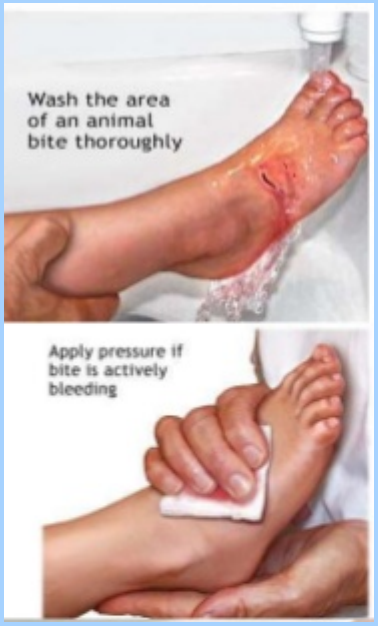
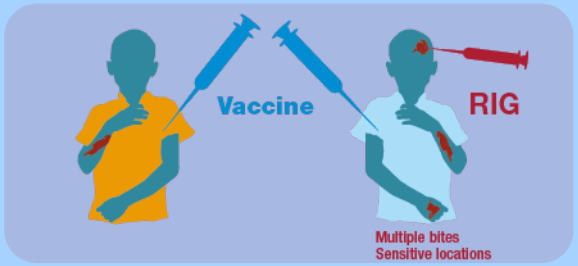
Post-Exposure Prophylaxis (PEP)



+



Recommendations

Questions 5, 6, 7, 8, 9

Question 5: Which (operational) parameters affect **cost-effectiveness of intradermal (ID)** compared to intramuscular (IM) administration route of PEP? a. in urban settings; b. in rural settings.

1. More efforts are needed to reach the rural and marginalized populations most often affected by rabies. We recommend innovation to improve access, affordability of PEP, awareness and programmatic delivery.

2. ID administration is always more cost-effective, even in low-throughput clinics.

Question 6: Can the **duration** of the entire course of current PEP regimens be reduced while maintaining immunogenicity and clinical protection?

Question 7: Can the **number of doses** administered in current PEP regimens be reduced while maintaining immunogenicity and clinical protection?

Proposed ID

- Shortened and reduced dose ID schedule

Proposed IM

- Essen regimen unrestricted for all populations
- Zagreb regimen unchanged

PEP regimens	**Characteristics**	**Key evaluation criteria**					
	Number of injection sites per visit on days 0, 3, 7, 14, 21 to 28	Immuno-genicity data	Clinical outcome data	Cost-effectiveness		Feasibility	Acceptability
				small clinic	*large clinic*		
Proposed recommended intradermal regimen							
IPC regimen, 1 week	2-2-2-0-0	✓	✓	>	>	✓	✓
Proposed recommended intramuscular regimens							
Essen regimen, 14 to 28 days	1-1-1-1-0	✓	✓	≤	<	✓	✓
Zagreb regimen, 21 days	2-0-1-0-1	✓	✓	≤	<	✓	✓

Question 8: Does novel evidence support recommendations on modified PEP protocols versus current PEP protocols for specific risk groups of rabies exposed patients, such as: Immuno-compromised patients (e.g. HIV-infected); patients concurrently using antimalarial drugs; pregnant women; bat exposures (i.e. for bat lyssavirus)?

1. Rabies vaccines and RIG are **safe and efficacious to use in pregnant women** and should be administered using any of the recommended regimens.

2. In individuals who are immunocompromised (e.g. unmanaged HIV/AIDS)
   - A **full course of PEP with RIG** is recommended in both, category II and III exposures, even in those who have previously received a full course of PEP.
   - Where available, **serology and/or consultation with a specialist** are advised.

3. Exposures to **bats** (e.g. single or multiple transdermal bites or scratches, licks on broken skin, contamination of mucous membrane with saliva from licks, nibbling of uncovered skin, and minor scratches or abrasions without bleeding) should be treated as category III exposures that require full PEP, including RIG.
   - For exposures in which there is no wound, RIG should be injected as close to the site of exposure as anatomically feasible.

Question 9: Does a change in route of administration (IM or ID) during a single course of a PEP regimen affect immunogenicity of PEP?

1. Changes in rabies vaccine product and/or the route of administration during the same PEP course is acceptable in unavoidable circumstances to promote completion of lifesaving PEP.
   - There is no evidence that restarting PEP is necessary after switching product or administration route.
   - The schedule for the new route of administration should be adopted after switching route.