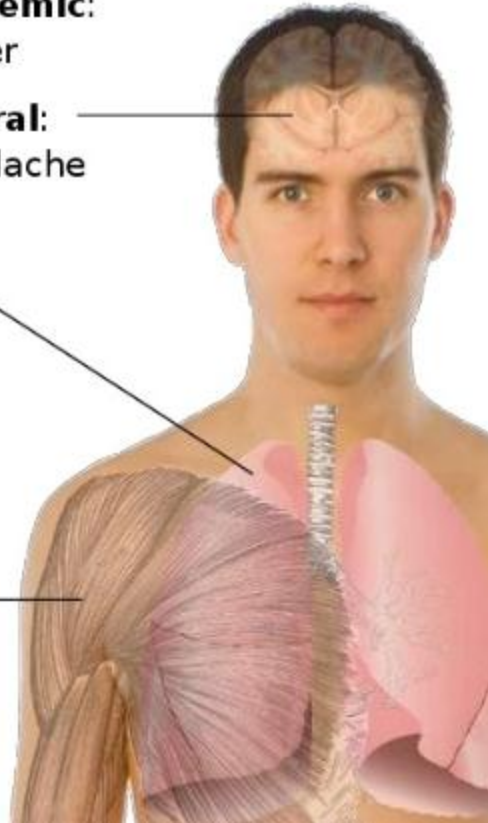
-Hemoptysis

-Dyspnea

-Chest pain

Muscular:

-Weakness



PEUNOMONIC

HOW IS PLAGUE DIAGNOSED?

If the health worker suspects plague, samples

blood, sputum, or lymph node aspirate are sent to a laboratory for testing.

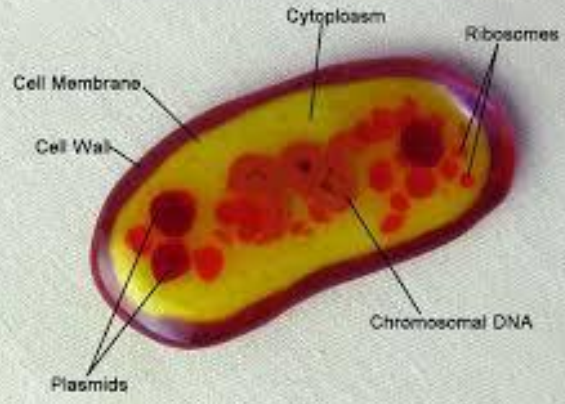
Once the laboratory receives the sample, preliminary results can be ready in less than two hours.

Laboratory confirmation will take longer, usually 24 to 48 hours.

Often, presumptive treatment with antibiotics will start as soon as samples are taken, if plague is suspected.

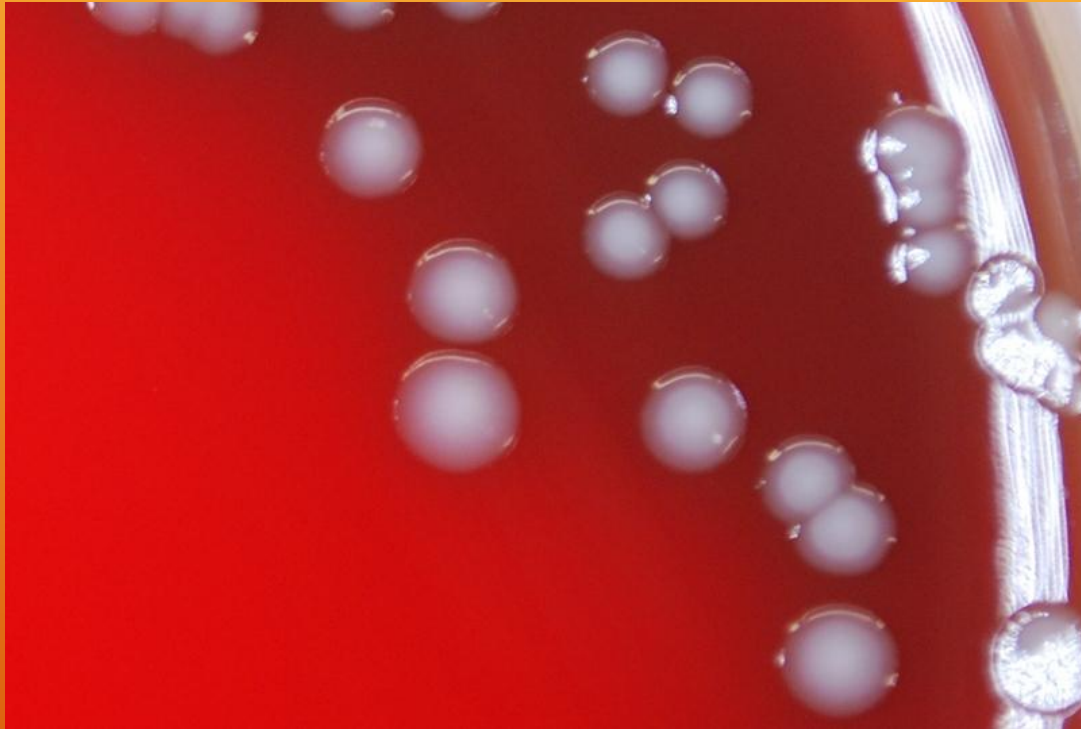
Yersinia pestis (Plague Bacteria)

4

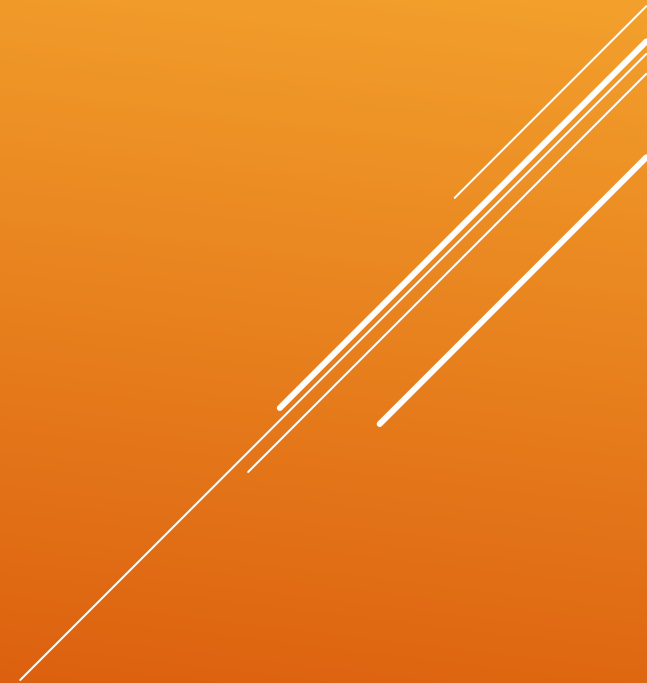


MICROSCOPY





MACROSCOPY



LPS

Capsule-like antigen, fraction 1 (F1)

Protease

Siderophore

PAHOGENESIS





TREATMENT

- ▶ ***Aminoglycosides: streptomycin and gentamicin***
- ▶ ***Chloramphenicol***



VACCINATION

- ▶ Worldwide,
- ▶ live attenuated and formalin-killed *Y. pestis* vaccines are variously available for human use