Healthy carriers, natural hosts of Lassa fever virus
CERTAIN SPECIES OF RAT
particularly Mastomys rats

CONTACT with blood and other biological fluids as well as the secretions and excrement of an infected person

HUMAN EPIDEMIC

SKINNING
CONSUMPTION
of food contaminated by urine or excrement

CONTACT with household items contaminated by infected rats

SCRATCHES BITES
**LASSA FEVER**

**WHAT SHOULD YOU DO DURING A HUMAN EPIDEMIC?**

1. Ensure good coordination between Veterinary Services and Health Services (including hygiene committees) as well as with associations active in the affected communities.
2. **During active outbreaks, collect samples from rats**, if possible, and send them to the national veterinary laboratory or a reference laboratory.
3. Notify WOAH by e-mail or fax or through WAHIS of every confirmed case of emerging infectious diseases (like Lassa fever) as per Article 1.1.4 of WOAH Terrestrial Code.

**WHAT MESSAGES SHOULD YOUR SHARE WITH AT-RISK COMMUNITIES?**

1. **Lassa fever is a disease of animal origin transmitted by rats.**
2. **Do not touch or play with rats.**
3. **Do not eat food contaminated by rat urine or excrement.**
4. **Take precautions to prevent rat bites and scratches, as well as contact with their urine or excrement.**
5. **Protect leftover food in rat-resistant containers (containers with lids).**
6. **Keep your home and its surroundings clean:**
   - Cut plants near homes.
   - Fill all holes in the house to prevent rats from entering.
   - Pick up garbage and throw it in a garbage pit far from homes.
7. **Go to the nearest health clinic** as soon as possible if you are scratched or bitten.

**UNDERSTANDING THE CYCLE OF LASSA FEVER**

**Concerned species**
- Humans.

**Reservoir**
- Peri-domestic rodents, especially rodents of the genus *Mastomys*, commonly referred to as «multimammate rats».

**Modes of transmission**
- The mechanisms for transmission between rodents of the genus *Mastomys* are thought to occur through contact with the excretions of existing carriers.
  - **Human transmission occurs through:**
    - Direct contact with the blood and other biological fluids as well as the secretions or excretions of infected rats.
    - Indirect contact with the excretions of infected animals (inhalation of contaminated dust).
    - Contact with contaminated food or household items.
  - **Inter-human transmission occurs through** direct contact with the blood or other biological fluids as well as the secretions or excretions of an infected person.

**Environmental factors**
- **Climate-related factors:** The rainy season can increase the frequency of contact between humans and rats, which would be more likely to seek refuge in homes.
- **Ecological factors:** Changes in the habitat of the reservoir animal caused by deforestation and the urbanisation of rural areas also influence human-rat contact.

**Clinical signs**

**Principal symptoms in humans**
- **Incubation period:** average of 10 days (range 2-21 days).
- **1st symptomatic phase (non-specific):** fever associated with headaches, sore throat and muscle pain, as well as generalized weakness.
- **2nd symptomatic phase (severe forms of the disease, after 7-8 days):** signs of mucosal haemorrhage (epistaxis, sub conjunctival haemorrhages, bleeding from the gums, microscopic haematuria with possibility of oedema of the neck and face) and neurological conditions (shock, seizures, coma and deafness).
- **3rd symptomatic phase (severe forms of the disease):** multiple organ failure (ARDS, renal failure) associated with anasarca and hemodynamic shock. Possibility of death between the second and third week. High mortality rate among women in late pregnancy.
- **Duration of symptoms:** 1 to 4 weeks.

**Principal symptoms in humans**

- **Duration of symptoms:** 1 to 4 weeks.

**80% of cases observed in the third trimester of human pregnancy are fatal for both mother and foetus.**