

# PLAGUE



## + Impact goal

**Elimination** as a public health problem

## + Elimination target

**Zero** new confirmed cases of plague

## + Programmatic targets

**<1** suspected case per 100 000 population per year in endemic foci

**100%** case confirmation by laboratory (culture, polymerase chain reaction [PCR], rapid diagnostic test [RDT], or serology)

**100%** of confirmed cases managed with appropriate antibiotics

## Action steps to achieve elimination

### ① Vector and reservoir control:

-Use insecticides to control fleas; eliminate rodent habitats near homes; improve sanitation and waste management to cut food sources; and exterminate rodents safely to avoid flea dispersion

### ② Surveillance:

-Apply geospatial tools to map high-risk zones; monitor rodent and flea populations for *Yersinia pestis*; track wildlife reservoirs (e.g., wild rodents, small mammals); and implement event-based surveillance (e.g., rodent die-offs, unexplained febrile deaths)

### ③ Rapid diagnosis and case management:

-Train health workers to identify and treat cases early; ensure access to diagnostics (RDTs, PCR); treat with effective antibiotics (e.g., streptomycin, gentamicin, doxycycline); and establish referral pathways for severe cases

## Best buys

### ④ Risk communication, community engagement, and One Health:

-Educate communities on transmission, symptoms, care-seeking, and safe animal handling in enzootic areas; develop tailored communication materials; and coordinate across human, animal, and environmental health sectors

### ⑤ Infection prevention and control (IPC):

-Implement IPC protocols in health facilities to prevent transmission; equip with personal protective equipment and isolation capacity; conduct contact-tracing and chemoprophylaxis; and stockpile medicines and protective gear in endemic areas

## More information

- Pan American Health Organization. Protocolos para la vigilancia y control de roedores sinantrópicos. Washington, DC: PAHO; 2015. Available from: [https://iris.paho.org/bitstream/handle/10665.2/50507/protocolosvigilancia\\_spa.pdf?sequence=1&isAllowed=y](https://iris.paho.org/bitstream/handle/10665.2/50507/protocolosvigilancia_spa.pdf?sequence=1&isAllowed=y).
- World Health Organization. Manual for plague surveillance, diagnosis, prevention and control. Geneva: WHO; 2024. Available from: <https://iris.who.int/bitstream/handle/10665/378694/9789240090422-eng.pdf?sequence=1>.
- World Health Organization. Plague. Geneva: WHO; 2025 [cited 29 May 2025]. Available from: [https://www.who.int/health-topics/plague#tab=tab\\_1](https://www.who.int/health-topics/plague#tab=tab_1).



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