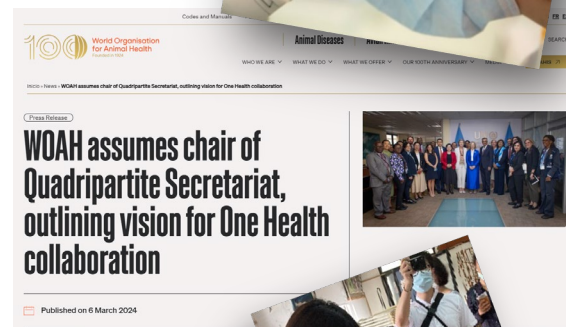


One Health approach to dog-mediated public health risks



Dr Florence Cliquet



WOAH Reference Laboratory for Rabies



WOAH Reference Laboratory for Rabies



European Union Reference Laboratory for Rabies

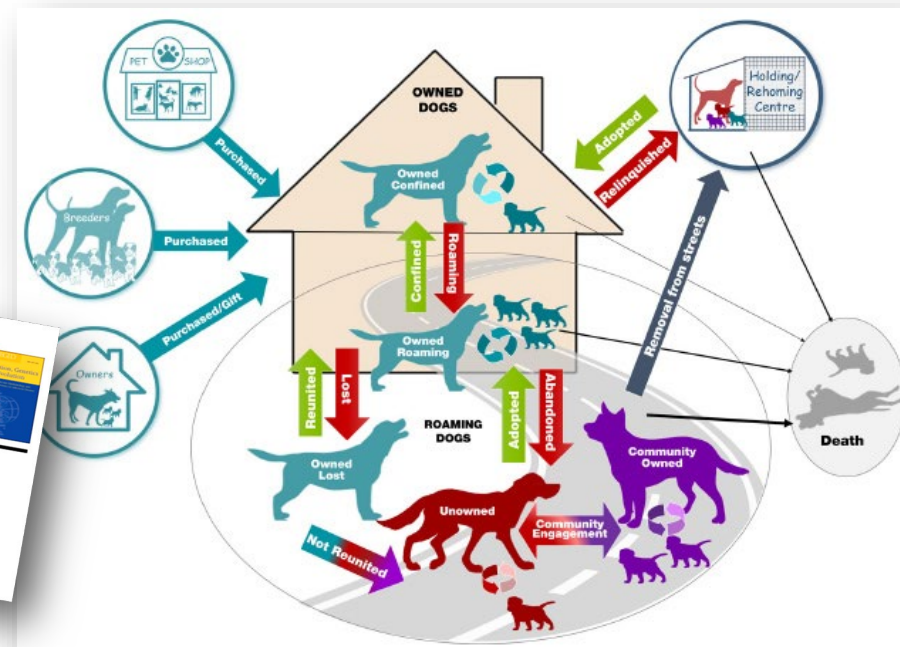
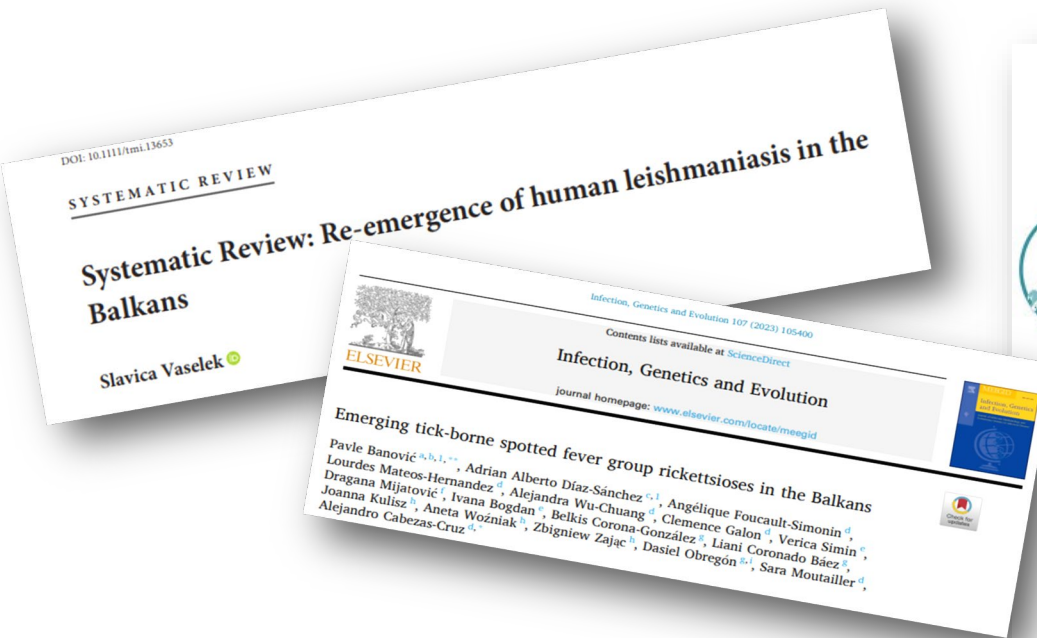


Sixth regional workshop on Dog Population Management for Balkans countries (DPM6) Sutomore, Montenegro, 05 – 07 November 2024

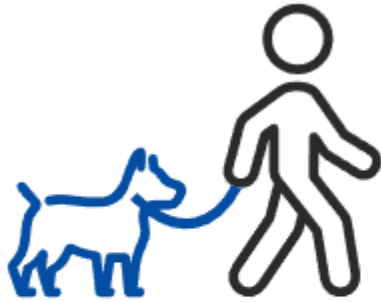
PET-ASSOCIATED DISEASE RISKS



- More than 70 pathogens of pets transmissible to humans and pets often subclinical shedding.
- Dog structure and dog population dynamics variable depending upon many factors.
- Health risks depend on many factors, and increase at extreme ages, pregnancy and immunocompromised people.
- Emerging and re-emerging diseases: Over 30 new human pathogens have been detected in the last three decades, 75% of which have originated in animals.



Sources: https://ipac-canada.org/photos/custom/Members/pdf/OneHealth_Stull.pdf; Jones et al., 2008; Hiby et al., 2023,



Increased levels of outdoor physical activity that often accompany pet ownership (e.g. regular dog walking).



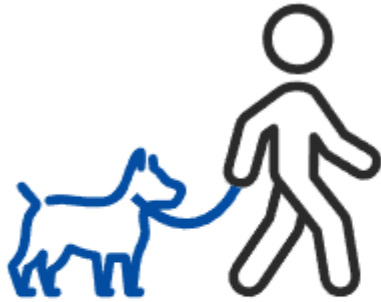
The sustained mental health benefits brought on by pet companionship.



Greater exposure to germs that can 'favourably alter the gut microbiome of an owner'.

- Reduction in cardiovascular disease risk.
- Reduction in stress, anxiety, loneliness, depression.
- Shorter hospital stays.
- Positive health and welfare effects in patients affected by cancers or autism.
- For children, better social skills, self-esteem, empathy.

Sources: <https://healthforanimals.org/reports/pet-care-report/global-trends-in-the-pet-population/#health>; Takashima et al., 2022; Patronek and Glickman, 1993; Friedmann and Son, 2009; Melson et al., 2009



Increased levels of outdoor physical activity that often accompany pet ownership (e.g. regular dog walking).



The sustained mental health benefits brought on by pet companionship.



Greater exposure to germs that can 'favourably alter the gut microbiome of an owner'.

Therefore, dogs and humans have therefore to continue to live together for a long time and everything must be done to ensure that it goes well!

Sources: <https://healthforanimals.org/reports/pet-care-report/global-trends-in-the-pet-population/#health>; Takashima et al., 2022; Patronek and Glickman, 1993; Friedmann and Son, 2009; Melson et al., 2009

MOST COMMON DISEASES OF DOGS

Viruses

Rabies

Canine parvovirus
Canine coronavirus
Canine distemper
Canine influenza
Infectious canine hepatitis
Canine herpesvirus
Pseudorabies

Parasites

Intestinal parasites
(Echinococcosis,
cryptosporidiosis, etc)
External parasites
(fleas, ticks, mange)
Heartworms

Bacteria

Brucellosis
Leptospirosis
Tick-borne diseases
(Rickettsiosis, Lyme disease, ehrlichiosis, etc)
Kennel cough

Protozoa

Leishmaniosis
Babesiosis
Neosporosis
Giardiasis

Others

Fungal infections
(blastomycosis,
histoplasmosis,
cryptococcosis,
ringworm, etc)

Diabete
Cancer
Allergies
Tooth pathology
Fertilizers and
pesticides

In blue: zoonotic
diseases

Underlined:
vaccine(s)
available



DOG, MAN'S BEST FRIEND

In a context of an overall increase in owned and free roaming dog populations

- Very close physical association with the population.
- Number of **zoonotic diseases** that may be transmitted from dogs to people and other animals (owned or roaming dogs, dogs in shelters).
- Transmission dependent upon many factors:
 - **Animal side**: lifestyle of the dog, vaccination and parasite control, exposure to other domestic or wild animals, exposure to particular environments.
 - **Human side**: knowledge of the population, education of children, dog ownership, hygiene conditions and health care, waste management, disposal of animal carcasses, movements of the people, level of surveillance of major zoonosis.

Sources: Day, 2011; <https://healthforanimals.org/reports/pet-care-report/global-trends-in-the-pet-population/#ownership>;

TRANSMISSION OF INFECTIOUS AGENTS BETWEEN ANIMALS AND PEOPLE

Direct contact: Coming into contact with the saliva, blood, urine, mucous, feces, or other body fluids of an infected animal. Examples include petting or touching animals, and bites or scratches.

Indirect contact: Coming into contact with areas where animals live and roam, or objects or surfaces that have been contaminated with germs (pet habitats as well as pet food and water dishes).

Vector-borne: Being bitten by a tick, or an insect like a mosquito or a flea.

Foodborne: Eating contaminated food. Eating or drinking something unsafe, such as unpasteurized (raw) milk, undercooked meat or eggs, or raw fruits and vegetables that are contaminated. Contaminated food can cause illness.

Waterborne: Drinking or coming into contact with water contaminated with feces from animals.

The screenshot shows the ProMED-mail interface. At the top, there are language and region selection options: ProMED-mail, Português, Español, Русский, Mekong Basin, Afrique Francophone, Anglophone Africa, South Asia, Middle East/North Africa, and Antimicrobial Resistance. Below these is a blue button labeled 'Latest on COVID-19'. To the right of this button are social media sharing icons and a 'View printable version' link. Below the COVID-19 button is a navigation menu with 'Latest', 'Plants', 'Hot Topics', and 'Errata' buttons. At the bottom of the interface, there is a section titled 'Latest Posts On ProMED-Mail' with a list of articles. The first article is titled 'RABIES (90): PHILIPPINES (DAVAO DEL NORTE) DOG MEAT CONSUMPTION, FATAL'.

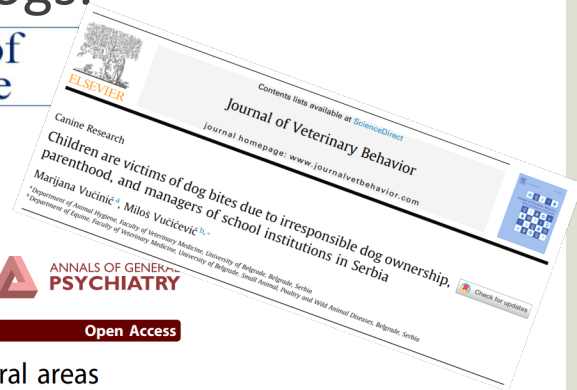
Sources: <https://www.cdc.gov/one-health/about/index.html>

DOG BITES

- Worldwide estimations at tens of millions of injuries per year annually (\approx 76-94 % of animal bite injuries).
- Saliva from these animals can be contaminated with pathogens transmitted to humans, such as Pasteurella, Capnocytophaga, Staphylococcus, and also rabies.
- Children are the largest percentage of people bitten by dogs.



Br J Gen Pract. 1997 Jul;47(420):435-437.



Dog bites in Bosnia.

Archer¹, R. Archer¹ <http://www.annals-general-psychiatry.com/content/9/51/527>



MEETING ABSTRACT

Open Access

Bite wound related infections in rural areas of Macedonia-Greece: consequences on overall health

Nikolaos Syrmos¹, Andreas Televantos, Stefanos Patiakas, Nikolaos Kapoutzis

RABIES STILL KILLS

>59,000 people a year

1 person every 9 minutes

Mostly children

In 2/3 of the countries worldwide

AND YET, IT IS 100% PREVENTABLE!

99% human rabies cases originate from dog bites

NO MORE DEATHS FROM RABIES! VACCINATE DOGS!

World Organisation for Animal Health
Founded as OIE

www.woah.org/rabies

Sources: Ghasemzadeh et al., 2015; <https://www.who.int/news-room/fact-sheets/detail/animal-bites>;

OTHER RISKS CAUSED BY DOGS (BUT BECAUSE OF PEOPLE!)

- Lack of responsible dog ownership (low levels of neutering, abandonment of puppies, etc).
 - Free roaming dogs (nuisance), dog rehoming and overcrowded shelters.
- Dog trafficking: illegally farmed for importation in EU countries.
- Limited access to veterinarian services: particularly in rural areas

Travel-Associated Rabies in Pets and Residual Rabies Risk, Western Europe

Florence Ribadeau-Dumas, Florence Cliquet, Philippe Gautret, Emmanuelle Robardet, Claude Le Pen, Hervé Bourhy

During 2001–2013, a total of 21 animal rabies cases attributed to pets from rabies-enzootic countries were reported in western Europe (<https://zenodo.org/record/49670#>), which represented 1.6 pets/year and 23 days/year of dog

Tackling the Threat of Rabies Reintroduction in Europe

Santiago Vega^{1†}, Laura Lorenzo-Rebenaque^{1†}, Clara Marin^{1††}, Rosana Domingo¹, Fernando Fariñas^{2†}

Received: 18 May 2022 | Revised: 29 September 2022 | Accepted: 21 November 2022
DOI: 10.1002/vro2.54

ORIGINAL RESEARCH

A survey of gastrointestinal parasites in dogs illegally entering the UK (2015–2017)

Margaret A. Fisher¹ | Beth Rees¹ | Colin Capner¹ | Susie Pritchard² | Peter A. Holdsworth³ | Ronan A. Fitzgerald⁴

VetRecord
Open

Received: 7 October 2022 | Revised: 24 March 2023 | Accepted: 27 March 2023
DOI: 10.1002/vetr.2996

ORIGINAL RESEARCH

Analysis of exotic pathogens found in a large group of imported dogs following an animal welfare investigation

Ian Wright¹ | Vanessa Whitfield² | Runa Hanaghan³ | Melissa Upjohn³ | Paula Boyden³

VetRecord

Sources: <https://www.dogstrustworldwide.com/our-priorities/balkans/>

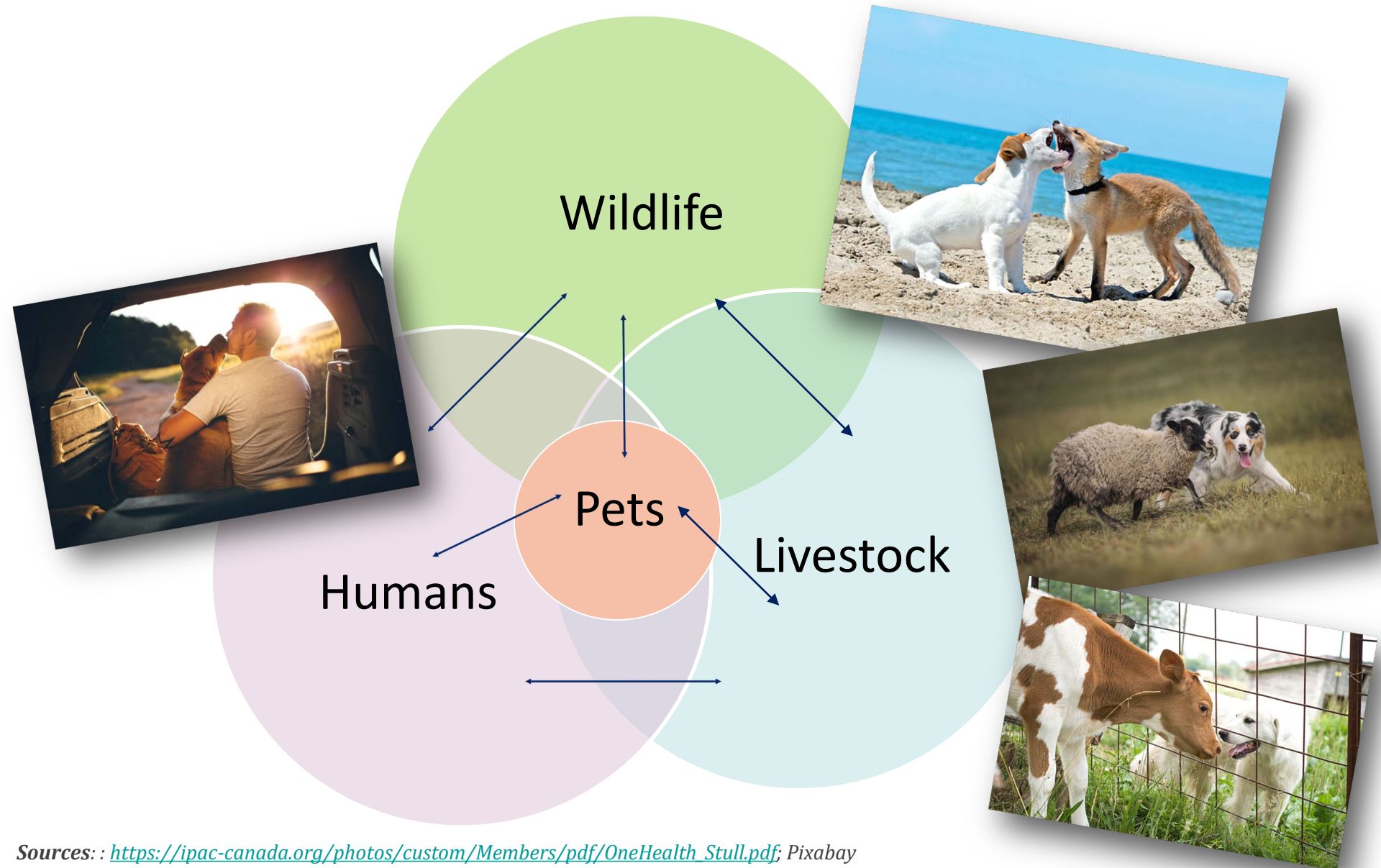
ONE HEALTH, NEW TERM FOR AN OLD CONCEPT

- Health of **people** closely connected to the **health of animals** and our shared environment.
- One Health is an **integrated**, unifying **approach** that aims to **sustainably** balance and optimize the health of people, animals and ecosystems.
- One Health has become more important in recent years as many factors have changed **interactions** between people, animals, plants, and our environment.
- Multiple sectors, disciplines and communities involved at varying levels of society to **work together**.



Sources: <https://www.cdc.gov/one-health/about/index.html>; <https://www.who.int/news/item/01-12-2021-tripartite-and-unep-support-ohhlep-s-definition-of-one-health>; <https://www.woah.org/en/what-we-do/global-initiatives/one-health/>

PET-ASSOCIATED DISEASE TRANSMISSION



Sources: : https://ipac-canada.org/photos/custom/Members/pdf/OneHealth_Stull.pdf; Pixabay

DOGS AS SENTINELS FOR DISEASE

Animals, including dogs, may serve as sentinels for identification and pathogen testing, as well as for environmental contaminants posing health risks to the exposed human population.



Tropical Medicine and
Infectious Disease



Brief Report

One Health Approach to Leptospirosis: Dogs as Environmental Sentinels for Identification and Monitoring of Human Risk Areas in Southern Brazil

Natacha Sohn-Hausner¹, Louise Bach Kmetiuk¹, Evelyn Cristine da Silva², Helio Langoni² and Alexander Welker Biondo^{1,*}

Use of tick surveys and serosurveys to evaluate pet dogs as a sentinel species for emerging Lyme disease

Sarah A. Hamer, MS; Jean I. Tsao, PhD; Edward D. Walker, PhD; Linda S. Mansfield, VMD, PhD; Erik S. Foster, MS; Graham J. Hickling, PhD

Science

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PERSPECTIVE | TOXICOLOGY



ELSEVIER

The Science of the Total Environment 274 (2001) 161–169

the Science of the
Total Environment

An International Journal for Scientific Research
into the Environment and its Relationship with Man

www.elsevier.com/locate/scitotenv

Canine sentinels and our shared exposome

Dogs are distinctly positioned to be indicators of human health and well-being

COURTNEY SEXTON AND AUDREY RUPLE [Authors info & Affiliations](#)

SCIENCE • 13 Jun 2024 • Vol 384, Issue 6701 • pp. 1170-1172 • DOI:10.1126/science.adl0426

Pet dogs as sentinels for environmental contamination

Lorraine C. Backer^{a,*}, Carol B. Grindem^b, Wayne T. Corbett^b,
Laura Cullins^b, J. Lee Hunter^c

QUADRIPARTITE COMMITMENT FOR ONE HEALTH

- Commitment between World Organization for Animal Health (WOAH), World Health Organization (WHO), Food and Agriculture Organization of the United Nations (FAO), and UNEP (United Nations Environment Programme).
- During the Second Quadripartite Executive Annual Meeting at the United Nations Office in Nairobi in 2024, WOAH formally assumed its role as forthcoming chair of the Quadripartite Secretariat, reinforcing its dedication to combating zoonotic animal diseases such as rabies or vector-borne diseases through a holistic approach.

Action Track 1. Enhancing One Health capacities to strengthen health systems

Action Track 5. Curbing the silent pandemic of Antimicrobial Resistance (AMR)

Action Track 6. Integrating the Environment into One Health



Action Track 4. Strengthening the assessment and management of food safety risks

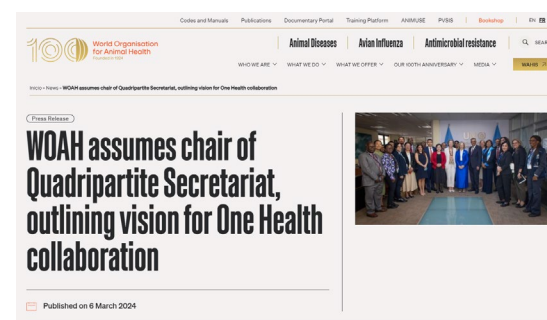
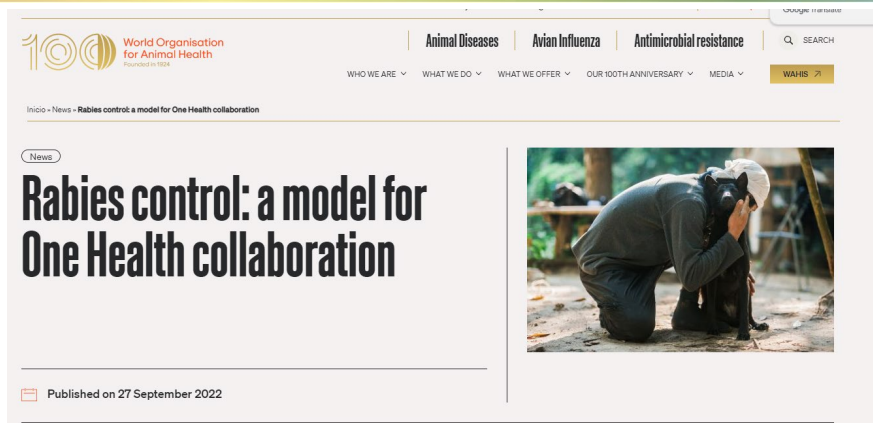
Action Track 2. Reducing the risks from emerging and re-emerging zoonotic epidemics and pandemics

Action Track 3. Controlling and eliminating endemic zoonotic, neglected tropical and vector-borne diseases

The screenshot shows the WOAH website header with navigation links: Codes and Manuals, Publications, Documentary Portal, Training Platform, ANIMUSE, PVSIS, Bookshop, EN, FR, ES. Below the header, there are search bars for 'Animal Diseases', 'Avian Influenza', and 'Antimicrobial resistance'. The main content area features a 'Press Release' section with the title 'WOAH assumes chair of Quadripartite Secretariat, outlining vision for One Health collaboration' and a date of 'Published on 6 March 2024'. To the right of the text is a photograph of a group of people in formal attire standing in a line on a stage.

Sources: <https://www.woah.org/app/uploads/2022/04/oh-joint-plan-of-action-summary.pdf>; <https://www.woah.org/en/woah-assumes-chair-of-quadripartite-secretariat-outlining-vision-for-one-health-collaboration/>

ONE HEALTH ACTION AGAINST RABIES



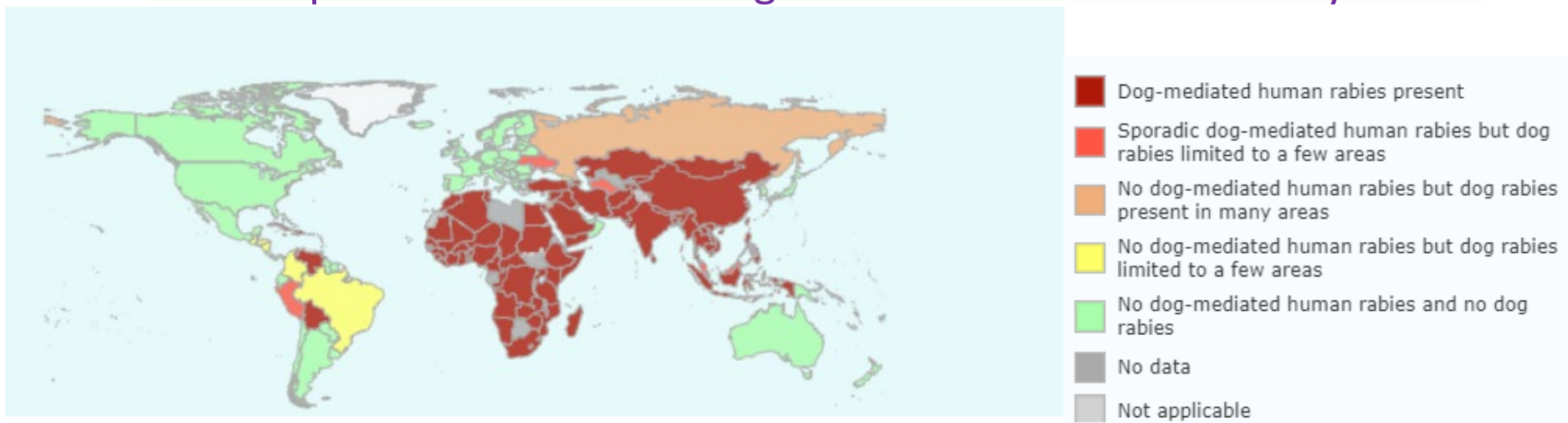
- “At the forefront of WOA^H’s leadership lies our robust commitment to combating rabies, a preventable yet deadly disease that still affects vulnerable communities”.
- “WOAH will promote efforts to control and eliminate endemic zoonoses, neglected tropical diseases, and vector-borne diseases, with a particular focus on ending human deaths from dog-mediated rabies. Leveraging on the [strategic plan Zero by 30](#) developed by FAO, WHO, and WOA^H, OH JPA activities on rabies will operationalise the One Health approach in countries with the highest rabies burden. This includes promoting the development of national control plans while considering surveillance in wildlife, facilitating access to the WOA^H vaccine bank for the vaccination of dogs (both sheepdogs in contact with wildlife and free-roaming dogs), and fostering stakeholder and communities communication”.

Source : <https://www.woah.org/en/woah-assumes-chair-of-quadripartite-secretariat-outlining-vision-for-one-health-collaboration/>;
<https://www.woah.org/en/rabies-control-a-model-for-one-health-collaboration/>

RABIES GLOBAL IMPACT

- Rabies still a neglected, vaccine-preventable disease, 100% fatal
- ~60,000 deaths per year (one person/ 9 minutes, ~100 children/ day)
- Dog bites cause ~ 95-99% of human cases
- Weak data and under-reported
- Impacts human and animal health and welfare
- Economic losses : economic impact of US\$8,6 billion annually

Inadequate investment in dog vaccination and accessibility to PEP



Presence of dog-mediated human rabies, 2022 (WHO)

Source : Hampson et al., 2015; <https://www.who.int/data/gho/data/themes/topics/rabies>

STRATEGIC PLAN « ZERO BY 2030 » IN A ONE HEALTH APPROACH



Zero by 30: The Global Strategic Plan to Prevent Human Deaths from Dog-Transmitted Rabies by 2030

Objective 1: To efficiently prevent and respond through effective use of vaccines, medicines, tools and technologies.

Objective 2: To generate, innovate and measure impact through policies, guidance and governance; reliable data to enable effective decision-making.

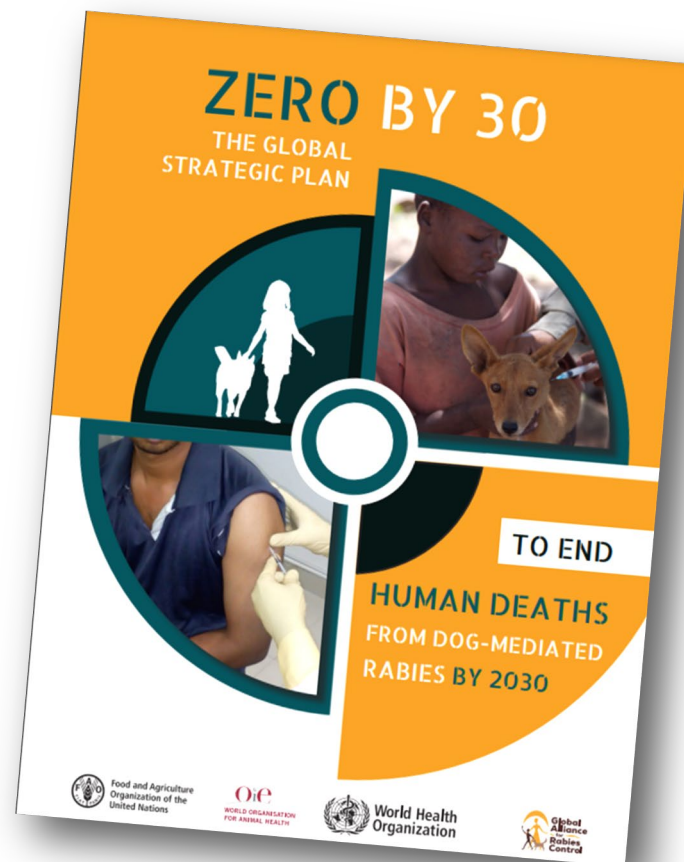
Objective 3: To sustain commitment and resources to drive progress. By providing a coherent foundation for rabies control, confidence in the feasibility of global elimination, and engages countries, research institutions and development partners in the fight to end rabies.

**GLOBAL ELIMINATION
OF DOG-MEDIATED
HUMAN RABIES**

the time is
now!



GLOBAL CONFERENCE
10–11 DECEMBER 2015
GENEVA, SWITZERLAND

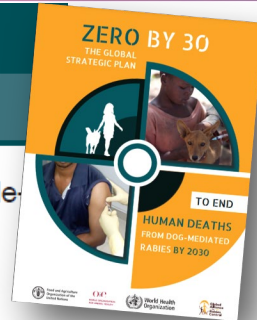


Sources: <http://www.oie.int/eng/RABIES2015/publication.html> - http://www.who.int/rabies/Executive_summary_draft_V3_wlogo.pdf

DETAILED ACTIVITY FRAMEWORK

Objective 2.1: Policies, guidance and governance provide support

Outcomes	Outputs	Major activities
2.1 Policies and guidelines, and governance to prevent human deaths from rabies exposure are created and adopted at regional and national levels	2.1.1 Clear guidance, strategies, priorities and legal frameworks at global, regional and national levels provided to prevent human deaths	<p>Complete WHO and OIE recommendations and FAO guidelines</p> <p>Define guidelines for regulatory framework</p> <p>Update and embed stepwise approach to national rabies elimination policies and plans in line with the global framework</p> <p>Implementation of One Health approach embedded within strong human and animal health services</p>
	2.1.2 Efficient and effective governance of regional and national rabies elimination programmes established	<p>Establish cross-sectoral working group</p> <p>Establish roles, responsibilities and accountability</p>
2.2 Appropriate technology and information are made available	2.1.3 Technology and health innovations to eliminate human deaths from rabies fostered	<p>Incorporate existing tools and leverage existing programmes</p> <p>Promote ICT-based enablers including surveillance tools</p> <p>Promote supply chain innovations</p> <p>Promote innovation into new vaccines and vaccine strategies</p> <p>Promote innovative rapid and sensitive diagnostics</p> <p>Promote dog population management tools (e.g. movement control, contraceptive technology, identification)</p>



Objective 2.2: Reliable data enables effective decision-making

Outcomes	Outputs	Major activities
2.3 Progress towards the goal is constantly and	2.3.1 Robust disease surveillance in human and animals	<p>Initiate capacity-building for laboratory diagnostics</p> <p>Train staff in surveillance and diagnostic methods</p>

RABIES RESERVOIRS IN EUROPE

Cycle on non-flying mammals (classical rabies)



Red fox



Raccoon dog

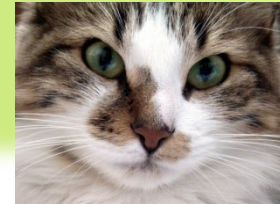
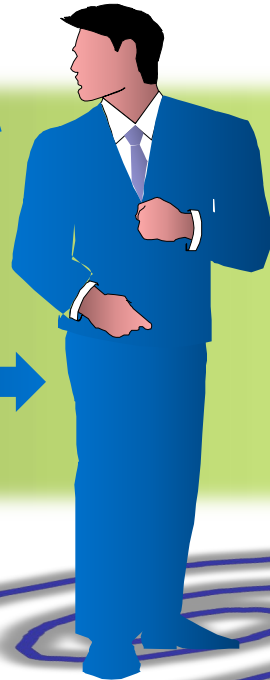
Lyssavirus
RABV virus species

Cycle on flying mammals

Lyssavirus
Virus species
EBLV-1, EBLV-2,
BBLV, LLBV, WCBV
and KBLV

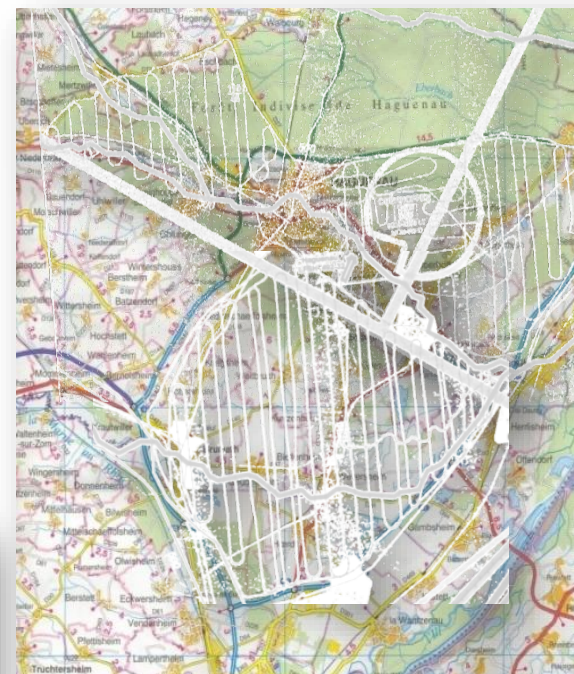
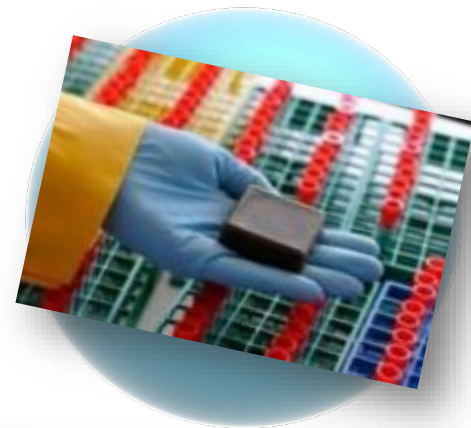


Insectivorous
bats



ORAL VACCINATION METHOD: A UNIQUE CONCEPT FOR BEST COST-BENEFIT RATIO

- Bait: rabies vaccine + biological marker (tetracycline)
- Distribution of baits in spring (April - May) and in Autumn (September – November)
- Regular distribution of 20 baits/km²
- Distribution by helicopter or by fixed-wing aircraft
- Choice of the area to be vaccinated : whenever feasible, it is preferable to vaccinate as a whole the totality of the infected area.



VACCINATION OF ANIMALS AGAINST RABIES IN EUROPE



Rabies vaccination (with inactivated vaccines) in domestic carnivores is intended:

- to protect individual animals if exposed to rabies virus,
- to prevent them from transferring rabies virus to other domestic animals or to humans.

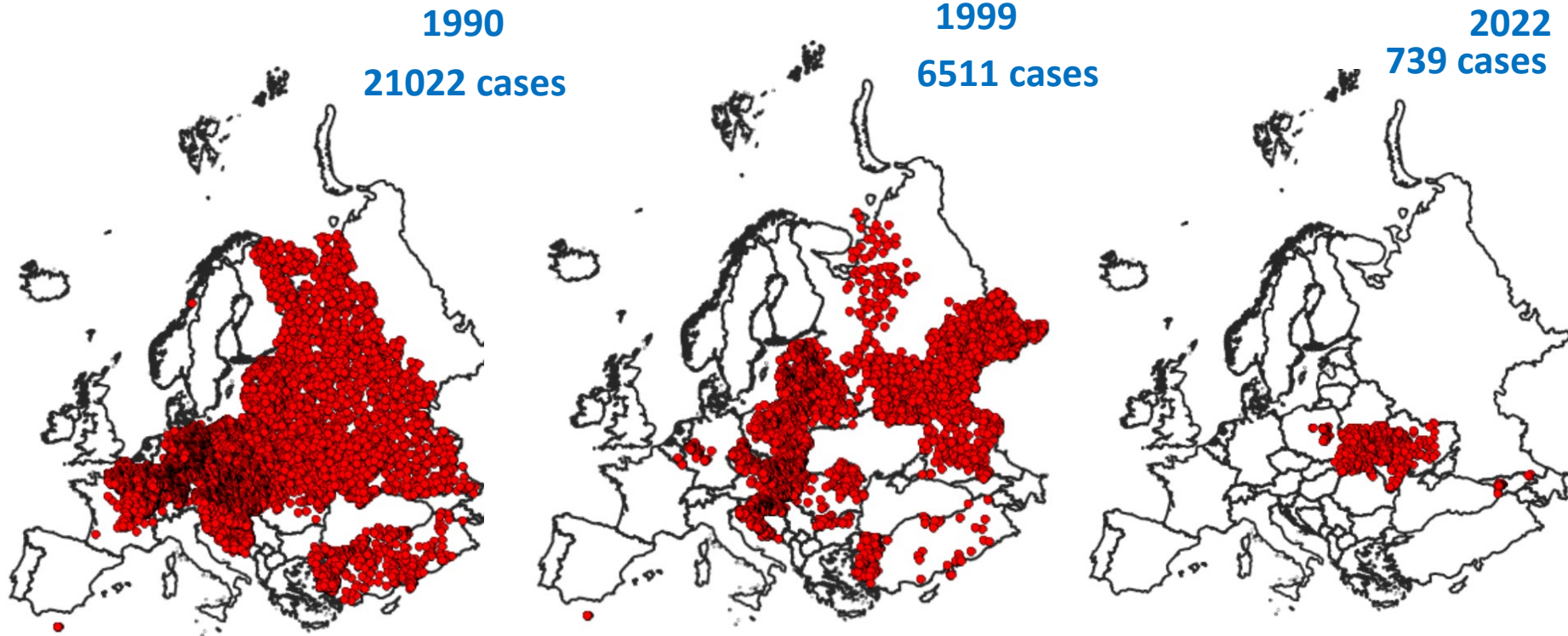
Rabies vaccination (with live vaccines) in wildlife is intended:

- to interrupt the transmission from one animal to another one,
- to eliminate the virus from those reservoirs.



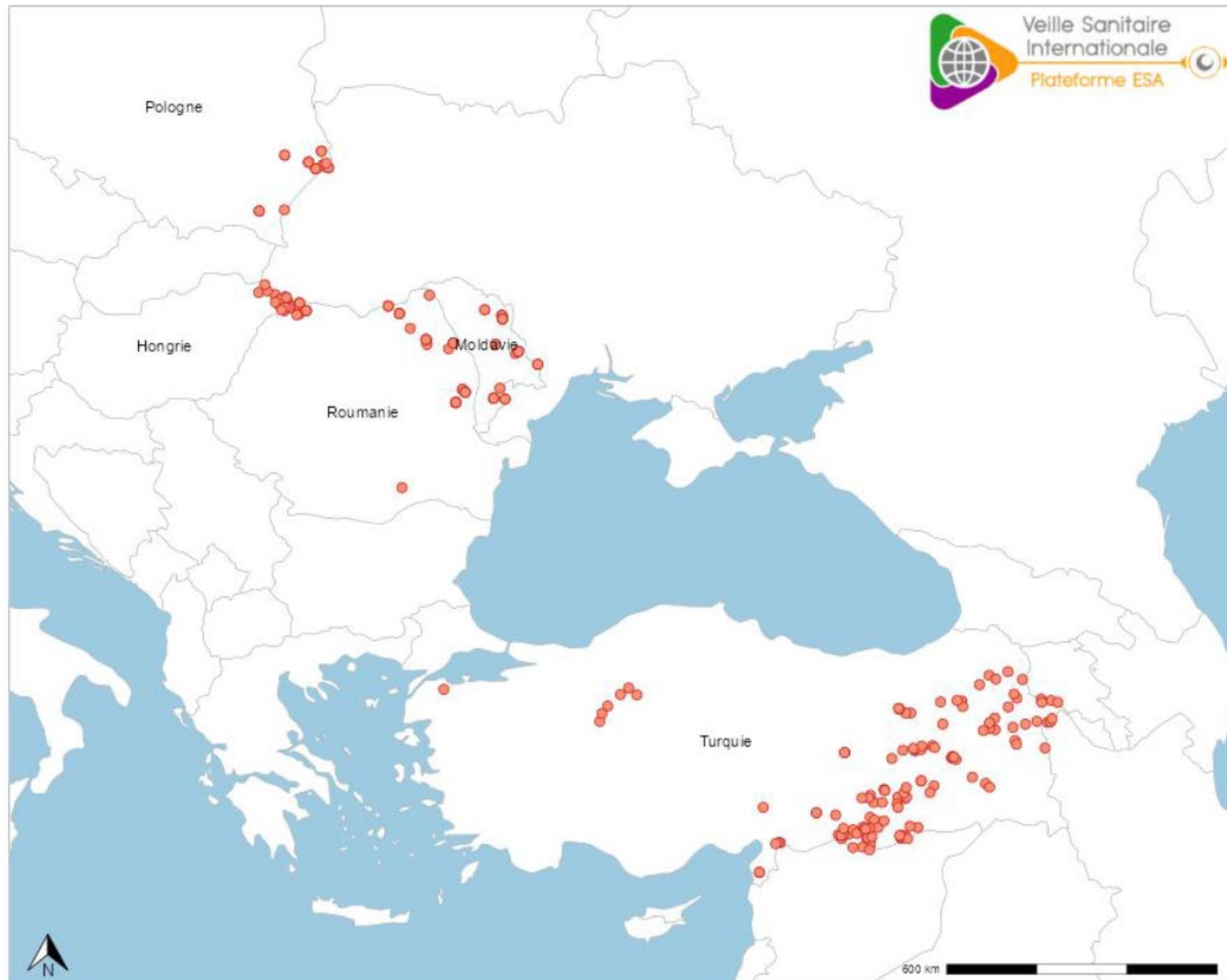
EVOLUTION OF RABIES IN EUROPE IN WILD AND DOMESTIC ANIMALS*

* Are excluded : bat rabies cases



Source : Rabies Bulletin Europe (compilation)

RABIES EPIDEMIOLOGICAL SITUATION IN EUROPE IN 2024 (UNTIL 27 OCTOBER)

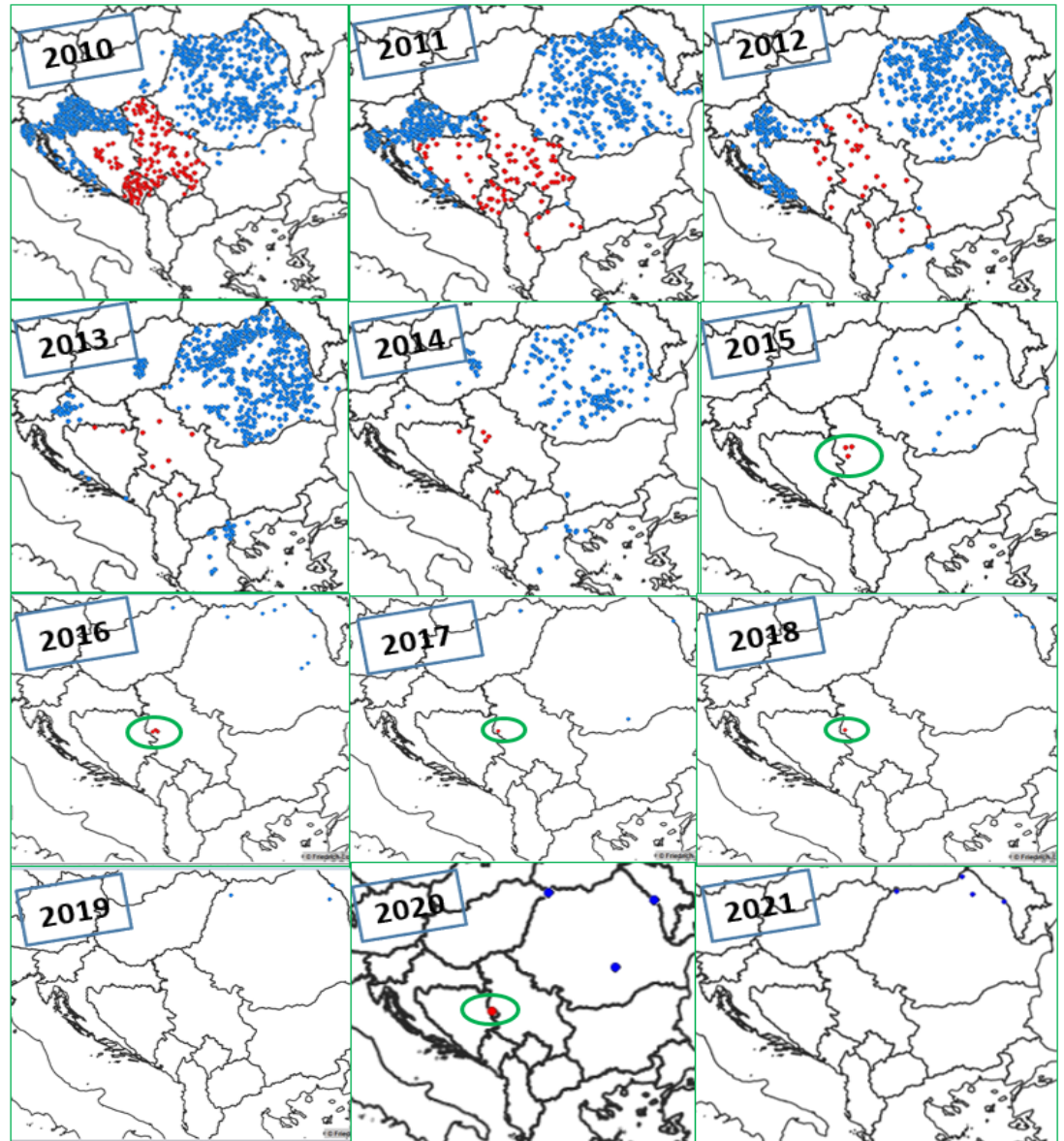


Sources : Compilation of ADIS data

RABIES EPIDEMIOLOGICAL SITUATION IN THE WESTERN BALKANS 2010 – OCTOBER 2024



In May 2020 :
one dog tested positive for rabies in Srebrenica, 6 km from the border to Serbia, 30 km from the last foci detected in Serbia in 2018



No case detected in 2019, 2021-October 2024

- EU bordering countries
- Western Balkans

About the project | News | Reports | WILCOFORUM | Activities | Contact | Login | ADEWB II

SANTE/2022/EA-OP/0001

Capacity Building of Veterinary and Plant Health Services in the Western Balkans - Lot 1 - Animal Health ADEWB II

Sources : *Compilation of Rabies Bulletin Europe data ; ADIS; GF-TAD meetings 2020-2024 (*

PREVENTION OF RABIES RE-INTRODUCTION IN EU

Animal health requirements for the non-commercial movement of pet animals into a Member State from another Member State or from a territory or a third country into EU

- Microchip (traceability of pets).
- Anti-rabies vaccination.
- Serological test, depending on the country of origin.
- Waiting period before animal movement, depending on the country of origin.
- Border checks.

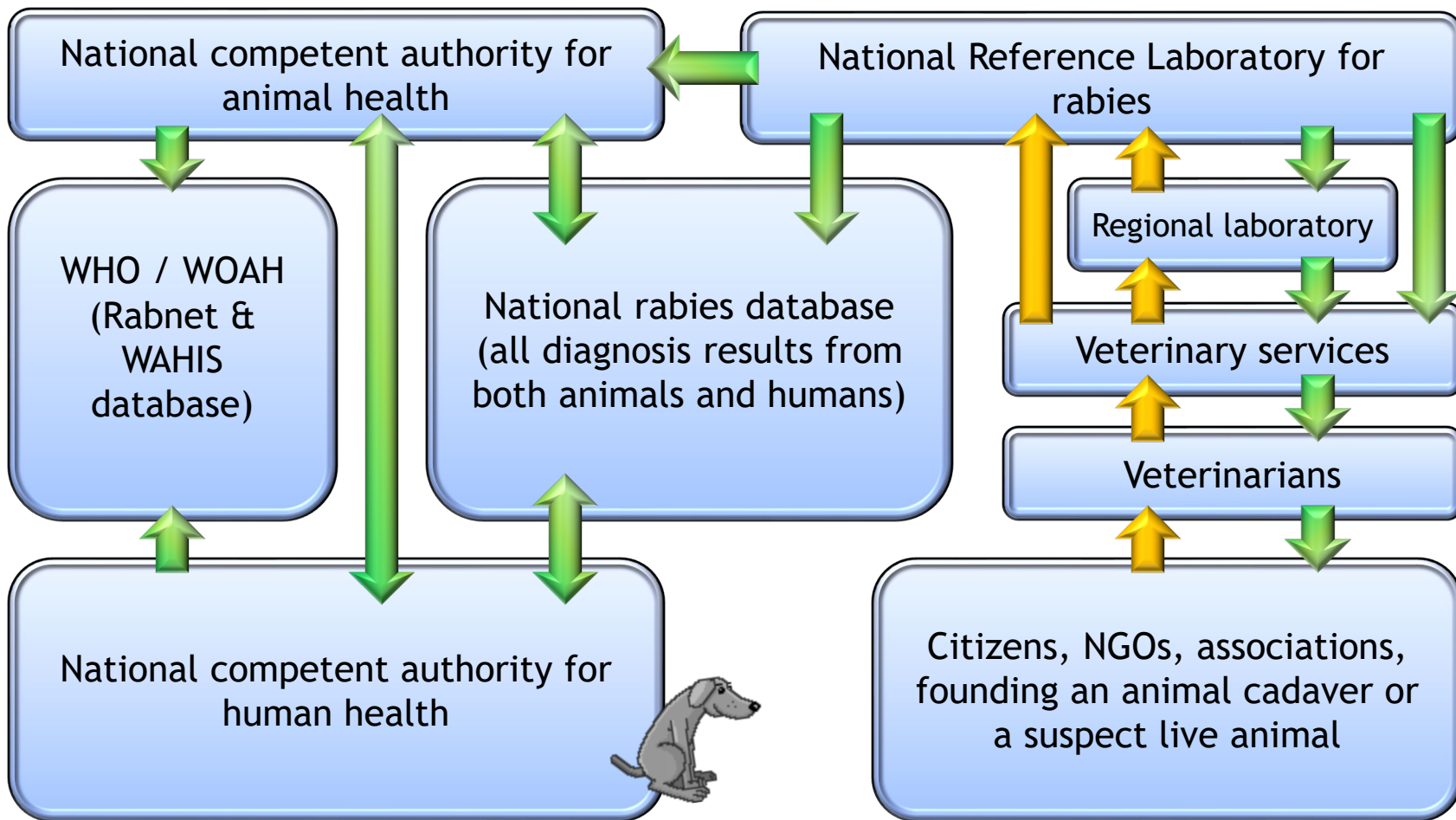
To limit illegal movements of pets to EU (introduction of exotic pathogens to EU via pets)



Source : Regulation (EU) No 576/2013 of the European parliament and of the council of 12 June 2013; Commission Implementing Regulation (EU) No 577/2013 of 28 June 2013

EXAMPLE OF ONE HEALTH RABIES SURVEILLANCE NETWORK

Such network should have a legal basis (legislation article)



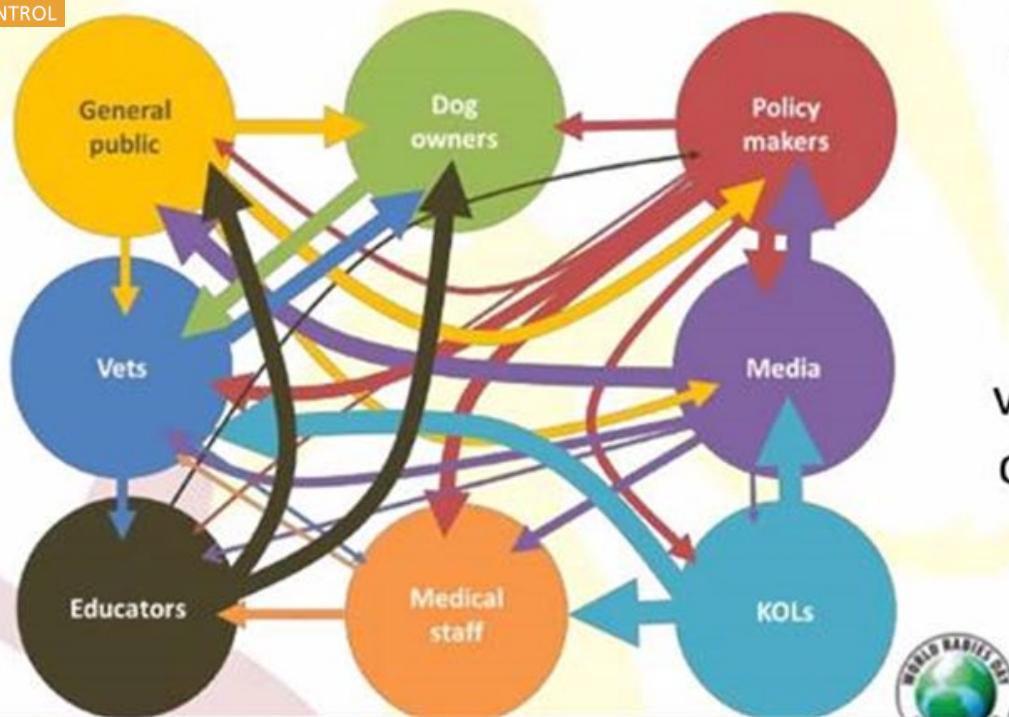
Caption



ONE HEALTH AND CANINE RABIES CONTROL AND PREVENTION IN THE FIELD



Rabies influence map



Who should be involved in the One Health Approach to eliminate rabies

General public, dog owners, Policy makers, Public health officials, city officials, veterinarians, doctors, educators, community, industry, civil society members and Key Opinion Leaders

Source : Tidman, United Against Rabies Stakeholder Meeting, 23-25 September 2024

INTERSECTION BETWEEN DPM AND RABIES CONTROL

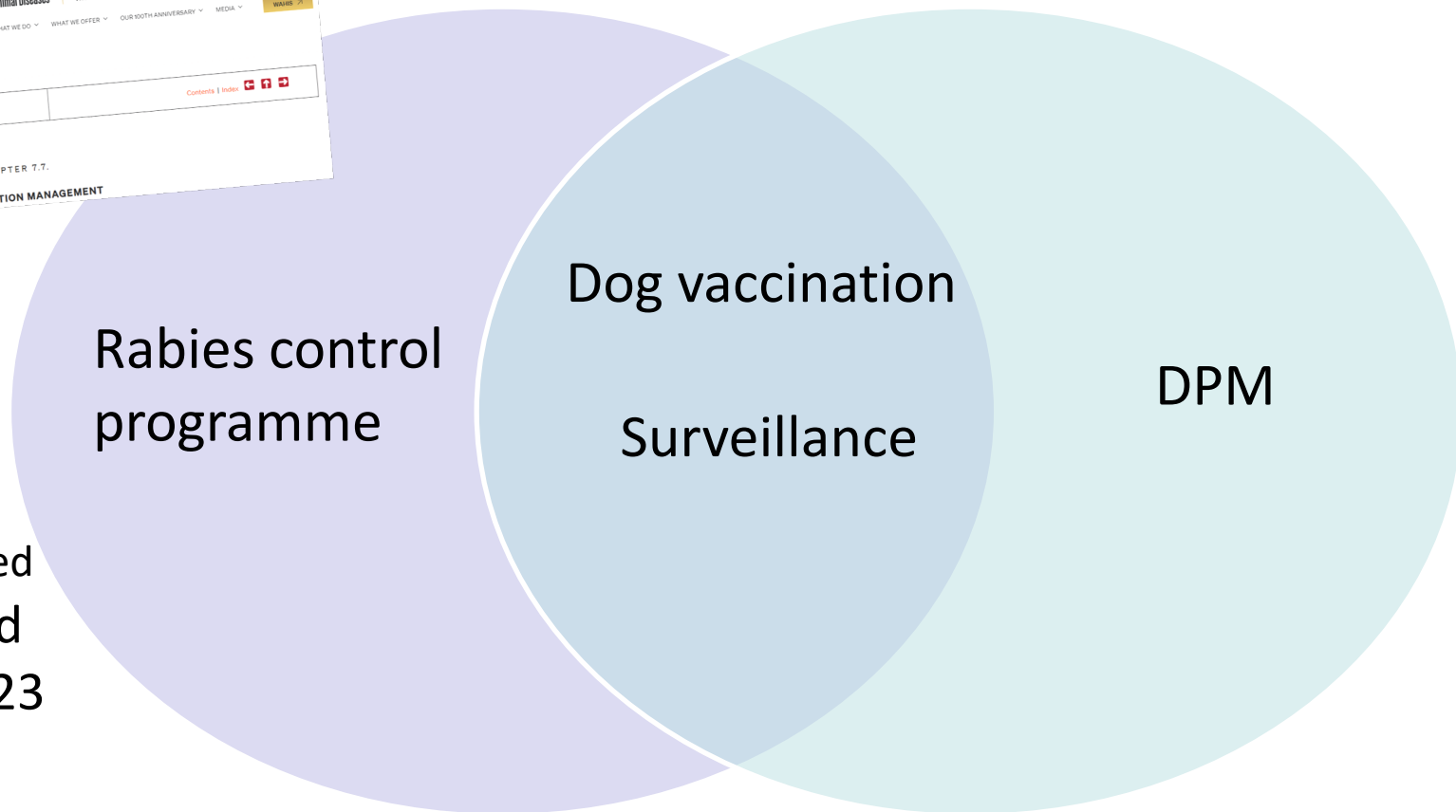
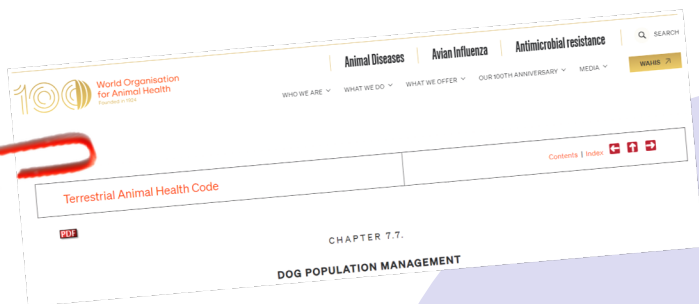
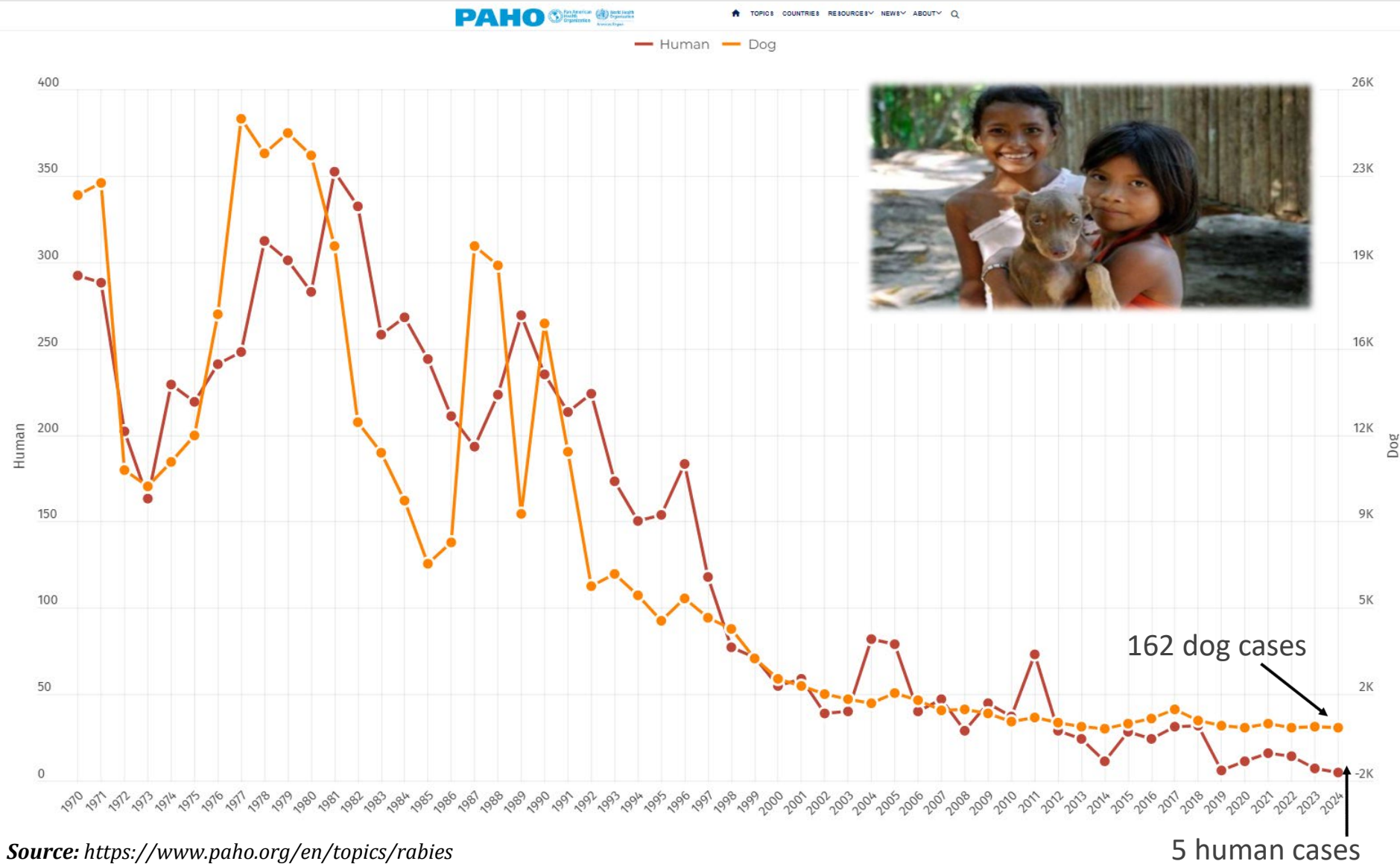


Diagram adapted from ICAM and Hiby et al., 2023

« Humane DPM is effective for minimizing the risk of rabies outbreak and reducing dog population turnover and creating a healthy, sustainable population, allowing to maintain vaccination coverage and effective surveillance. Dog culling does not stop rabies ».

Sources: Hiby et al., 2023; WHO Expert Consultation on Rabies, Third report, 2018

EPIDEMIOLOGICAL SITUATION OF RABIES IN LATIN AMERICAN AND CARIBBEAN COUNTRIES, 1970 – AUG. 2024



Source: <https://www.paho.org/en/topics/rabies>

RABIES IN LATIN AMERICAN AND CARIBBEAN COUNTRIES

How we got here? By prioritising rabies

	Endemic	First	Second	Third	Total
1	Rabies	22	2	6	30
2	Leptospirosis		11	10	25
3	Brucellosis				19
4	Tuberculosis				
5	<i>Salmonella</i>				
6	Hydatidosis				
7	<i>Campylobacteria</i>				
8	<i>Escherichia coli</i>				
9	Influenza				



RESEARCH ARTICLE

Building the road to a regional zoonoses strategy: A survey of zoonoses programmes in the Americas

Melody J. Maxwell^{1na}, Mary H. Freire de Carvalho¹, Armando E. Hoet², Marco A. N. Vigilato¹, Julio C. Pompei¹, Ottorino Cosivi¹, Victor J. del Rio Vilas^{1nb*}

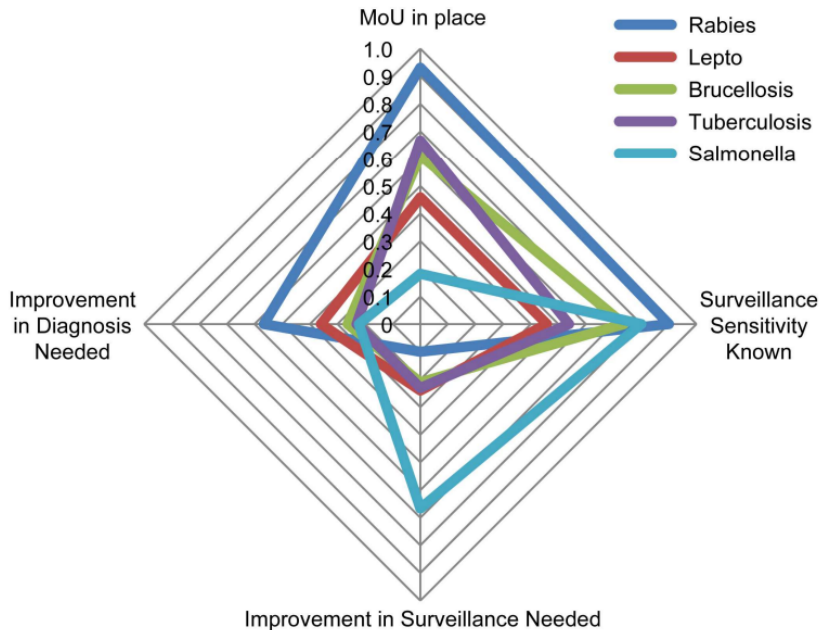


Fig 5. Comparison of the top five priority endemic zoonoses for Latin American and Caribbean countries.

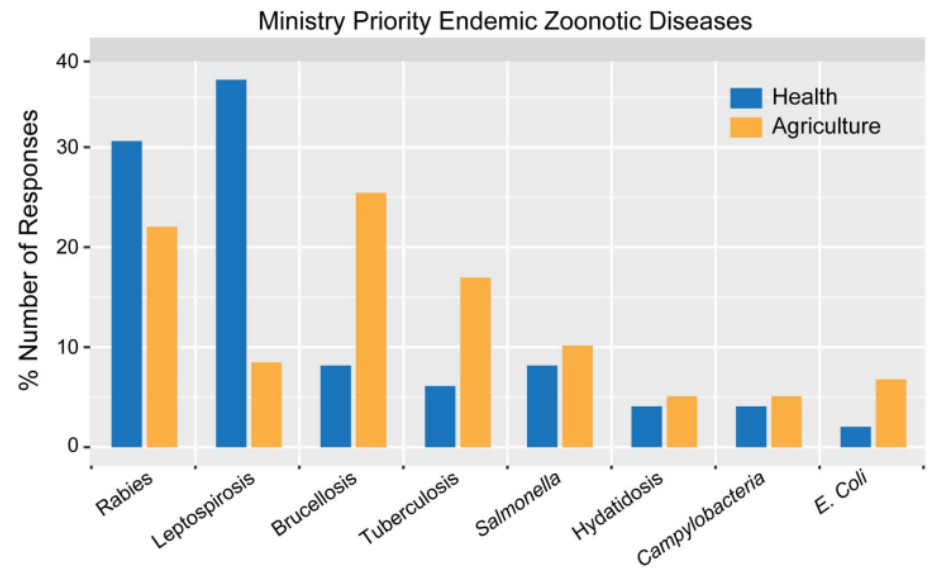


Fig 1. Comparison between the Ministries regarding their top endemic zoonotic disease priorities.

KEY COMPONENTS

- Political decision
- Community desire, perception of risk and strong support/participation
- Intersectoral participation/collaboration, including private sector, if feasible
- Control/elimination plan, at national, state or provincial and local levels
- Clear definition of the responsibility of each government level (ex: the quality of rabies vaccines either for dog or human should be controlled by the national level)
- Technical capacity development – staff trained and permanently updated
- Results based follow-up



Source: Courtesy of Dr Marco Vigilato, PANAFTOSA/VPH-PAHO/WHO, Rabies EURL Workshop, Bucarest, June 2019;
<https://www.who.int/news/item/21-12-2019-mexico-is-free-from-human-rabies-transmitted-by-dogs>

COMMISSION DELEGATED REGULATION (EU) 2020/689

of 17 December 2019

supplementing Regulation (EU) 2016/429 of the European Parliament and of the Council as regards rules for surveillance, eradication programmes, and disease-free status for certain listed and emerging diseases

(Text with EEA relevance)

- “For the purpose of eradication programmes for infection with RABV the vaccination against infection with RABV of stray dog populations must:
 - (a) be organised and implemented, if necessary, as part of control and management measures of stray dog populations, taking into account the risk assessment provided for in point (a) of Article 32(2)” (this point mentions that risk assessment shall be updated, as necessary, according to the epidemiological situation);
 - “(b) comply with the requirements of Section 1” (this Section refers to Vaccination of kept animals).

PROPOSAL FOR A EU REGULATION ON PET WELFARE



EUROPEAN COMMISSION

Brussels, 7.12.2023
COM(2023) 769 final
2023/0447(COD)

- “This proposal aims to address these issues by proposing a common framework with the following objectives:

- Ensuring minimum common animal welfare standards for the breeding, keeping and placing on the market of dogs and cats bred or kept in establishments,
- Improving the traceability of dogs and cats placed on the Union market or supplied, including when offered for sale or adoption online,
- Ensuring a level playing field between operators keeping and placing on the market dogs and cats across the Union,
- Promoting competence for animal caretakers,
- Supplementing existing rules for the import of dogs and cats.”

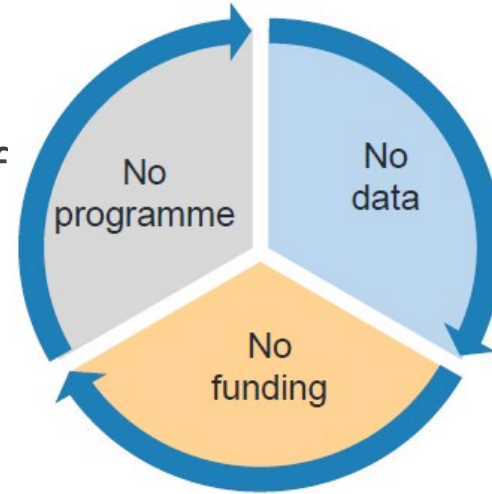
Proposal for a

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

on the welfare of dogs and cats and their traceability

REINFORCING SURVEILLANCE SYSTEMS

- Animal and health systems strengthening, through governance, advocacy for continued political and financial support, agile chains of command.
- Disease indicators (surveillance data) collection.
- Data analysis (epidemiology, mapping, risk analysis).
- Global reporting of data.



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World Organisation for Animal Health **WOAH**
Founded on OIE

Reports ▾ Analytics [EN](#)

Latest animal disease events

Country/Territory	Disease - genotype/serotype/subtype	Date
Kirgistan	Anthrax	2024/10/22
Dominica	New world screwworm (Cochliomyia hominivorax)	2024/10/22
Germany	High pathogenicity avian influenza (H5Nx) (Inf. with) H5N1	2024/10/22
Romania	High pathogenicity avian influenza (H5Nx) (Inf. with) H5N1	2024/10/22
Romania	Influenza A virus of high pathogenicity (Inf. with) (nonpoultry including wild birds) (2017*) H5N1	2024/10/22
Portugal	Influenza A virus of high pathogenicity (Inf. with) (nonpoultry including wild birds) (2017*) H5N1	2024/10/22
United Kingdom	Influenza A virus of high pathogenicity (Inf. with) (nonpoultry including wild birds) (2017*) H5N1	2024/10/22
Falkland Islands	Influenza A virus of high pathogenicity (Inf. with) (nonpoultry including wild birds) (2017*) H5N1	2024/10/22

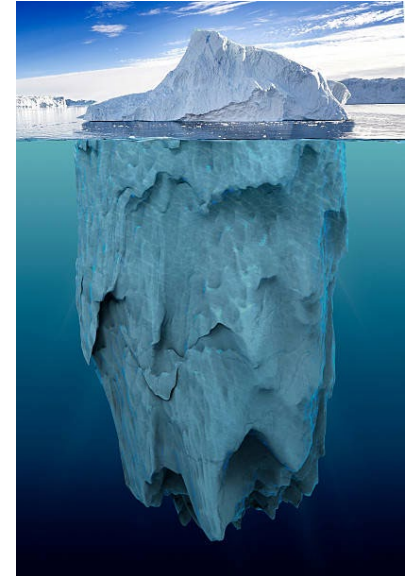


ADEQUATE PASSIVE SURVEILLANCE ?

Surveillance indicators:

- Do we have sufficient surveillance data to assess the real situation?
- Are data on negative cases sufficient?
- Is surveillance pressure enough regarding the size of the reservoir population?
- Are awareness campaigns enough?

Achieving a sufficient level of surveillance to assess the *true* disease situation is the priority : is the disease still in the country, even in small areas, or is it eliminated?



RAISING AWARENESS FOR PRIORITY DISEASES AND ONE HEALTH

Many levels, therefore many messages and different supports of information to be provided to *ad hoc* groups (national and local basis).



CHALLENGES - CONCLUSIONS



In a context of globalization, increase in international traveling, political instability, increase in dog populations (owned and stray dogs)

- Political prioritization: Identifying diseases for which dogs are reservoir of human infection (e.g. rabies, leishmaniosis, etc) and establishing public health strategies that effectively prevent and control the diseases in reservoirs.
- Improving and facilitating inter-sectoral collaborations.
- Promoting awareness to recognize these diseases by the public and by the human and veterinary sectors.
- Developing surveillance networks for mapping these infectious agents and their vectors.
- Using WOHAI recommended methods (or developing robust ones) in National Reference Laboratories well trained and equipped.
- Possibly investigating the contacts between dogs and wildlife species and developing strategies to minimize these contacts.
- Importance of research.



Sources: Day, 2011

THANK YOU FOR YOUR ATTENTION!

ANSES-NANCY LABORATORY

