

World Rabies Day 2021

Tripartite Webinar on “Rabies: Facts, Not Fear” in the Asia Pacific Region

Tuesday, 28 September 2021, Zoom®

Human rabies updates in Asia and the outcomes of the Regional Review of National Programme for Prevention and Control of Human Rabies in the Western Pacific Region

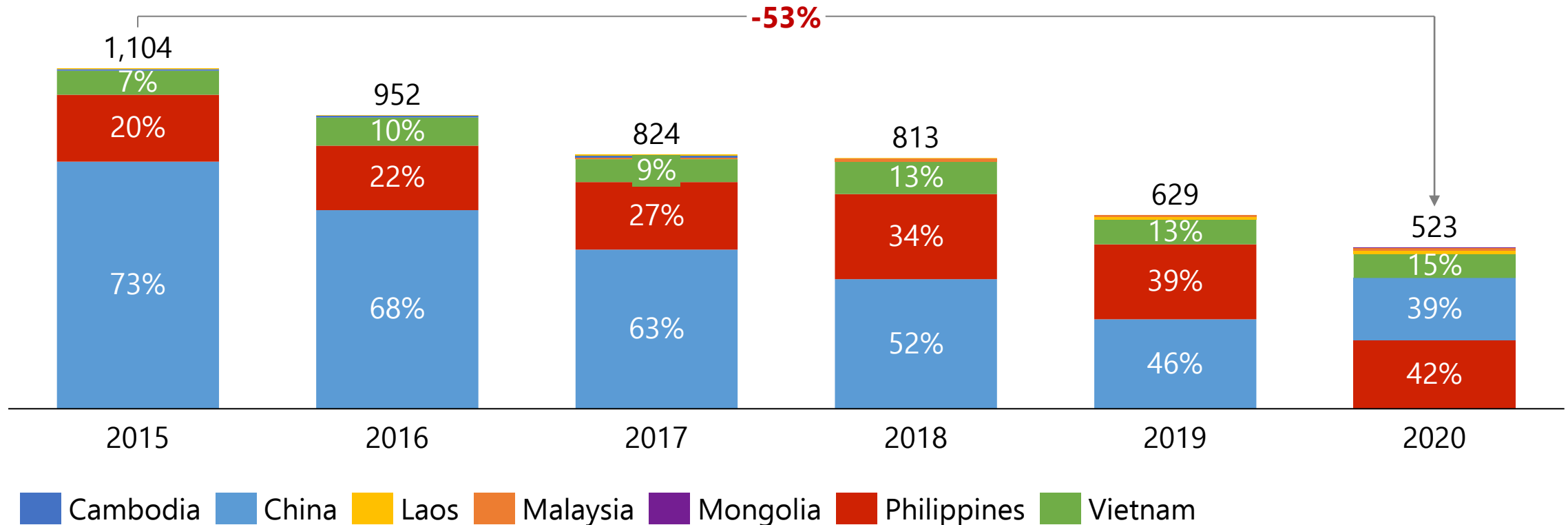
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WHO Southeast Asia Regional Office



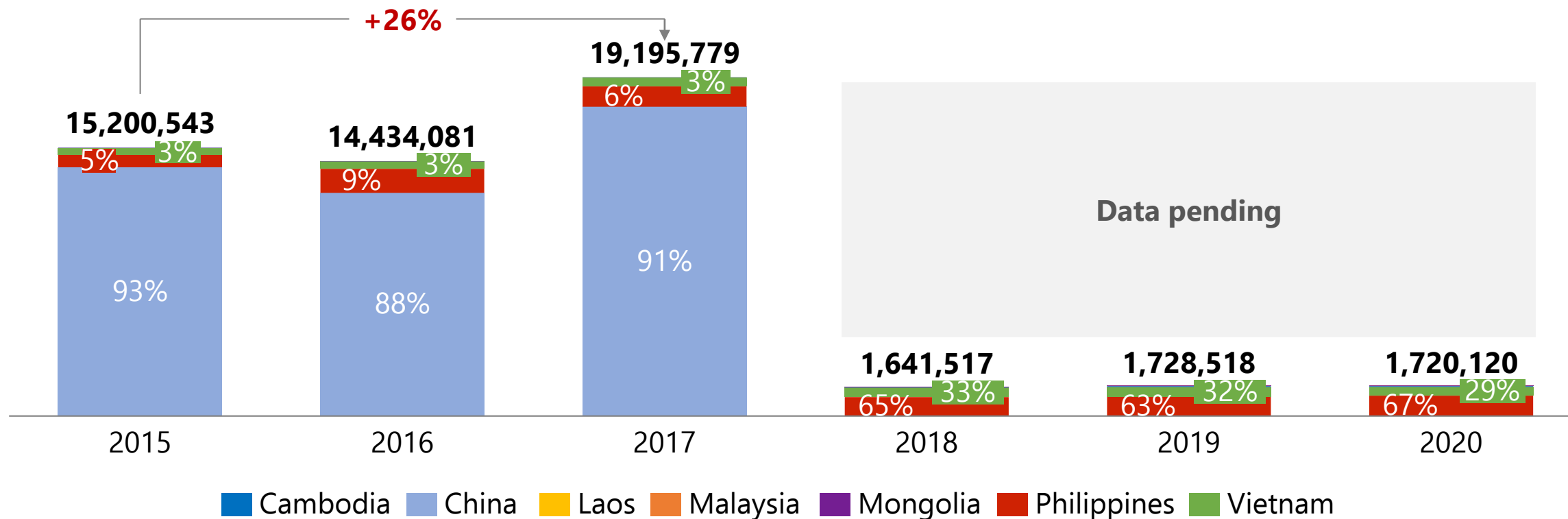
Credit: Mission Rabies

Reported human rabies cases in WPR, 2015-2020



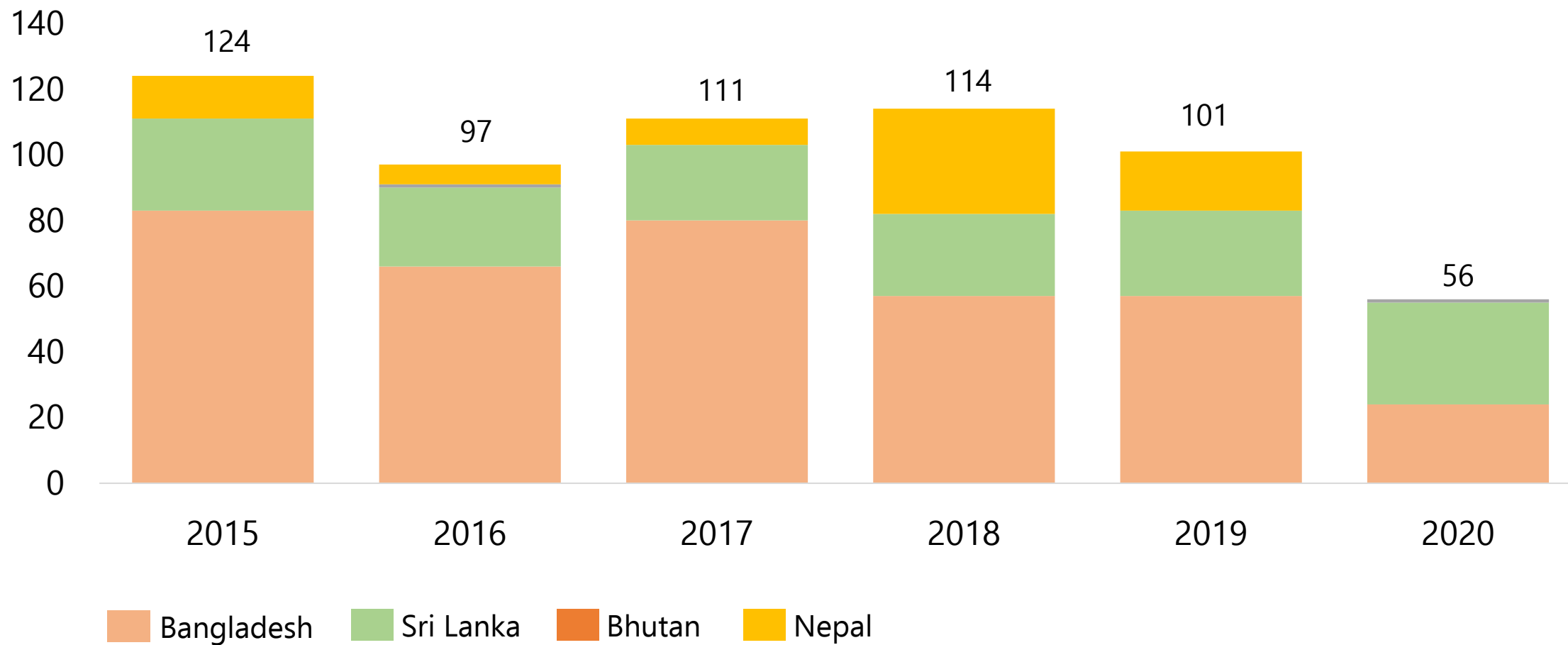
- Reduction driven by decreasing cases in China
- Note that rabies cases are **significantly underreported**, and occur despite sustained efforts for **universal vaccine access**

Reported animal bite cases receiving PEP in WPR, 2015-2020



- Regionally **over 15 million peoples are given PEP** following animal bites every year in endemic areas
- Over 800 people still die of rabies annually in the Region **because life-saving PEP does not reach them** for some reasons

Reported human rabies cases in SEAR, 2015-2020



- **Significant under-reporting:** No data has been submitted from India, Indonesia and Thailand

Rabies programme survey in 7 rabies-endemic WPR countries in 2021

Survey consisted of 53 questions across five categories

- 1 **Strategic planning and partnership** (15 questions)
- 2 **PEP delivery (access, cost, PHC training, safety and supply chain)** (24 questions)
- 3 **Public awareness and risk communication** (3 questions)
- 4 **Rabies surveillance** (8 questions)
- 5 **Challenges** (3 questions)

1 Strategic planning and partnership

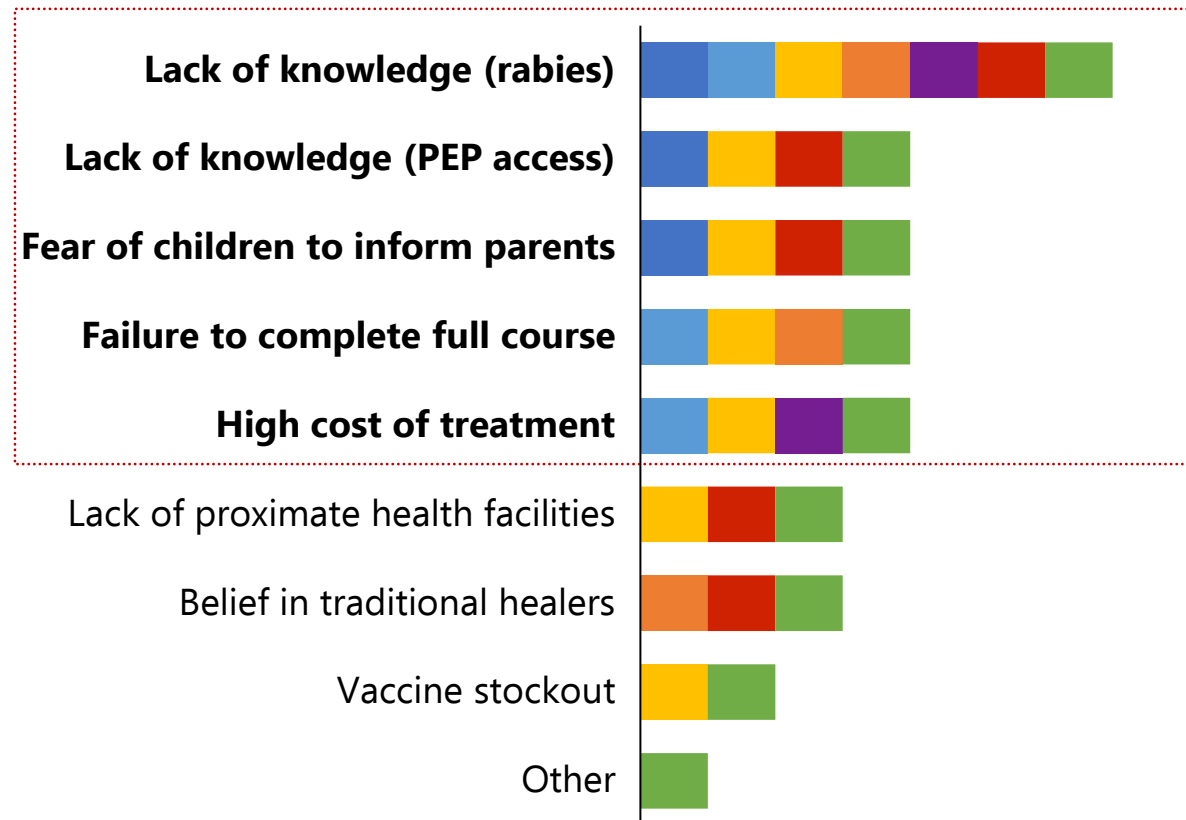
	Cambodia	China	Lao PDR	Malaysia	Mongolia	Philippines	Vietnam
National plan for rabies control (years)	✓ (2015-2020)	✓ (2017-2020)	✓ (2020-2024)	✓ (2021-2025)	✗	✓ (2021-2025)	✓ (2017-2021)
Endorsing ministries	MOH	MoA	MOH, MOAF	Not yet endorsed	-	DOH, DA, DepEd, DILG	Prime Minister
Responsible divisions	MOH/CDC	National Health Commission / Ministry of Agriculture & Rural	MOH/DCDC (zoonoses and point of entry)	MOH/DCD (zoonoses sector) DVS	MOH/National Center for Zoonotic Diseases	DOH/DPCB (infectious disease office) DA/BAI	GDPM, NIHE DAH
Role of NPI in rabies	None	Procurement, data collection	Cold chain	Cold chain	Cold chain	Cold chain	Cold chain
Role of MoH in animal rabies control	Mobilizing resources	Awareness; info sharing	Awareness; info sharing	Awareness; info sharing; PrEP for vet. frontline	Mobilizing resources, info sharing	Awareness; info sharing	Awareness; info sharing
National intersectoral task force	✓ (zoonoses)	✗	✓ (rabies)	✓ (zoonoses)	✗	✓ (rabies)	✓ (rabies)
Sub-national intersectoral task force	✓ (high risk provinces)	✗	✗ (being established)	✓ (high risk provinces)	✗	✓ (some regions)	✗

② PEP delivery (access, cost, PHC training)

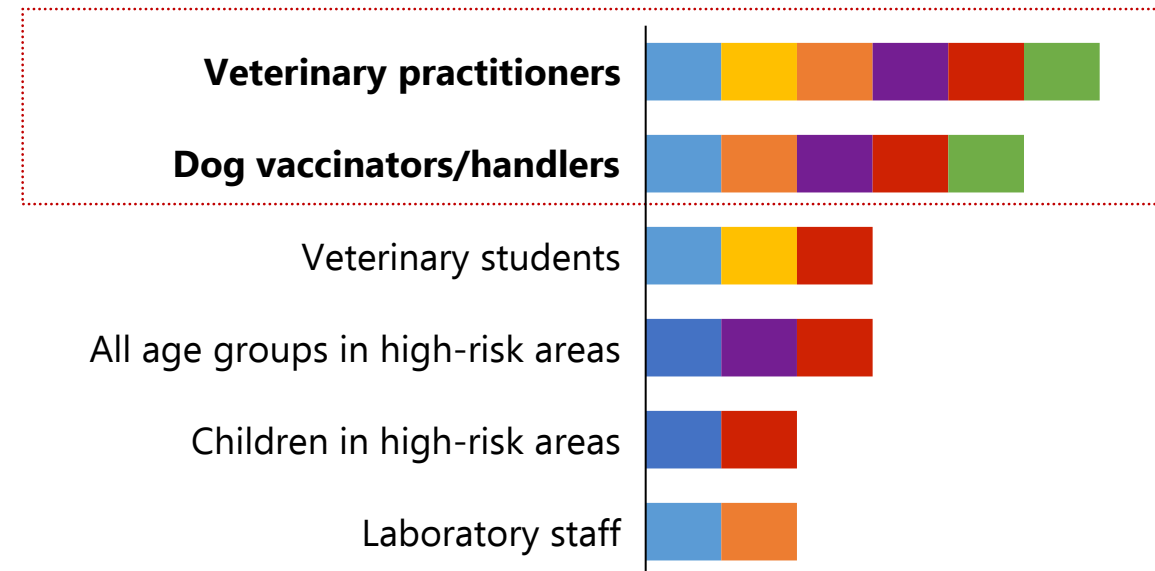
	Cambodia	China	Lao PDR	Malaysia	Mongolia	Philippines	Vietnam
# PEP facilities	1 (IPC)	~20k	18 ¹	82	?	616	>700
PEP facility type							
• Central – public	✓	✗	✓	✓	✓	✓	✓
• Central – private	✗	✗	✓	✗	✗	✗	✓
• Provincial – public	✗	✗	✓	✓	✓	✓	✓
• Provincial – private	✗	✗	✗	✗	✗	✗	✓
• Peripheral – public	✗	✓	✗	✓	✓	✓	✗
Standard Tx guidelines	✓	✓	✗	✓	✓	✓	✓
Regular PHC worker training	✓ (IPC)	✗	✗	✗	✓ (zoon. prog.)	✓ (rabies prog.)	✓ (rabies prog.)
PEP cost / patient (US\$)	\$15	\$77 (est.)	\$75	\$0 (free)	\$0 (free)	\$0 (free)	\$40-63
RIG cost / patient (US\$)	\$100 (est.)	\$155 (est.)	Not available	\$0 (free)	\$0 (free)	\$0 (free)	\$18
PEP completion recorded							
• Health facilities	✓	✓	✓	✓	✓	✓	✓
• National level	✓	✗	✗	✓	✓	✓	✓

2 PEP delivery (access, cost, PHC training)

Causes of failure to access PEP by country



PrEP provision to high-risk groups by country



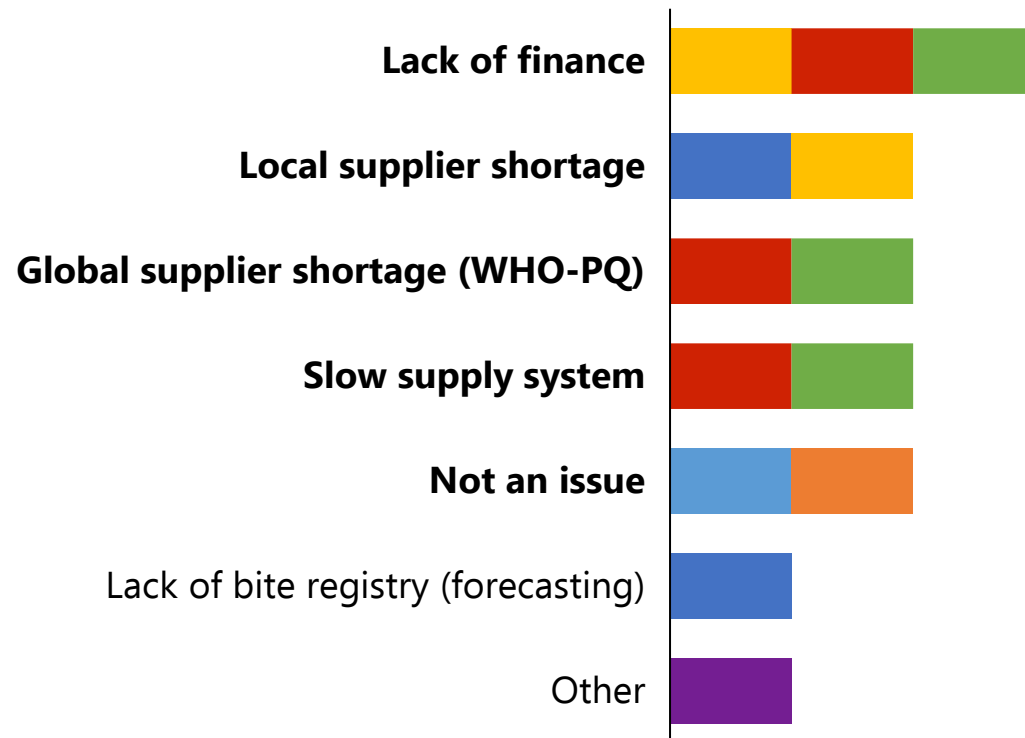
■ Cambodia
 ■ China
 ■ Lao PDR
 ■ Malaysia
 ■ Mongolia
 ■ Philippines
 ■ Vietnam

2 PEP delivery (safety and supply chain)

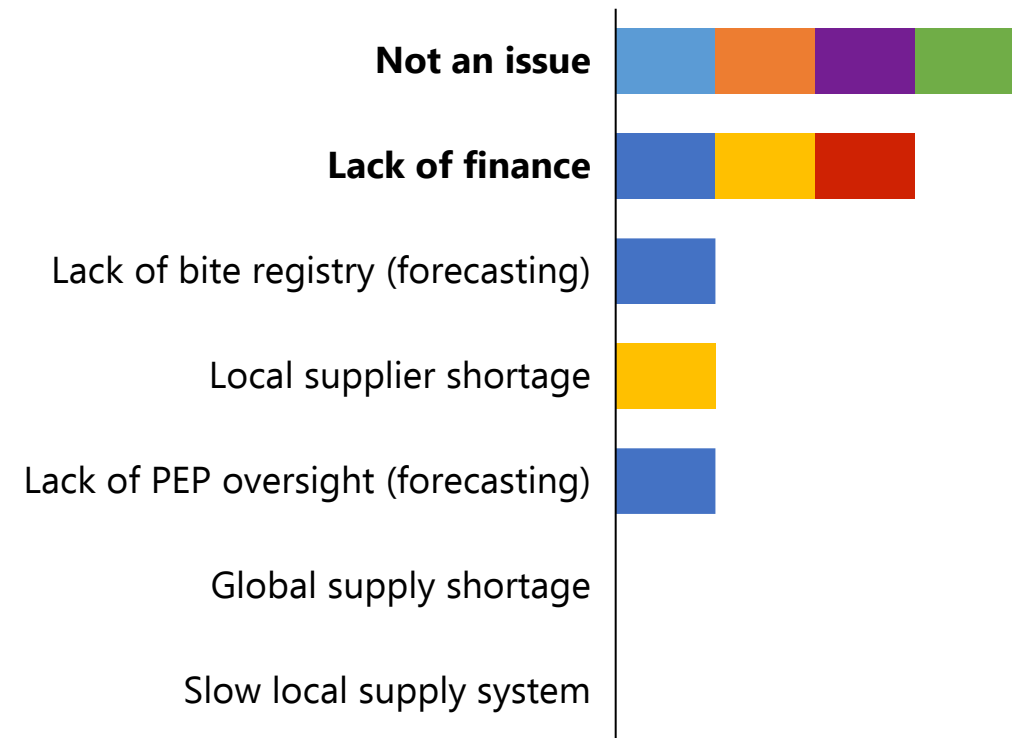
	Cambodia	China	Lao PDR	Malaysia	Mongolia	Philippines	Vietnam
Quality control mech.							
• <i>WHO-PQ vaccines only</i>	✓	✗	✗	✓	✓	✗	✗
• <i>All vaccines authorized by national FDA</i>	✗	✓	✗	✓	✗	✓	✓
• <i>Batch testing biologicals</i>	✗	✓	✗	✗	✗	✗	✓
Adverse event reporting system in place	✓ (IPC)	✓ (imm. prog.)	✗	✓ (pharmacovigilance)	✗	✓ (rabies prog. + epi bureau)	✓ (rabies prog.)
Inventory mgmt. system for human rabies vaccine	✗	✗	✗	✓ (paper)	?	✓ (paper, electronic)	✓ (paper)
Dedicated cold chain for rabies vaccine	✗	✗ (uses NPI)	✗ (uses NPI)	✗ (uses NPI)	✗ (uses NPI)	✗ (uses NPI)	✗ (uses NPI)

2 PEP delivery (safety and supply chain)

Causes of human rabies vaccine shortage by country



Causes of RIG shortage by country



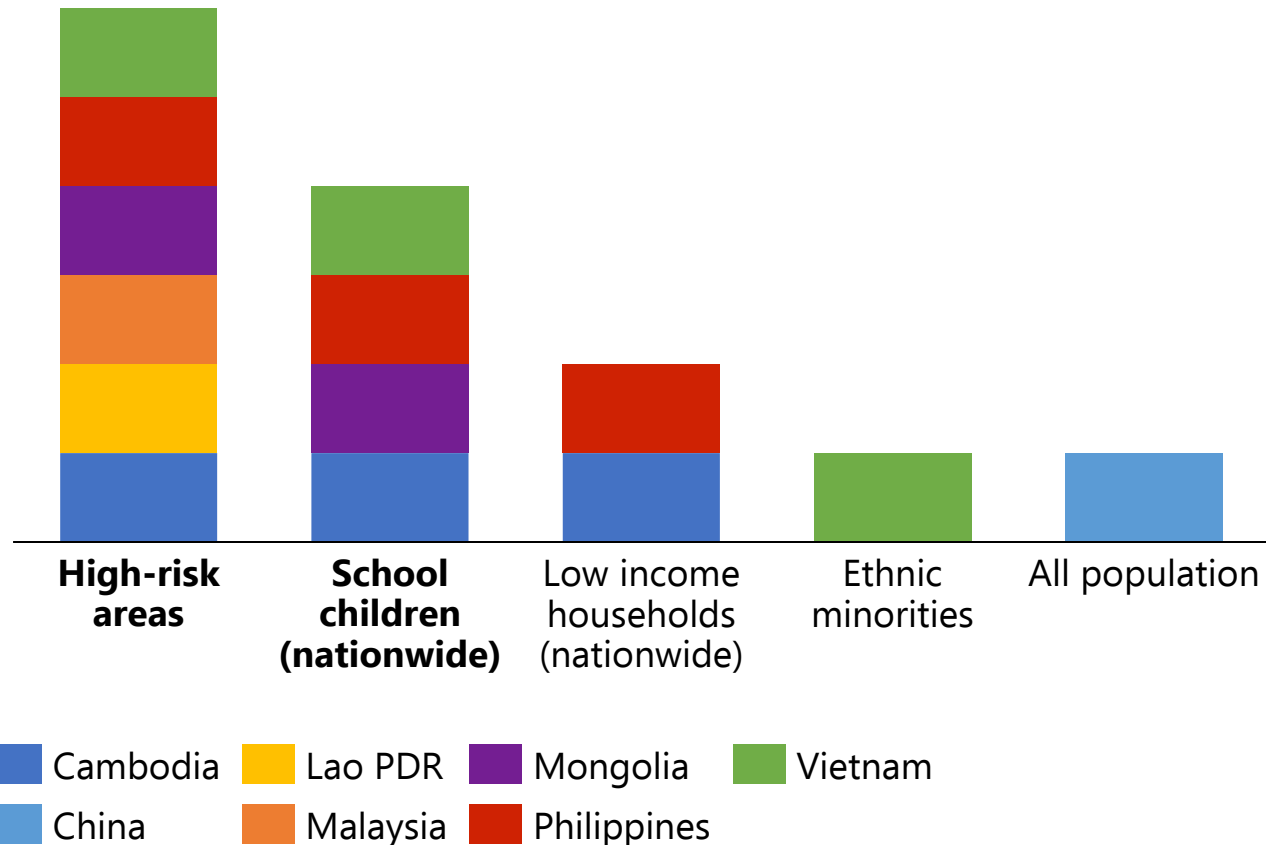
WHO PQ: WHO prequalification

■ Cambodia
 ■ China
 ■ Lao PDR
 ■ Malaysia
 ■ Mongolia
 ■ Philippines
 ■ Vietnam

- Over 50% of countries reported **lack of finance for both PEP** and **limited / slow global and local supplies of PEP** as leading causes of shortage (or stockout) of PEP
- Almost 50% of countries have shortage issues of RIG; but the leading cause is again lack of finance

③ Public awareness and risk communication

Regular public awareness and risk communication implementation by target population



Challenges

- ★ **Limited resources for implementation**
 - **Limited funding for regular outreach**
 - **Lack of materials and training for local health staff** for rabies risk communication
 - Lack of information-seeking behaviours
- ★ **Difficulties in reaching target populations**
 - **Challenging geographical conditions** (e.g. remote areas)
 - **Ethnic groups** with multiple languages
 - **Elderly people** in rural areas
- ★ **Addressing awareness of epizootic wildlife infection**

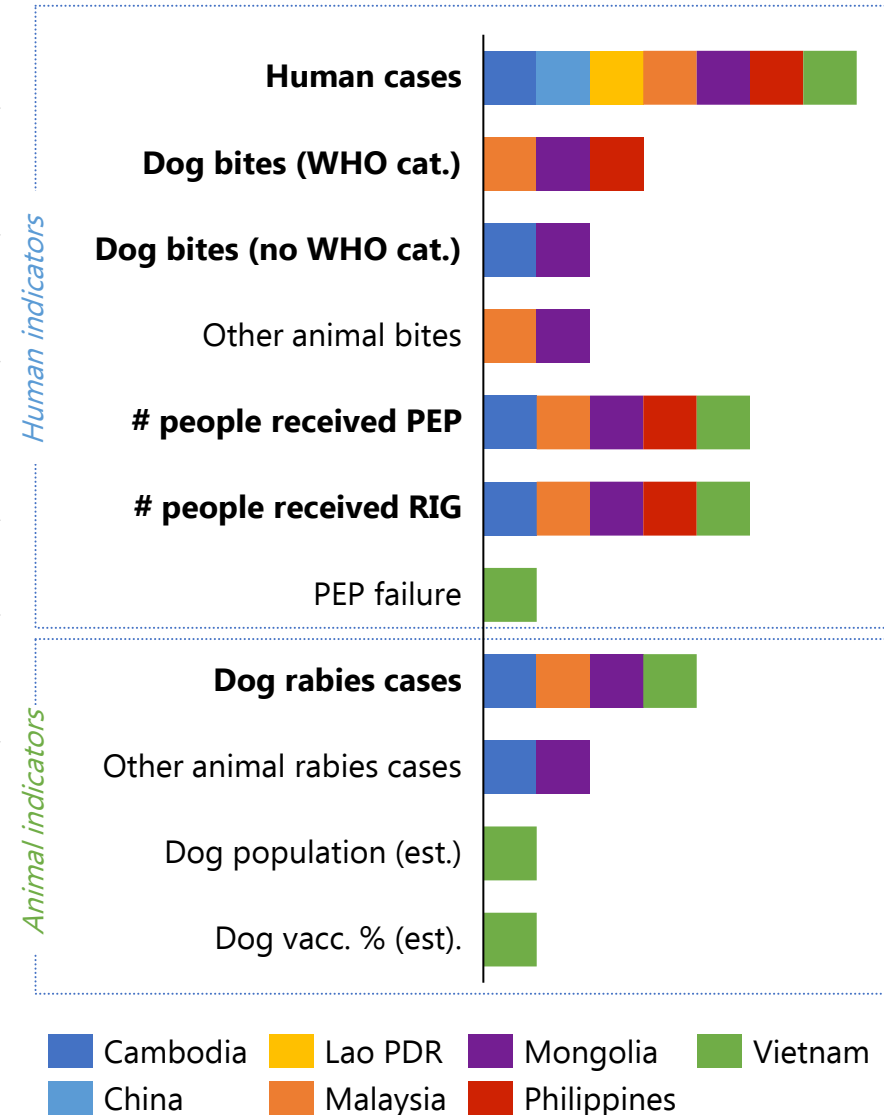
4 Rabies surveillance

	Cambodia	China	Lao PDR	Malaysia	Mongolia	Philippines	Vietnam
National surveillance in place – human rabies	✓	✓	✓	✓	✓	✓	✓
Who monitors rabies data at national level?	MOH/CDC	Rabies programme	Epidemiological Bureau	Rabies programme	NCZD	Epidemiological Bureau	Rabies programme
Standard reporting form to national level	✓	✓	✓	✓	✓	✓	✓
Report complete the form at peripheral level	CDC / MoH	Local CDC	Surveillance staff	Health care workers	Treating doctors	Regional epidemiology surveillance unit	District health office or provincial CDC
Case investigation done?	Occasionally	Regularly	Rarely	Rarely	All cases	Regularly	All cases
# diagnostic labs to confirm human rabies	1 (IPC)	32 (at least)	0	3	?	1	2

NCZD: national center for zoonotic diseases

- **All countries have human rabies surveillance system in place**, with standardized forms completed largely by surveillance officers or health care workers at sub-national level
- **All countries report # human cases** but data quality poor in some countries
- All except for China, Lao PDR, and the Philippines report dog bites, but immediate reporting of dog bites to human side for rapid response often limited
- **Regular sharing of animal indicators to MOH also limited**

Rabies indicators reported nationally (# of...)



5 Challenges

Key challenges identified to eliminate human rabies

- **Rabies not a national priority disease**
 - Lack of commitment from central and local governments
 - Lack of commitment **from the animal health sector to address rabies at the source** continue to recur MOH (and patients) major spending to procure human vaccines
- **Bite cases continue to fail PEP access**
 - **PEP and RIG costly** for patients, if not given free of charge
 - **Shortage of WHO-PQ vaccines and RIG, lack of finance**, lack of local supplies or slow procurement system
 - Counterfeit vaccines present
 - **Lack of rabies awareness**, particularly proper management of exposures and responsible pet ownership in public
- **Awareness and risk communication activities is limited to small areas**
 - **Lack of political commitment/interest and resources for outreach**
 - **Lack of capacity of PHC workers on risk communication**
 - Some only seek treatment when bite wounds are severe
 - Beliefs in traditional healers
- **Poor surveillance to trigger rapid response**
 - **No dog bite registries** available in some countries
 - **Poor sharing of data and joint data analysis** across rabies programme, surveillance programmes and veterinary sectors
- **Limited action to address disease in dogs**
 - **Low dog vaccination coverage** and high populations of **free-roaming and stray dogs** propagate disease
 - **No national immunisation program for dogs**
 - Challenges from NGOs to strays / dog population management
 - **Transboundary dog movement** from endemic neighbours
 - Insufficient funding, resourcing for mass dog vaccination