Global overview: Human rabies vaccine and immunoglobulin use monitoring, reporting and forecasting

Driving progress towards rabies elimination & 2nd international PARACON

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Assessment Objectives

- Describe procurement, delivery, distribution, and monitoring systems for rabies PEP
- Identify areas that need to be strengthened
- Understand the feasibility and logistical requirements of increasing access to rabies PEP



Methods

- Assessment tool with questions grouped into 10 main categories
 - Program delivery
 - Vaccine procurement, demand, requests and distribution
 - $\,\circ\,$ Cold-chain and vaccine storage
 - Vaccine and RIG forecasting
 - Vaccine monitoring and utilization
- Series of interviews with key informants at every level
 - Health facility visits when possible
- Assessment tool distributed to 25 countries
 - Some countries did in-depth surveys

Countries participating



Vaccine type

- Six (26%) of 22 countries exclusively use PQ vaccines
- 15 (68%) of 22 countries use either pre-qualified (PQ) or non prequalified vaccines (non-PQ)
- Most common reasons for using non-PQ vaccines are lower cost and increased availability

Administration route

- 52% exclusively use IM administration
 - Essen 5-dose regimen most commonly used
- 22% exclusively use ID administration
 Updated Thai Red Cross regimen most commonly used
- 22% use either ID and IM administration
- 1 country uses subcutaneous administration (NTBV)

Availability and cost of vaccine

- In 10 (43%) of 23 countries, vaccine is consistently provided for free to the patient in the public sector
- In 4 of 23 (17%) countries, vaccine is provided for free when available
 These countries reported limited capacity to procure vaccines due to insufficient funds, so patients are required to purchase it
- In 7 (30%) of 23 countries, patients are required to pay (\$6.60-20/dose)
 Primary reason for high vaccine cost to patients, is lack of funds at the central level to subsidize vaccine costs
- In 2 (15%) of 23 countries, vaccine is provided for free to certain patient groups only

Access to vaccine & RIG by Gavi-eligibility



Access to Rabies Vaccine by Presence of National Programme



Distribution

- 11 (50%) of 22 countries have a standardized PEP distribution/collection system separate to EPI program
 - Frequency ranges from monthly to annual
- Combination of manufacturer distributing to facilities and MOH distribution (separate to EPI)
 - 4 (18%) of 22 countries
- Ad hoc collection/distribution separate to EPI
 - 6 (27%) of 22 countries
- No countries currently use EPI distribution mechanisms (at the time of the survey, 2 countries were transitioning away from using EPI)

Monitoring and Reporting

- 19 (86%) of 22 countries have some type of monitoring system for tracking patients receiving PEP, or for monitoring vaccine stock
 - At least 6 (32%) of these countries reported that tools are not standardized, their use is not enforced, or is limited to selected health facilities only
 - Variables collected vary by country, and in some cases by health facility within a country
- 9 (41%) of 22 countries have regular mandatory weekly, monthly or quarterly reporting on rabies vaccination

Procurement

- Most PEP procurement happens at the national level, independent of EPI program, or directly from the manufacturer
 - Typically more complicated and longer than EPI vaccines
- Only one country has received a donation of vaccine and RIG; most others use their own budgets
- Time from procurement to arrival in country: ~4-6 months (0 months -1 year)

Conclusions

- Access to rabies vaccine continues to be hindered by cost
- Many countries use non pre-qualified vaccines
- Only 1/3 of countries exclusively use ID administration
- Almost half of all countries assessed have a regular system of distribution or collection for rabies vaccines, separate from routine vaccines
- Limited information on vaccine utilization in part due to lack of standardization of monitoring tools and lack of mandatory reporting

Recommendations

- Consider developing standardized global guidelines for rabies PEP
 - Provide examples of standardized reporting tools
 - Consider instituting mandatory reporting on PEP utilization
- Consider leveraging systems that are already established for distribution
- Encourage manufacturers to apply for pre-qualification
- Strengthen advocacy and training for ID administration

Acknowledgements

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- NGOs and research institutes
- CDC Poxvirus and Rabies Branch

Questions?

More information: http://www.who.int/rabies/en/

