

World Rabies Day - Africa Regional Webinar (2022)

One Health: Building Momentum to Zero Human Deaths from Rabies in Africa by 2030

A joint Africa Union-Quadripartite-GARC event

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Food and Agriculture
Organization of the
United Nations

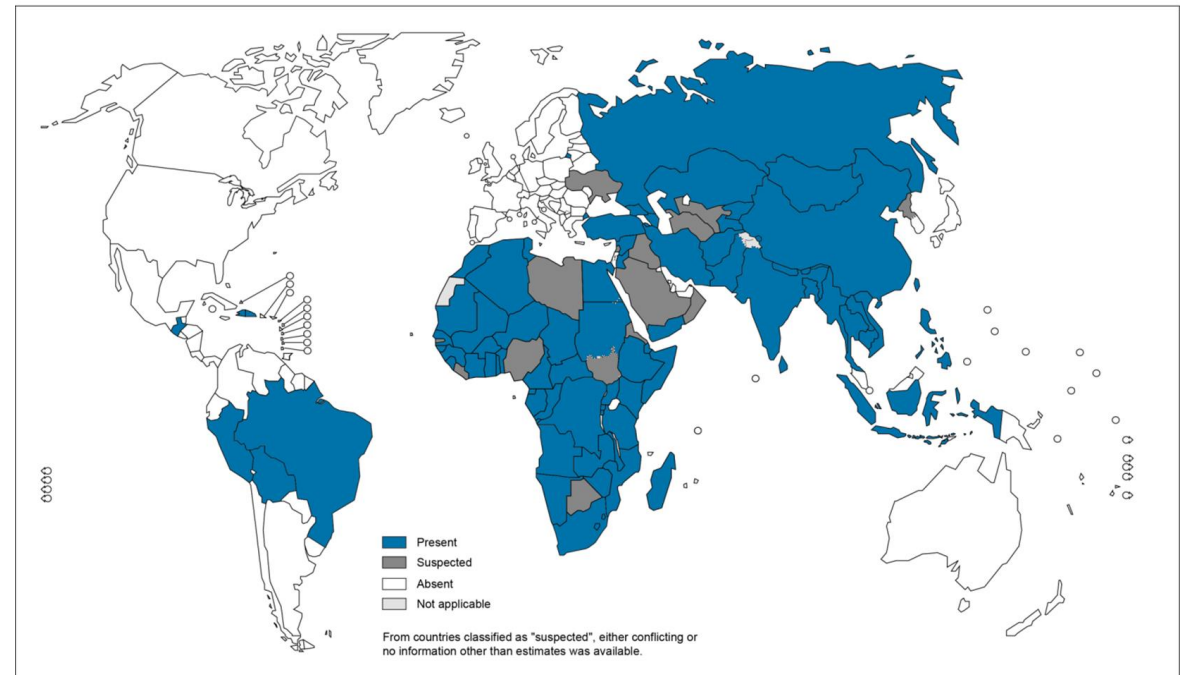
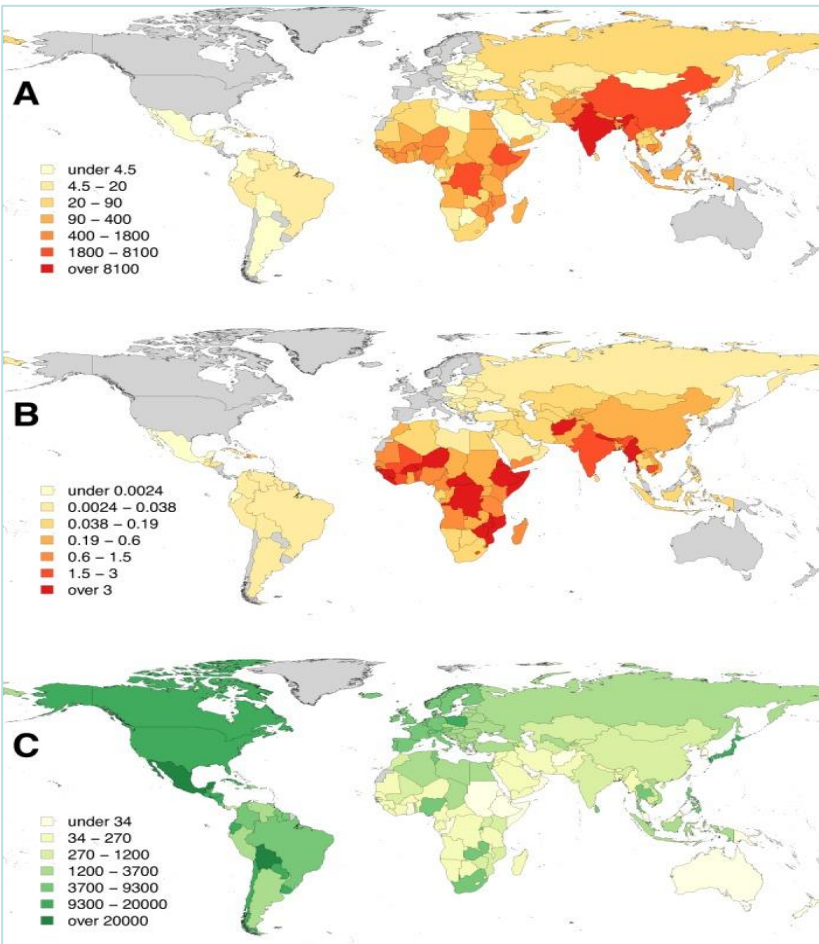


World Health
Organization



World Organisation
for Animal Health
Founded as OIE

Distribution of the global burden of rabies



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement. © WHO 2015. All rights reserved

Data Source: World Health Organization
Map Production: Control of Neglected Tropical Diseases (NTD)
World Health Organization

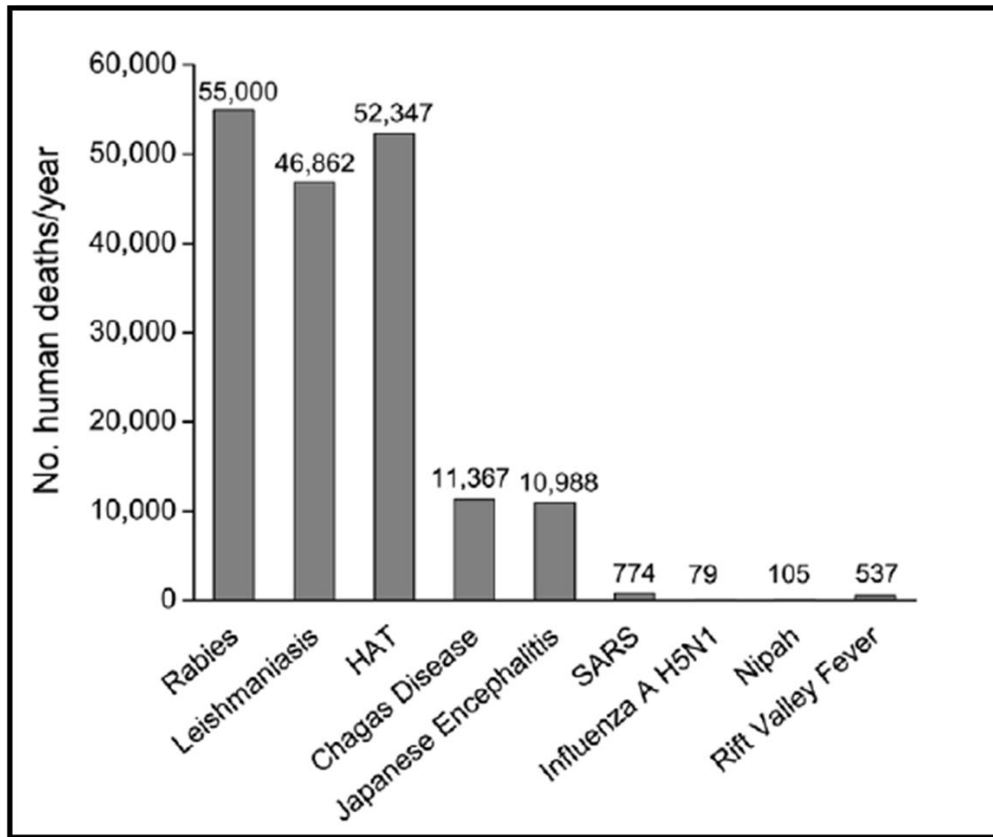


Presence of dog-transmitted human rabies based on data from different sources, 2010-2014

A) human rabies deaths, B) per capita death rates (per 100,000 persons), and C) expenditure on dog vaccination (per 100,000 persons). Countries shaded in grey are free from canine rabies.



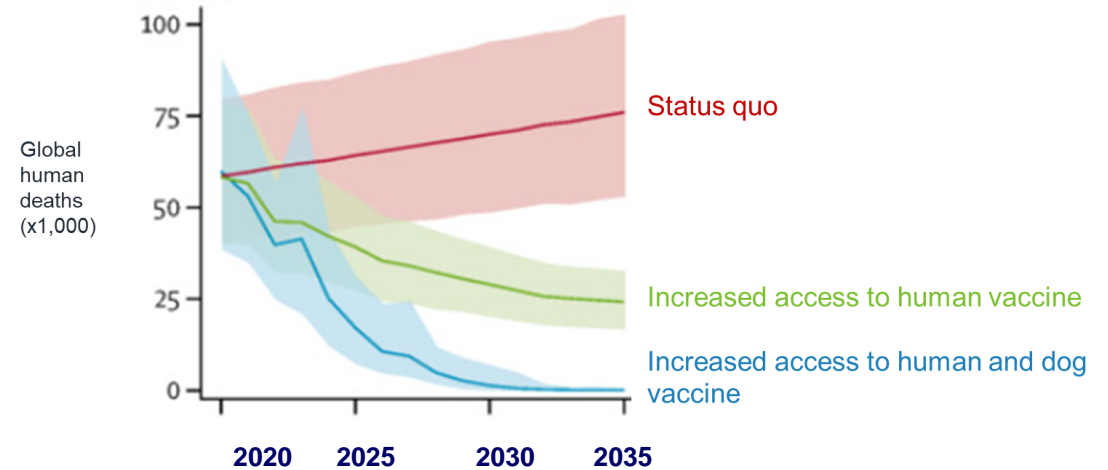
Without further intervention an estimated 1m people will die from rabies



HAT = Human African Trypanosomiasis

Lembo et al. 2010, PLOS Neglected tropical diseases

One Health intervention: approaches to the prevention of human rabies deaths



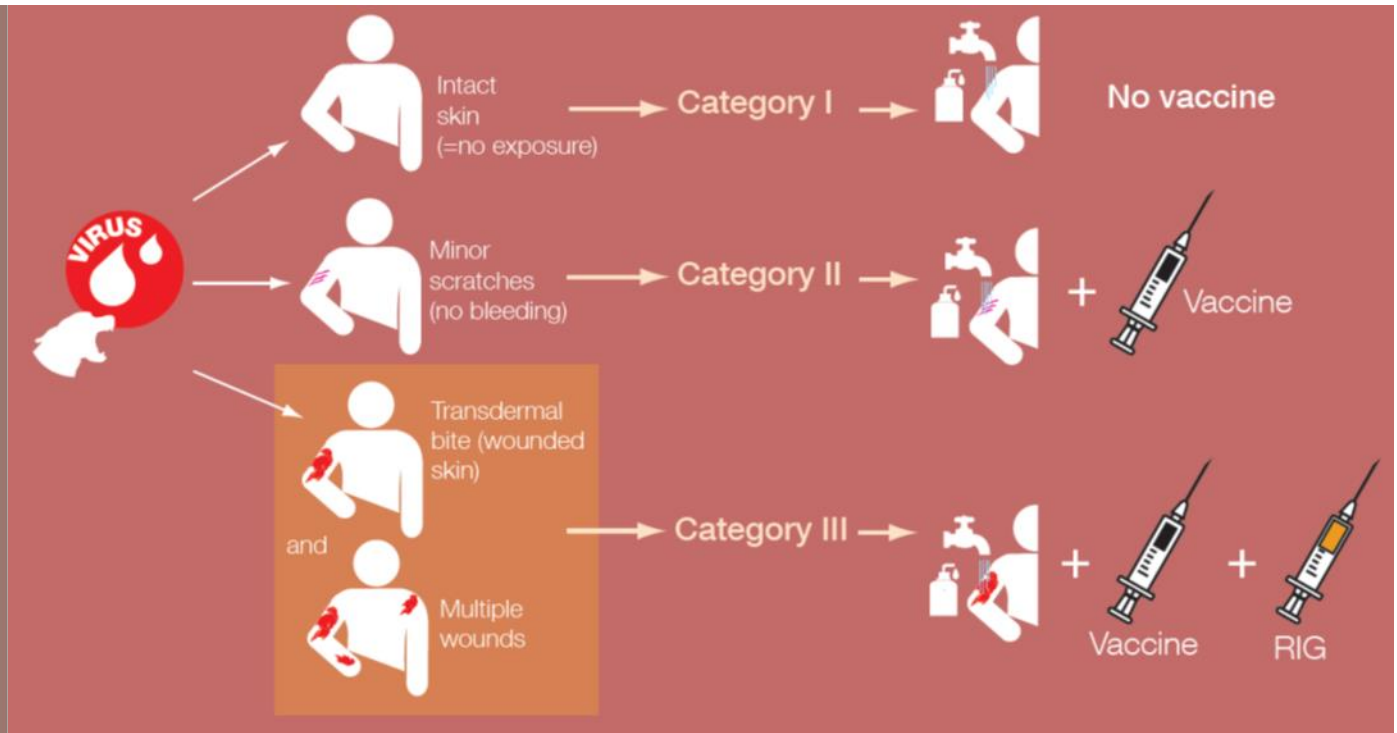
Cost-effectiveness and sustainable approaches

Without further intervention an estimated 1m people will die from rabies.

WHO Rabies Modelling Consortium*: The potential effect of improved provision of rabies post-exposure prophylaxis in Gavi-eligible countries: a modelling study

<https://www.thelancet.com/action/showPdf?pii=S1473-3099%2818%2930512-7>

Human rabies is 100% preventable through two complementary measures



- Mass dog vaccination is feasible and cost-effective as a way of preventing human deaths
- Post-exposure prophylactic: administration of rabies immunoglobulin and multi-dose course of rabies vaccination
- Wash immediately for 15 min (with soap, water and disinfectant)

Eliminating rabies contributes to the sustainable development goals

- Sustained mass vaccination of domestic dogs is the most cost-effective strategy
- Prompt administration of post-exposure prophylaxis (PEP) to victims after rabies exposure
- Pre-exposure immunization of people in high-risk occupations (including veterinary professionals, people working with animals, laboratory personnel working on the virus, etc.)

1. NO POVERTY



RABIES COSTS \$8.6 BILLION A YEAR



**LOST LIVES
LOST LIVELIHOODS
HIGH COST OF TREATMENT**

#UnitedAgainstRabies #SDG1

3. GOOD HEALTH & WELL BEING



RABIES KILLS 1 PERSON EVERY 9 MINUTES

40% ARE CHILDREN

FIGHT RABIES, SAVE LIVES

#UnitedAgainstRabies #SDG3

10. REDUCED INEQUALITIES



RABIES IS A DISEASE OF POVERTY & NEGLECT



ENSURE LIFE-SAVING VACCINES FOR ALL



#UnitedAgainstRabies #SDG10

17. PARTNERSHIP FOR THE GOALS



AFFORDABLE TREATMENT FOR ALL

VACCINATE ALL DOGS



PUBLIC EDUCATION

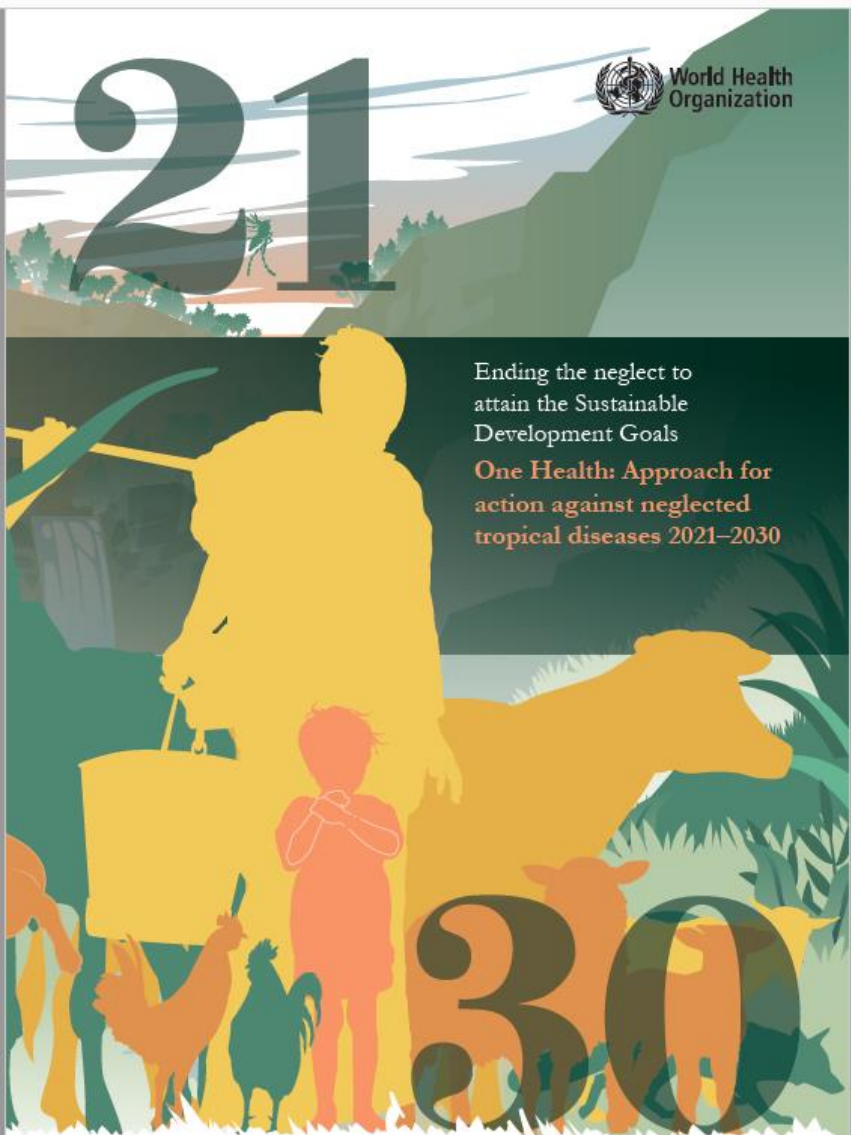


BE A PARTNER AGAINST RABIES

#UnitedAgainstRabies #SDG17

We need action across all stakeholders to achieve the elimination goal “Zero by 2030”

One Health in action against Neglected Tropical Diseases

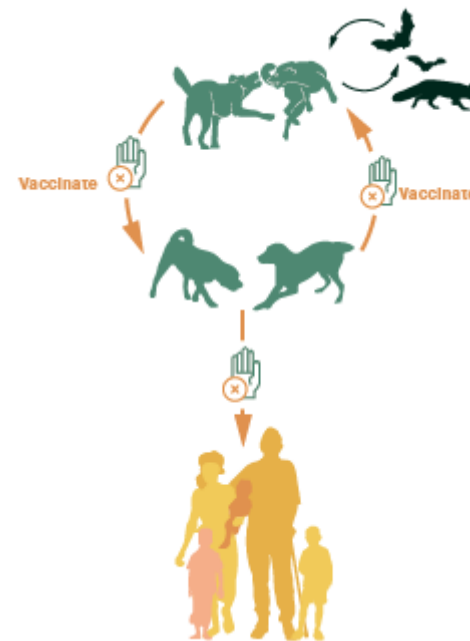


Ending the neglect to attain the Sustainable Development Goals

A road map for neglected tropical diseases 2021-2030

Overview

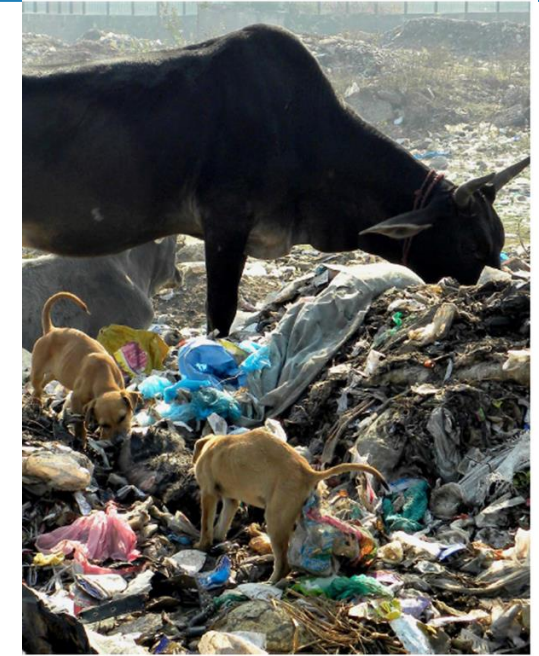
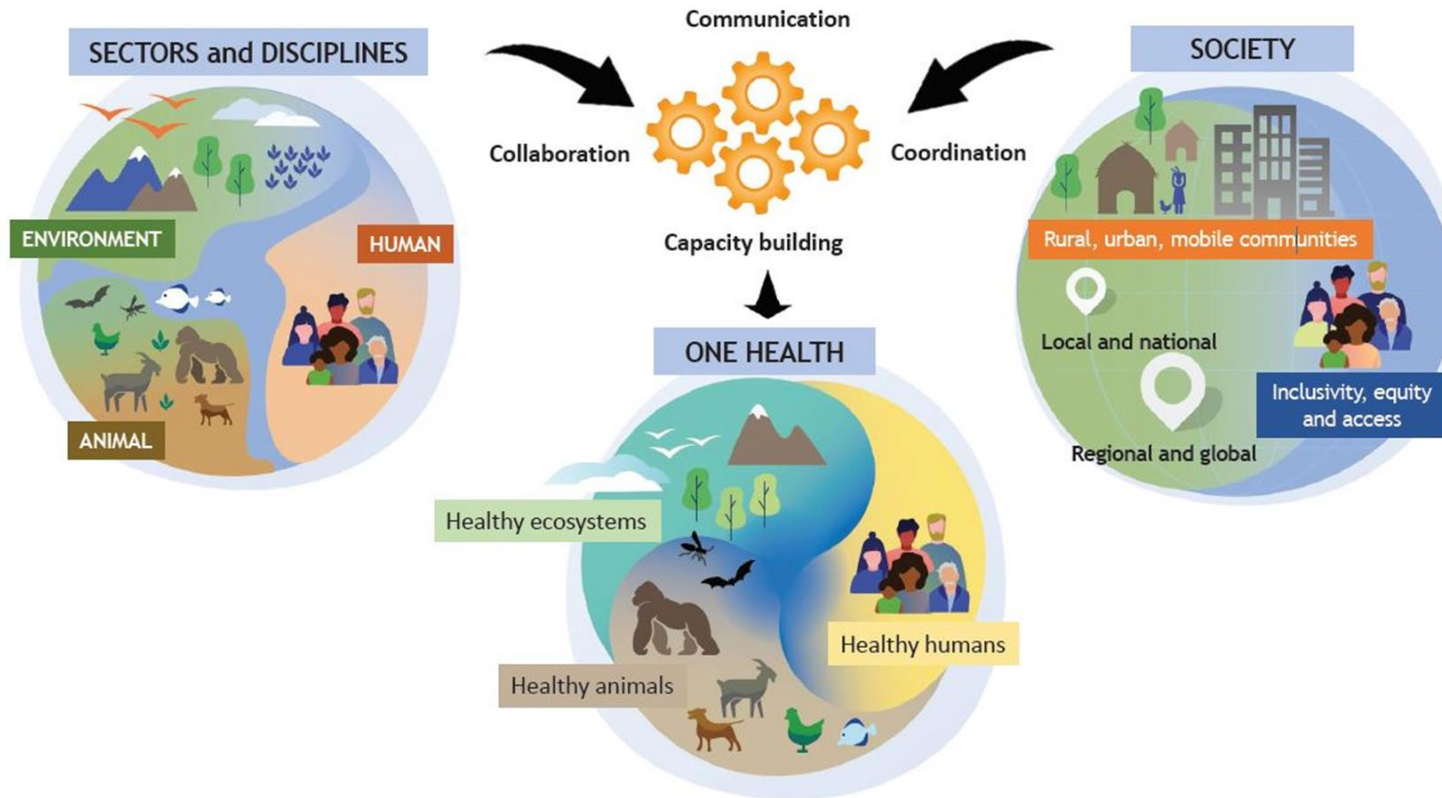
Rabies: stop transmission between dogs to stop transmission from dogs to people.



Preventing rabies in dogs is key to preventing human rabies (infection/disease) without forgetting that wildlife, particularly bats, can also play a role in transmission.

Coordinating the veterinary and health services is paramount, human and animal surveillance is needed to improve control strategies and effects.

One Health optimizes the health of people, animals, and ecosystems



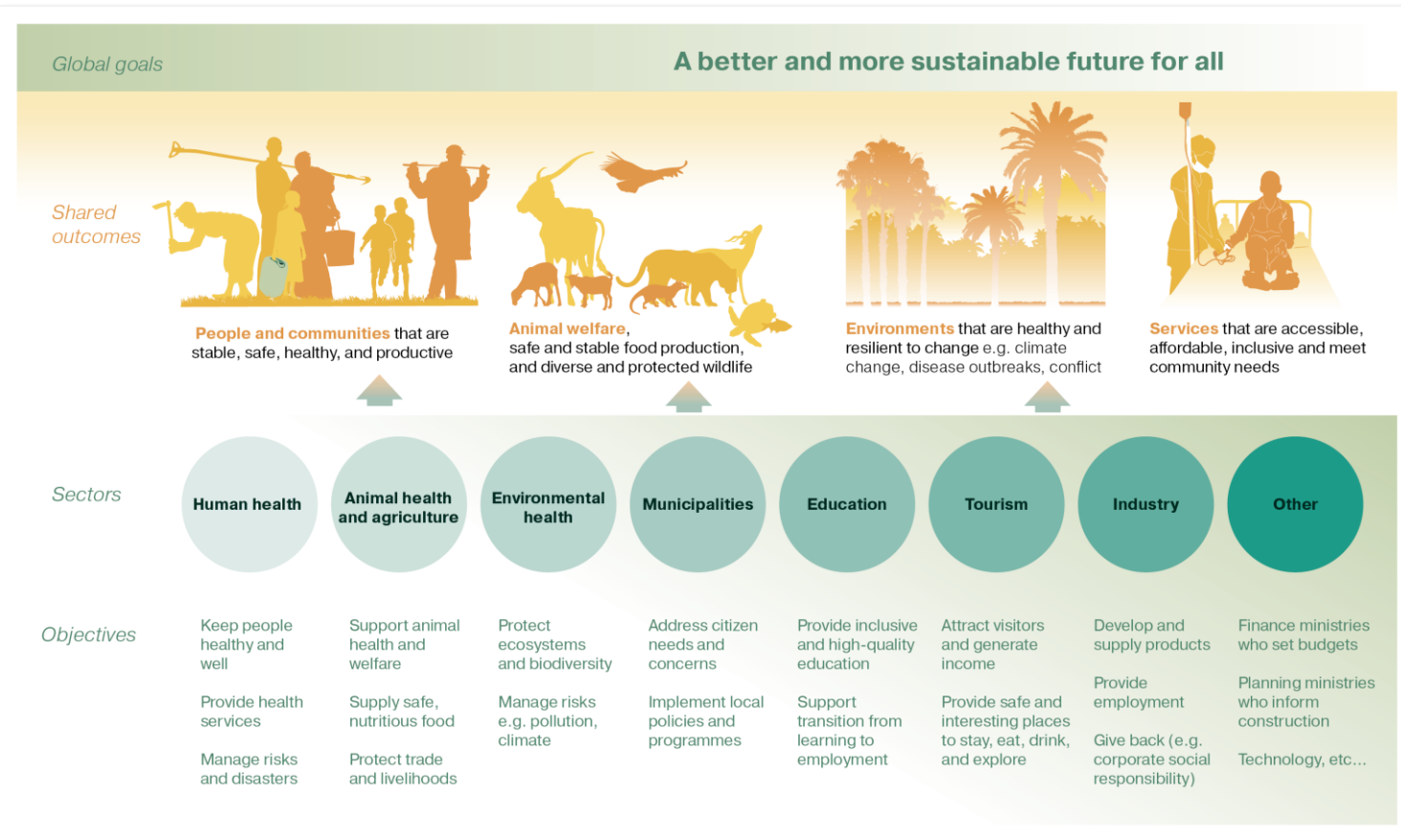
Clear roles and responsibilities would need to be agreed with all relevant stakeholders: human health, animal health, education, and municipalities, communities etc.

Actions across all stakeholders are needed to unlock a paradigm shift

We need to find **common ground** between sectors and stakeholders

One Health integration can happen at **different levels** and to varying degrees

Not everything will make sense to integrate – or to integrate first



Source: [One Health: approach for action against neglected tropical diseases 2021-2030](#)

The “Zero by 2030” plan is a coordinated strategy to act now

2018-2020: Start up

2021-2025: Scale up

2026-2030: Mop up

1

Change the status quo

2

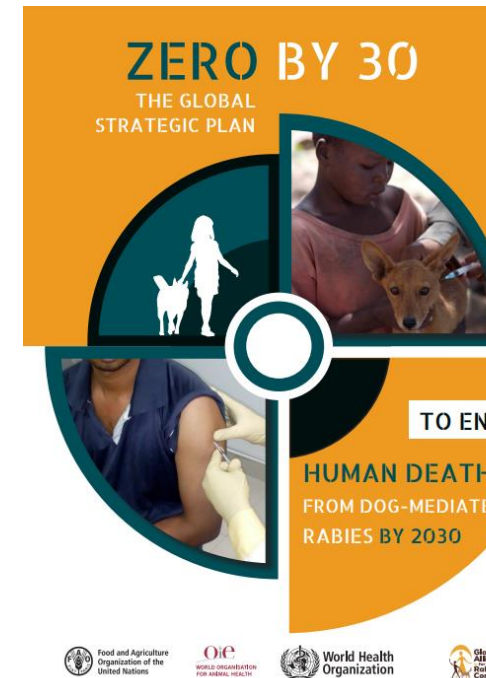
Put countries at the centre

3

Create a unified coalition for success

These objectives will be achieved through:

- the effective use of vaccines, tools, and technologies
 - to reduce human rabies risk
- the generation and measuring of impact
 - to provide reliable data and effective guidance
- the sustainment of political and financial commitment
 - to engage with stakeholders



<https://apps.who.int/iris/handle/10665/72756>

WHO provides standards, guidance and support for implementation

WHO – Rabies webpage


Rabies & One Health: From basics to cross-sectoral action to stop human rabies

deaths

OpenWHO

Course is available

Learnings Discussions Progress Certificates Collab Space Course Details Documents Announcements



Share Tweet Share Mail

Despite being fully preventable, dog-mediated human rabies kills tens of thousands of people every year, especially in rural and impoverished areas in Africa and Asia. This course provides participants with knowledge about the biology and epidemiology of this Neglected Zoonotic Disease, the current 'Zero by 30' rabies elimination strategy, and how to prevent rabies in people and dogs by taking a One Health approach. The learning package consists of seven modules, which include downloadable video-lectures by global experts and professionals confronted with rabies in the field.

Photo credit: WHO/ Budi Chandra

Self-paced
Language: English
Rabies

>>>Enroll me for this course

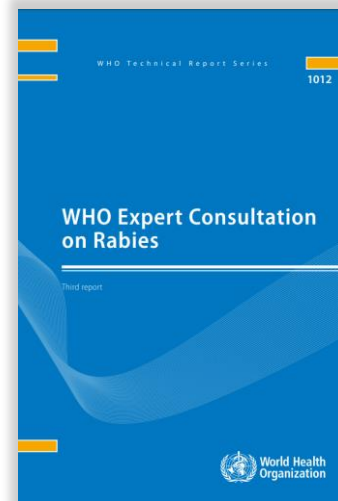
<https://openwho.org/courses/NTDs-Rabies-and-one-health>

Rabies Vaccines – WHO position paper

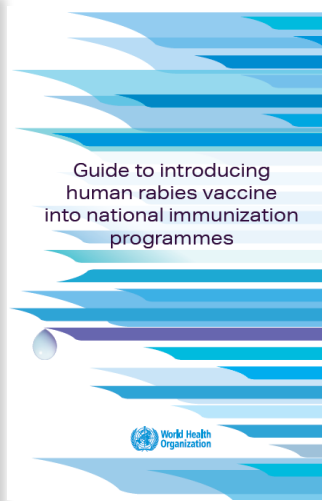
Global Market Study – Human rabies vaccines

Laboratory techniques in rabies, volume 1 & volume 2

Soon available: *Rabies Routine Health Information System Toolkit*



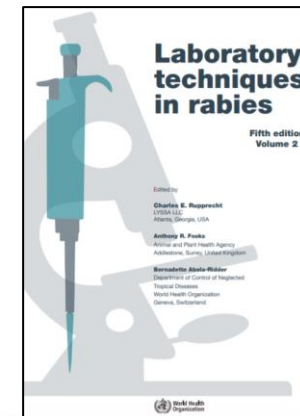
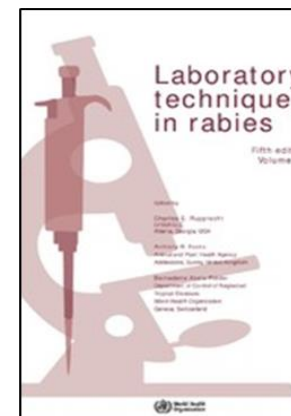
<https://www.who.int/publications/i/item/WHO-TRS-1012>



<https://apps.who.int/iris/handle/10665/360978>



<https://apps.who.int/iris/handle/10665/351193>



Frameworks and tools

ZERO BY 30
THE GLOBAL STRATEGIC PLAN

TO END HUMAN DEATHS FROM DOG-MEDIATED RABIES BY 2030

Logos: FAO, OIE, WHO, UN

The Tripartite's Commitment

Providing multi-sectoral, collaborative leadership in addressing health challenges

October 2017

Logos: FAO, OIE, WHO

International Legal Framework

HUMAN HEALTH

IHR (2005)

Assessment tools for country capacities

Annual reporting tool + JEE tool

ANIMAL HEALTH

Terrestrial Animal Health Code

OIE Standards

PVS Pathway

TECHNICAL GUIDELINES FOR INTEGRATED DISEASE SURVEILLANCE AND RESPONSE IN THE WHO AFRICAN REGION

THIRD EDITION

BOOKLET TWO: SECTIONS 1, 2 AND 3

World Health Organization
AFRICA

This booklet comprises the following sections of the Integrated Disease Surveillance and Response Technical Guidelines:

- Section 1: Identify and record cases of priority diseases, conditions and events
- Section 2: Report priority diseases, conditions and events
- Section 3: Analyze and interpret data

Taking a Multisectoral, One Health Approach:
A Tripartite Guide to Addressing Zoonotic Diseases in Countries

Logos: FAO, OIE, WHO

UN Environment Programme joins alliance to implement One Health approach

Logos: FAO, WHO, UNEP

- Action Track 1:** Enhancing One Health capacities to strengthen health systems
- Action Track 2:** Reducing the risks from emerging and re-emerging zoonotic epidemics and pandemics
- Action Track 3:** Controlling and eliminating endemic zoonotic, neglected tropical and vector-borne diseases
- Action Track 4:** Strengthening the assessment, management and communication of food safety risks
- Action Track 5:** Curbing the silent pandemic of Antimicrobial Resistance (AMR)
- Action Track 6:** Integrating the Environment into One Health

GHANA ONE HEALTH TECHNICAL WORKING GROUP (OHTWG)

NATIONAL BRIDGING WORKSHOP ON RABIES

Theme: Mobilizing towards Zero by 30 in Ghana: One Health in Action

DATE: 14TH - 18TH AUGUST, 2022.
VENUE: AQUA SAFARI RESORT, ADA.

Logos: Republic of Ghana, FAO, WHO, OIE, GHP, FLEI, etc.

Awareness and community engagement

● https://www.who.int/health-topics/rabies#tab=tab_1



28 September 2020 | Departmental news
World Rabies Day 2020



7 August 2020 | Departmental news
OIE endorsement of official control programmes for dog-mediated rabies



7 August 2020 | Departmental news
Mexico's feat against rabies through cross-sectoral collaboration is possible in other countries



21 December 2019 | Departmental news
Mexico is free from human rabies transmitted by dogs



Leading and coordinating anti-rabies efforts with "One Health" partners



Human rabies prevention and management



Vaccinating against rabies to save lives



Food and Agriculture Organization of the United Nations



World Health Organization



World Organisation for Animal Health
Founded as OIE

United to Eliminate Rabies worldwide

United Against Rabies: One Health in Action, Partnering for Success

A global virtual event announcing the new United Against Rabies Forum, with high level speakers including ministers, experts and activists from around the world. First shown 22 September 2020, moderated by Patricia Amira.



New 2021-2025 high level strategy to leave no-one behind with immunization approved by Gavi Board



GLOBAL MARKET STUDY HUMAN RABIES VACCINES

Key Takeaways

- The rabies vaccine manufacturer base is extremely fragmented across 24 manufacturers and 27 products. Geographically, supply is 85% concentrated in China and India.
- Limited prequalified supply (four vaccine products, representing 14% of total supply) may hinder procurement flexibility. Only three of these prequalified products are labelled for intradermal (ID) administration and available in a 1.0mL vial presentation.
- However, supply is sufficient to serve demand under all reasonable scenarios. Shortages in the period 2018-19 were linked to specific one-time events and, unless similar events were to repeat, are not expected to happen again.
- The switch to ID administration is likely to reduce annual vaccine needs considerably – from an estimated 60M vials to about 20M vials, mostly driven by China. Suppliers' plans must be carefully monitored as a significant drop in demand may trigger manufacturers to reassess their long-term market presence.
- Excluding China, this decrease in annual vaccine need is less severe and may be offset partially if PEP access increases due to new support from Gavi and the Zero by Thirty global strategic plan
- Choice of route of administration plays an important role in rabies vaccine affordability, with ID administration providing significantly less expensive vaccine costs per person than intramuscular (IM) administration, particularly in urban settings.

QUICK STATS

NUMBER OF VACCINE TYPES
1

NUMBER OF VACCINE PRODUCTS
27

2020 NUMBER OF MANUFACTURERS¹
24

2020 ESTIMATED GLOBAL DEMAND²
64 million vials

2020 DEMAND/SUPPLY RATIO
● Sufficient supply³

2019 REPORTED PER DOSE PRICE
UNICEF US\$ 7.50
PAHO US\$ 9.30

1 This number indicates only the companies that have full manufacturing capacity. The number does not include licensors providing a portion of the manufacturing process (e.g., filling and finishing) or distributors that simply commercialize the product in some locations.

2 Demand refers to programmatic vial requirement, defined as the average estimated number of vials a country would need to procure to meet its immunization programme needs, whether these are routine or campaign. This requirement includes wastage (depending on the presentation) and buffer.

3 Supply refers to the 'Available Supply for Commercialisation' (ASC) defined as the number of doses available for sale at the global level in one typical year with normal production facilities utilization across the various vaccine final finishing in special market, regulatory or technical events). This differs from the manufacturing capacity or

Disclaimer: This market study was completed before the impact of the SARS-CoV-2 pandemic was fully ascertained. Demand projections assume that any delay or disruption will be absorbed and resolved in 2021. Uncertainty on the progression of the pandemic raises the risk that disruptions will extend beyond 2021. An updated analysis of overall rabies vaccine supply-demand balance will be planned when more information is available on the impact of the SARS-CoV-2 pandemic on the rabies programme and statistics.

World Rabies Day, 28 September, 2022

Key message: scaling up dog vaccination

Pre-/Post-exposure prophylaxis (PrEP, PEP) (timely)

Strengthening surveillance system, without surveillance there is no programme

Perspectives: how best to achieve the goal set ?

- Need for effective surveillance
- Minimum data set and reporting to WHO and WOAHA
- Country ownership, budgeted country plans
- Scale up dog vaccination campaigns
- Pre-/Post-exposure prophylaxis (PrEP, PEP) (timely)
- Strong intersectoral collaboration (local, national and global)
- Strong partnership (all stakeholders, including technical and financial partners)

Additional resources

- WHO expert consultation on rabies: third report. World Health Organization (2018)
<https://apps.who.int/iris/handle/10665/272364>
<http://www.who.int/rabies/en/>
- WHO: <https://www.who.int/en/news-room/fact-sheets/detail/rabies>
 - [Zero by 30: the global strategic plan to end human deaths from dog-mediated rabies by 2030](#)
 - [WHO, Laboratory techniques in rabies. Fifth edition. Volume 1](#) and [Volume 2](#)
 - [WHO expert consultation on rabies: Third Report. TRS N°1012](#)
 - [Scientific and operational updates on rabies](#)
 - [OIE Rabies Portal](#)
 - [Ending the neglect to attain the sustainable development goals: a road map for neglected tropical diseases 2021–2030](#)
- [Taking a multisectoral, one health approach: a tripartite guide to addressing zoonotic diseases in countries](#)
- One Health Zoonotic Disease Prioritization workshops:
<https://www.cdc.gov/onehealth/what-we-do/zoonotic-disease-prioritization/completed-workshops.html>

Thank you
 Merci
 Obrigado

RABIES: THE FACTS



VIRUS TRANSMISSION

Saliva of infected animals **99%** of human cases are caused by **dog bites**

The virus attacks the brain
 Rabies is **fatal** once symptoms appear

TREATMENT

Thorough washing of the wound with soap, and, vaccine injections can avoid symptoms and **save lives**

HOW TO PREVENT RABIES TRANSMISSION FROM DOGS?

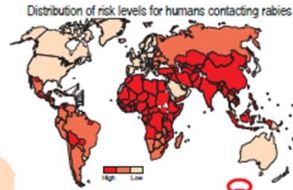
Learn **dog body language**
NO BITE = NO RABIES

Raise public awareness



FATALITIES

Rabies affects **poor rural communities** mostly in Asia and Africa



About **One death** every **15 mins**

40% of the victims are younger than 15

VACCINATING DOGS SAVES HUMAN LIVES

Rabies is **100% preventable**

Vaccinating **70%** of dogs **breaks rabies transmission cycle** in an area at risk

Every dog owner is concerned

Global elimination of dog-mediated human rabies
 The Time is Now!

rabies

17. PARTNERSHIP FOR THE GOALS

AFFORDABLE TREATMENT FOR ALL

VACCINATE ALL DOGS PUBLIC EDUCATION

BE A PARTNER AGAINST RABIES

#UnitedAgainstRabies

#SDG17

10. REDUCED INEQUALITIES

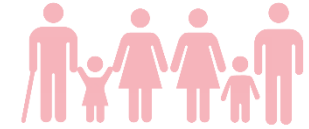
RABIES IS A DISEASE OF POVERTY & NEGLECT

ENSURE LIFE-SAVING VACCINES FOR ALL

#UnitedAgainstRabies

#SDG10

1. NO POVERTY



RABIES COSTS **\$8.6** BILLION A YEAR

LOST LIVES
 LOST LIVELIHOODS
 HIGH COST OF TREATMENT

#UnitedAgainstRabies #SDG1

3. GOOD HEALTH & WELL BEING

RABIES KILLS **1** PERSON EVERY **9** MINUTES

40% ARE CHILDREN

FIGHT RABIES, SAVE LIVES

#UnitedAgainstRabies

#SDG3

