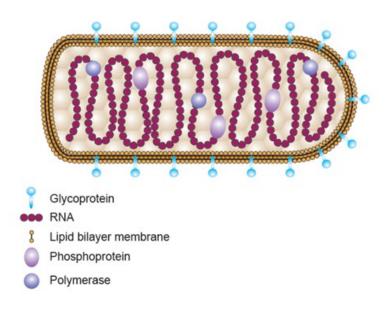
## Rabies vaccines - Session 8

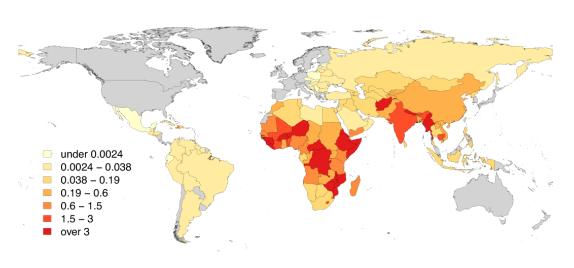
#### Session outline

- Introduction to rabies
- Pre-exposure prophylaxis (PrEP)
- Post-exposure prophylaxis (PEP)
- Rabies immunoglobulins (RIG)



## Rabies is a neglected, vaccine-preventable disease

An indicator for impact on inequity

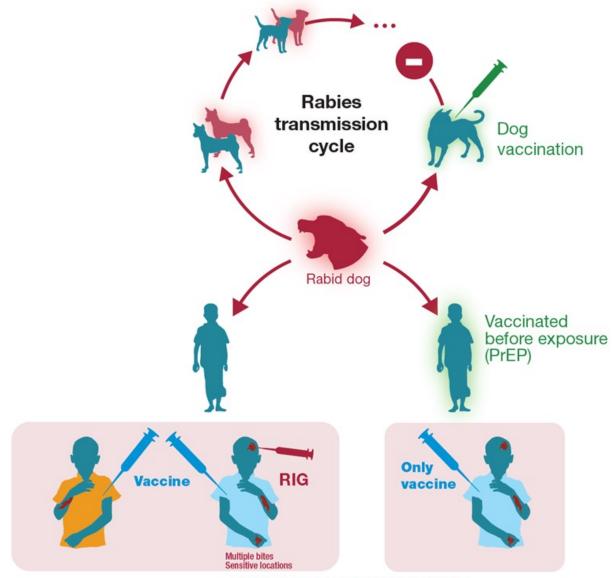


Rabies per capita death rates per 100,000 persons.

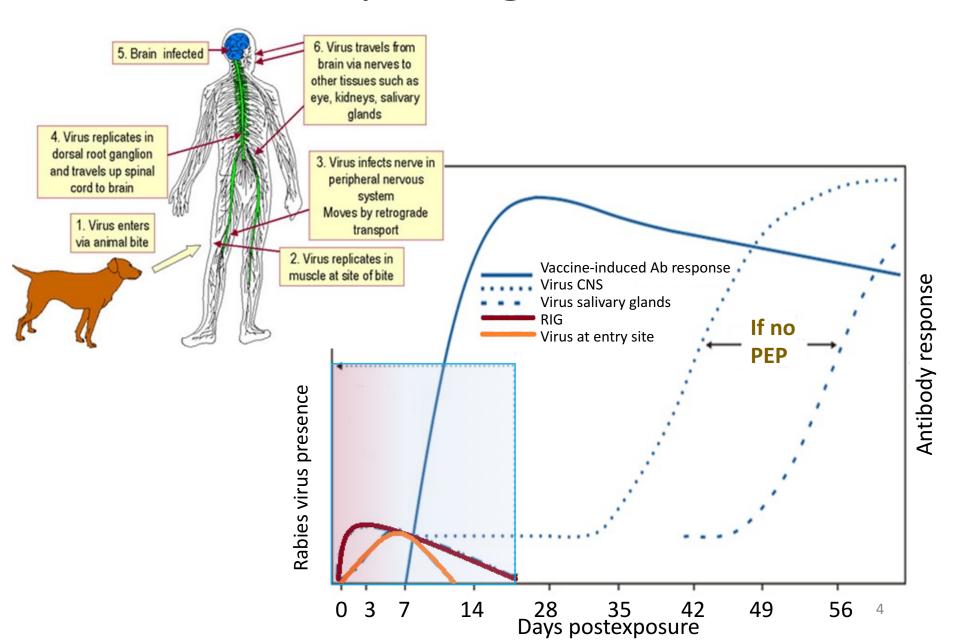
- 100% fatal
- ~60,000 deaths per year
- Weak data and under-reporting
- Mostly children
- Dog bites cause ~ 95-99% of human cases
- Vaccine is a key component of the global plan and triggers national programmes



### Rabies transmission cycle and preventive measures



## Rabies virus pathogenesis



## Rabies vaccines & immunoglobulins

#### **Vaccines**

#### **Product**

- Highly immunogenic & well tolerated
- Same vaccines for PrEP and PEP
- Rabies virus-neutralizing antibodies:
   0.5 IU/ml considered protective
- Currently, 3 WHO PQ rabies vaccines more under review

#### Use

- Administration ID or IM equivalent
- Demand driven delivery
- Global manufacturing capacity if needs forecasted would be sufficient

#### RIG

#### **Product**

- HRIG & eRIG ,
- Monoclonal antibodies (new)
- No WHO quality assessment process
  - Batch-to-batch variation ↑
  - Rel. short shelf-life

#### Use

- 1% of Cat III bite victims in endemic countries receive RIG
- Barriers:
  - Global availability & supply ↓↓
  - Hesitance to administer RIG
  - Out of pocket expenses

## Update the rabies position paper

- Compelling new scientific evidence
- Simplify recommendations and increase attention to improve programmatic delivery and clinical feasibility in different settings while maintaining safety and efficacy
- Create opportunities for better access and maximize public health impact of biologics
- A break through may lie ahead if the Gavi Vaccine Investment Strategy 2018 includes rabies
- A global strategy for human rabies elimination by 2030 provides a comprehensive approach

# United against Rabies to Reach Zero Rabies deaths by 2030

## PREVENT

Awareness, responsible dog ownership, bite prevention and dog vaccination

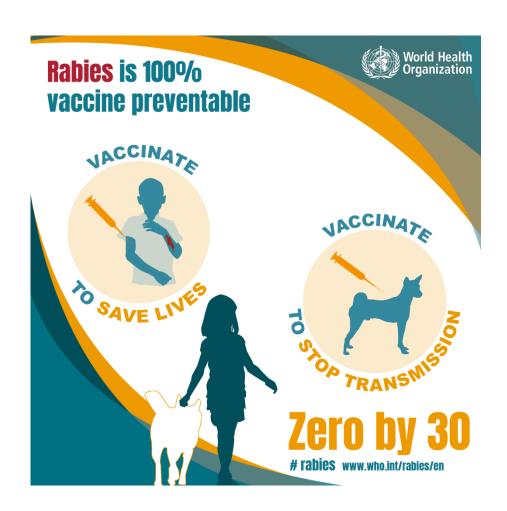


## RESPOND

Bite management and when necessary, post-exposure treatment, Integrated bite case management



## Thank you!



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