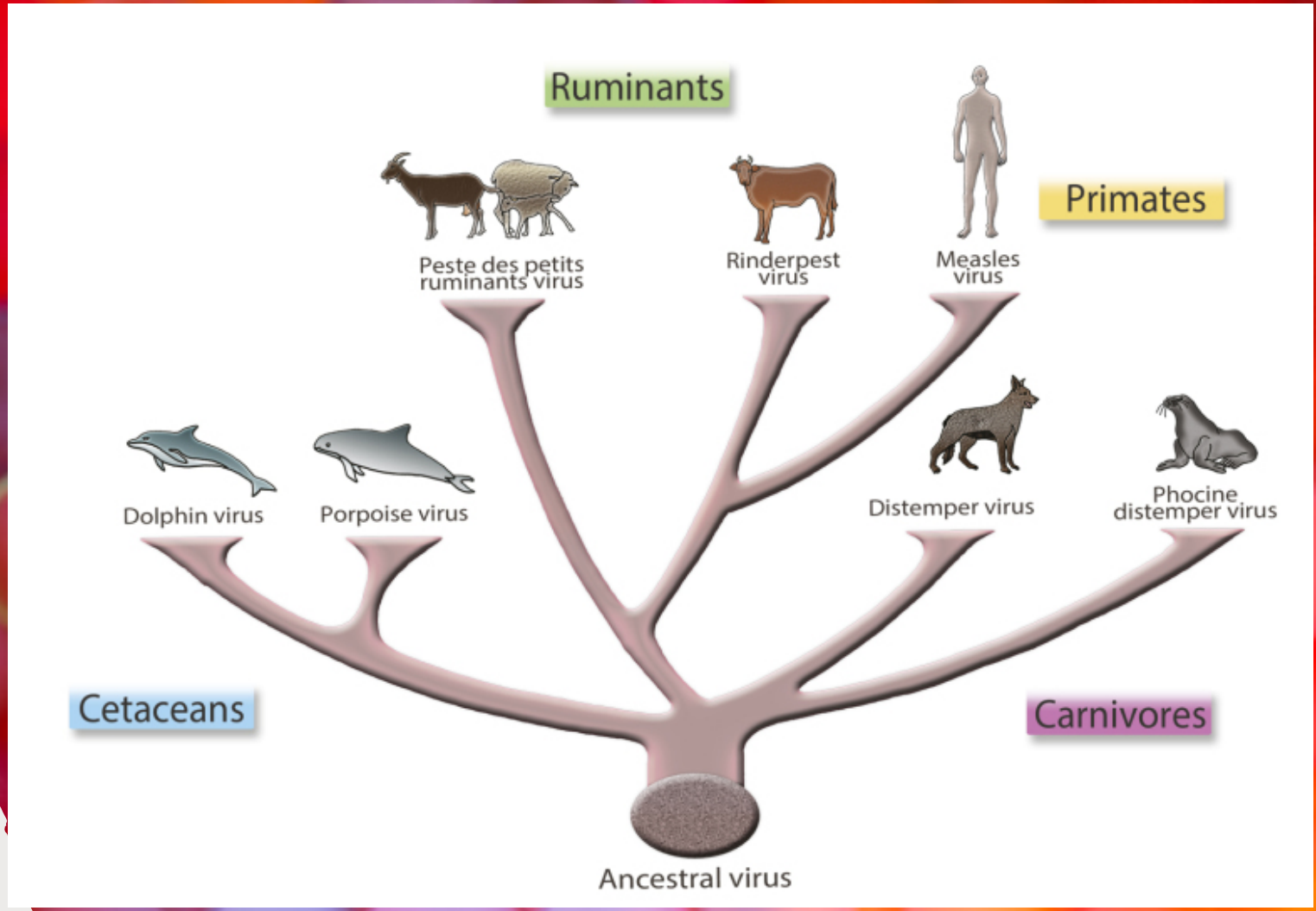
PESTE DES PETIT RUMINANT (PPR)

OVİNE RİNDERPEST, PSEUDORİNDERPEST



PESTE DES PETIT RUMINANT (PPR)

- Peste des petits ruminants (PPR) is a highly contagious viral disease that mainly affects sheep and goats.
- Major losses can be seen, especially in goats, with morbidity and mortality rates sometimes approaching 80-100%.
- World Organization of Animal Health (WOAH) and the Food and Agriculture Organisation (FAO) have set as a target the global eradication of PPR by 2030.
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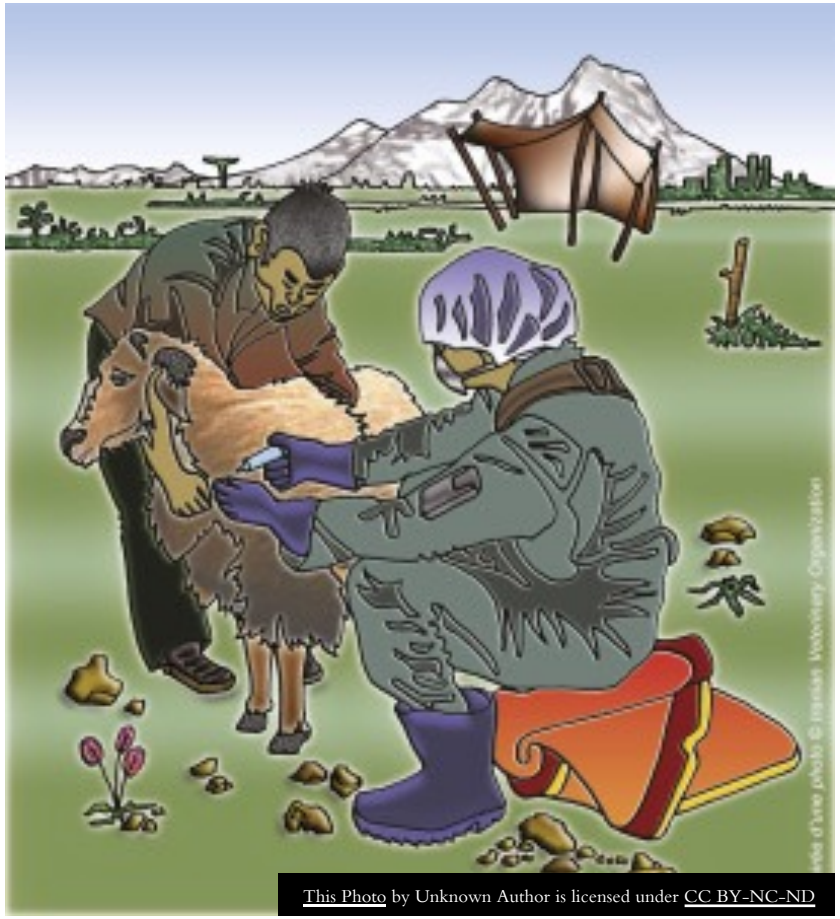
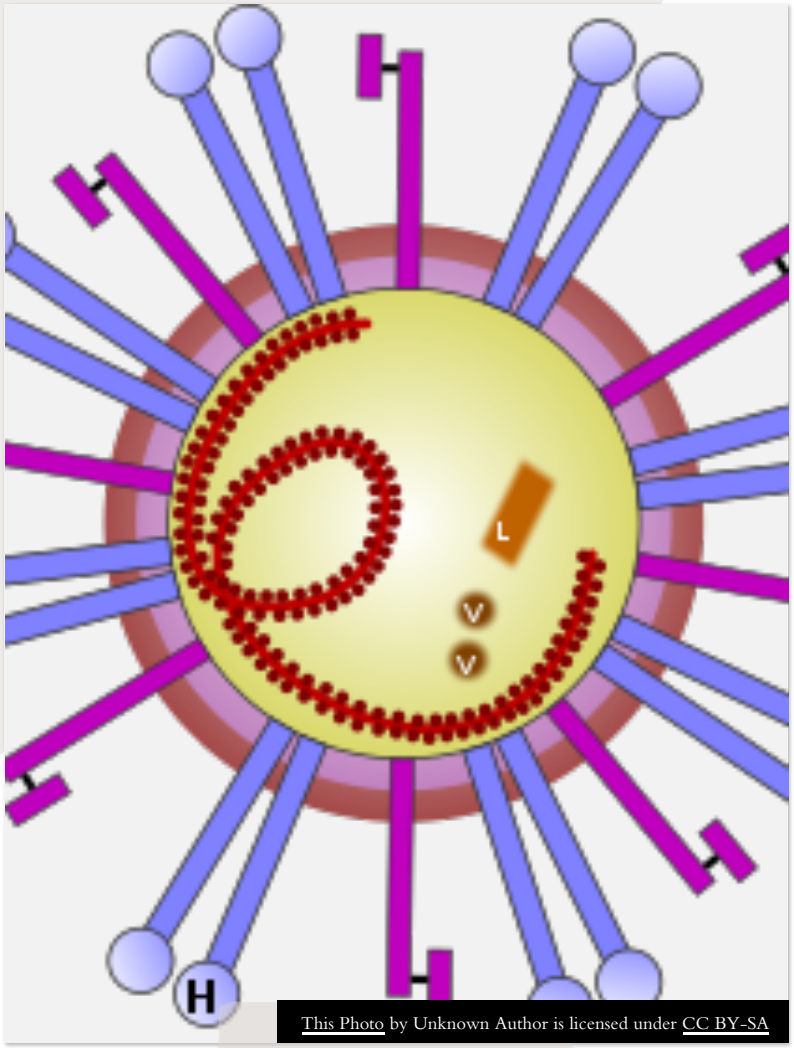
- Efficient PPR vaccines are available and can induce life-long protective immunity in vaccinated animals.

NOTIFIABLE DISEASE





ETIOLOGY

- Paramyxoviridae, Morbillivirus
- Among domesticated animals, peste des petits ruminants is primarily a disease of goats and sheep. PPRV has also been implicated, in a few outbreaks in camels and water buffalo.
- It has a high economic impact in areas of Africa, the Middle East, and Asia.
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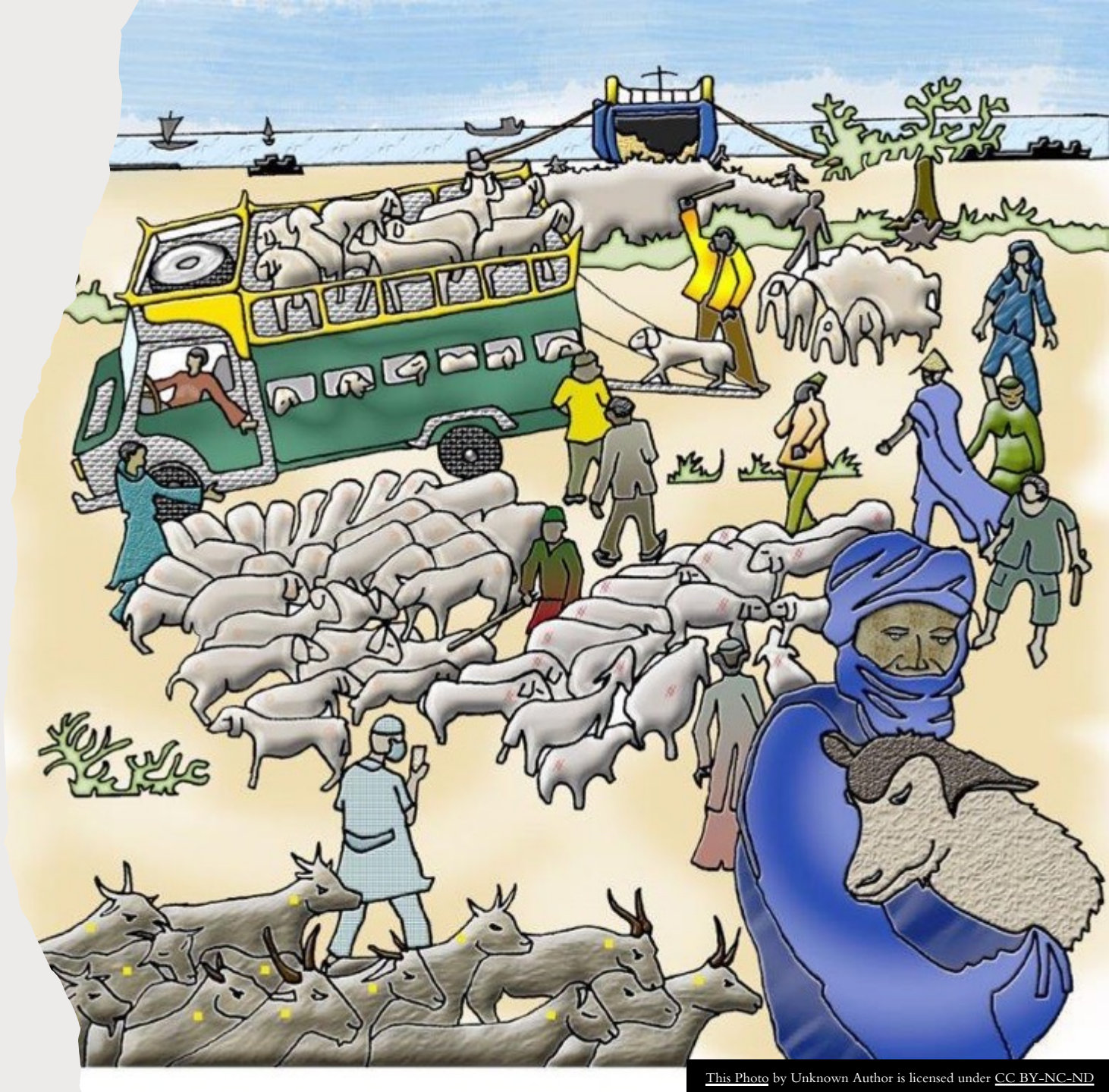
TRANSMISSION

- Transmission of PPRV mainly occurs during close contact.
- Inhalation is thought to be an important route.
- This virus can be shed during the incubation period, and has been found in nasal and ocular secretions, saliva, urine and feces.
- PPRV is relatively fragile in the environment, and long-distance aerosol transmission is unlikely; in cool temperatures and in the dark, this virus has been shown to spread for approximately 10 meters.

- https://www.youtube.com/watch?v=aXMNbF57xJw&t=9s



CLINICAL SIGNS

- The incubation period can range from 2 to 10 days; in most cases.
- The severity of the clinical signs can vary with the animal's species, breed and immunity to PPRV.
- Typical signs of infection include pyrexia, conjunctivitis, rhinotracheitis, ulcerative stomatitis, gastroenteritis and in severe cases pneumonia.
- Acute
- Peracute
- Subacute

Acute form

- Sudden rise in body temperature (40–41°C) with effects on the general conditon: animalsbecome depressed or restless, anorexic and a dry muzzle develops, and pyrexia may last for 3–5 days
- Serous nasal discharge becoming mucopurulent and resulting in a profuse catarrhal exudate which crusts over and occludes the nostrils; signs of respiratory distress in surviving animals, mucopurulent discharge may persist for up to 14 days
- Within 4 days of onset of fever, gums become hyperaemic, and erosive lesions develop in the oral cavity with excessive salivation, necrotic stomatitis with halitosis is common, erosions mayresolve or coalesce
- Small areas of necrosis on the visible mucous membranes

Purulent eye & Nose discharge

Sores in mouth

Swollen & Eroded lips

Diarrhoea

Typical mucopurulent nasal discharge in peste des petits ruminants in a goat.

Vaccines against peste des petits ruminants virus July 2010 DOI: 10.1586/erv.10.74

- Congestion of conjunctiva, crusting on the medial canthus and sometimes profuse catarrhal conjunctivitis
- Severe, watery, blood-stained diarrhoea is common in later stages
- Bronchopneumonia evidenced by coughing is a common feature; abdominal breathing
- Abortions may occur
- Dehydration, emaciation, dyspnoea, hypothermia and death may occur within 5–10 days
- Survivors undergo long convalescence

Peracute form
Frequent in goats; especially situations of inmuno-naïve introductions into instances of circulating PPRV
High fever, depression and death
Higher mortality
Subacute form
Frequent in some areas because of local breed susceptibility; form commonly seen in experimentally infected animals
Usually 10–15 days development with inconsistent signs; on or about 6th day post-infection, fever and serous nasal discharge is observed
Fever falls with onset of diarhea and, if this is severe, may result in dehydration and prostration

PATHOLOGY

The postmortem lesions are characterized by inflammatory and necrotic lesions in the oral cavity and throughout the gastrointestinal tract.

The respiratory tract is also affected in many cases.

Erosions in the mouth, and sometimes in the pharynx and upper esophagus.

- The most severe lesions are seen in the large intestine, particularly around the ileocecal valve, at the cecocolic junction and in the rectum.
-
- “Zebra stripes” or “tiger stripes” of congestion, hemorrhage or darkened tissue are sometimes found in the posterior part of the colon on the mucosal folds.

DIAGNOSIS

PPRV, its nucleic acids or antigens can be detected in

- whole blood,
- swabs of ocular and nasal discharges
- swabs of buccal and rectal mucosa.

At present, PPRV is usually isolated in African green monkey kidney (Vero) cells, although other cell lines have also been employed.

DIFFERENTIAL DIAGNOSIS

- Bluetongue
- Contagious ecthyma
- Foot and mouth disease
- Heartwater
- Coccidiosis
- Mineral poisoning
- Contagious caprine pleuropneumonia
- Pasteurellosis
- Rinderpest

PREVENTİON AND CONTROL

- In regions where peste des petits ruminants is not endemic, it can be eradicated with a combination of quarantines, movement controls, euthanasia of infected and exposed animals, and cleaning and disinfection of infected premises.
- Vaccination of high-risk populations may also be helpful.

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VETERİNER KONTROL MERKEZ ARAŞTIRMA
ENSTİTÜSÜ MÜDÜRLÜĞÜ
ETLİK - ANKARA

PEST-S ETVAC AŞISI PROSPEKTÜSÜ

Koyun-Keçi vebası aşısı, koyun-keçi vebası hastalığına karşı vero cell line hücre kültürlerinde hazırlanan canlı attenüe liyofilize bir aşıdır.

Aşı kompozisyonu:

Beher doz aşı	Attenüe PPR 75/1	$10^{2.5}$ $DKID_{50}$/doz
	Lactalbumin hydrolysate	0.25 mg
	Sucrose	0.5 mg

Endikasyon kontrendikasyon: Koyun ve keçilerde Koyun-keçi vebası hastalığına karşı koruyucu amaçla kullanılır. Kontrendikasyonu yoktur. Her yaştaki ve gebe hayvanlarda güvenle kullanılabilir.

Uygulama ve dozaj: Her yaş ve ağırlıktaki koyun ve keçilerde deri altı yolla 1 ml uygulanır.

Uyarılar: Aşı kullanılacağı zaman, steril enjektöre, aşı ile birlikte gönderilen fizyolojik sudan bir miktar çekilir. Kuru aşı bununla sulandırılır. Kuvvetle çalkalayıp, enjektörle çekilir, büyük şişedeki fizyolojik tuzlu su ile karıştırılır. Bu işlem birkaç kez tekrarlanır. Aşılama sırasında aşı şişesi, güneşten korunmalı, mümkünse buz içinde bulundurulmalı, asepsi ve antisepsiye uyulmalıdır. Sulandırılmış aşı 2 saat içinde kullanılmalıdır. Enjektöre her çekilişte aşı şişesi çalkalanmalıdır. Enjektörlerin sterilizasyonunda dezenfektan ve antiseptikler kullanılmamalıdır.

Aşılama takvimi: Koruyucu düzeyde bağışıklık 21 günde meydana gelir. Bağışık anadan doğan kuzu ve oğlaklar 4-6 aylık aşılanabilir ve bu hayvanlarda ilk aşılamadan 3-6 ay sonra rapel yapılır.

Saklama koşulları: Liyofilize aşı +2/8°C'de karanlıkta muhafaza edilmelidir.

Ambalaj şekli: 1 ml 100 doz liyofilize aşı ve 100 ml sulandırma sıvısı ile birlikte ticari sunum.

İmha şartları: Sulandırılıp kullanılmayan aşılar 10 dakika kaynatılarak imha edilmelidir. Kullanılmayan liyofilize aşılar üretici kuruma iade edilmelidir.

"SADECE VETERİNER KULLANIM İÇİNDİR."

Üretici kurum: Veteriner Kontrol Merkez Araştırma Enstitüsü Etlik /ANKARA

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VACCINATION

In an outbreak, ring vaccination and/or vaccination of high-risk populations can be helpful

Endemic areas

- Used to control disease

Vaccine types

- Attenuated rinderpest vaccine, previously
- Homologous, attenuated PPR vaccine
- Recombinant vaccine (recombinant capripox-based PPR vaccine)

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