

OIE Collaborating Centres Reports Activities

Activities in 2021

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ToR: To provide services to the OIE, in particular within the region, in the designated specialty, in support of the implementation of OIE policies and, where required, seek for collaboration with OIE Reference Laboratories

ToR: To identify and maintain existing expertise, in particular within its region

1. Activities as a centre of research, expertise, standardisation and dissemination of techniques within the remit of the mandate given by the OIE

Disease control	
Title of activity	Scope
48th Meeting of the South American Commission for the fight of FMD (COSALFA)	The 48th Ordinary Meeting of the South American Commission for the fight of Foot-and-Mouth Disease (COSALFA 48) was held in August 17 and 18 as a virtual event. In the meeting was analysed the current FMD situation in South America according with the Hemispheric Program for the Eradication of FMD (PHEFA) Action plan 2011-2020.
International Seminar pre-COSALFA	The seminar was focused on Eradication of Foot-and-Mouth Disease: the PHEFA Plan of Action 2021-2025, preparedness and transition toward free countries/zones without vaccination (August 17-18, virtual event).
Sustainability of the FMD free status in countries of the Region	PANAFTOSA has provided technical cooperation to Colombia, Bolivia, and Ecuador to support the country FMD programs, assisting the countries in maintain their status of FMD free.
Restoration of the FMD control program in Venezuela	PANAFTOSA provided technical cooperation to INSAI and the associations of livestock producers in Venezuela. The Centre has facilitated the creation of the public-private entity FUNVESSA, the Venezuelan Foundation for Animal Health Services, with the main objective of enhancing the vaccination strategy of the country and to give continuity and effectiveness to the foot-and-mouth disease program.
16th Annual Meeting OIE/FAO Reference Laboratories	This meeting coordinate international activities: a vaccine bank network (now the IVSRN), and this Foot-and-Mouth Disease Reference Laboratory Network. Attendance at the meeting by delegates from affiliate Foot-and-Mouth Disease laboratories is an essential component of the Network and provides an approach to ensure that the most relevant data is collected regarding FMD outbreaks and surveillance.
Facilitating the creation of a Regional Antigen/vaccine bank for FMD (BANVACO)	PANAFTOSA is working very close with the countries of the Region to kick off the launching of BANVACO; an essential strategy for the prevention and control of potential incursions of FMD in the Region. With Paraguay already officially on board in the initiative and other countries already demonstrating their interest, it is expected to start the technical work in the first semester of 2022.

Chairing the Global Coordination Committee on FMD (GCC-FMD)	With a key role of PANAFTOSA, the GCC-FMD started in 2021. The main objectives are sharing experiences and lessons learned, facilitate coordination and alignment of regional FMD control initiatives, and to develop a harmonized 5-year global FMD action plan for the last phase of the FMD Global Strategy for final endorsement by the GF-TADS.
Epidemiology, surveillance, risk assessment, modelling	
Title of activity	Scope
Support to countries in the design and implementation of epidemiological studies for FMD	PANAFTOSA/PAHO provided technical cooperation to COL, ECU and BOL in the design of FMD NSP and SP studies to detect/rule out FMDv transmission and to evaluate the post vaccination immunity.
Support to countries in the design and implementation of epidemiological studies for Avian Influenza	Provided technical cooperation to PAN in the design of AI sero-surveys for poultry farms.
Development of IVVO information system	PANAFTOSA/PAHO completed the development of the Interface for Official Veterinary Surveillance (IVVO), an online information system to support official veterinary (both passive and active) of animal diseases surveillance at national and regional level, which was launched in 2021, and is working to engage the countries in its utilization. This system includes modules to capture surveillance data from companion animals.
Training, capacity building	
Title of activity	Scope
Training and capacity building in the Americas	Through 2021 PANAFTOSA/PAHO has provided several training and capacity building services to the countries of the Americas region (check section 6).
Zoonoses	
Title of activity	Scope
World Rabies Day 2021	PANAFTOSA/PAHO has worked on rabies awareness with the countries of the region during the World Rabies Day 2021, with several events organized in each country that can be reached at: https://www.paho.org/pt/campanhas/dia-mundial-contra-raiva-2021
REDIPRA Network	Within the framework of the Americas Region's Network of National Rabies Control Programs Directors (REDIPRA), PANAFTOSA/PAHO has provided direct technical cooperation and followed the advances in each country of the region, promoting several virtual meetings (check section 6).
RELAPA Network	This network is responsible for sharing experiences, articulating among National laboratories producers of antivenom and promoting training and exchange of experiences in GMP practices (check section 6).
Cystic Echinococcosis Virtual Training	Launch of the Virtual Training for public health and animal health agents, on epidemiology, diagnosis, control and prevention, treatment and future perspectives upon the diseases: https://www.campusvirtualsp.org/es/curso/curso-virtual-de-actualizacion-profesional-sobre-hidatidosissequinococosis-quistica-2021
Pre-exposure prophylaxis for rabies mediated by vampire bat in human population living at risk in Amazonia region	Elaboration, execution, and analysis, in collaboration with the Ministry of Health of Brazil, of a human rabies vaccination pilot project to prevent human rabies mediated by hematophagous bat (<i>Desmodus rotundus</i>) in marginalized riverside populations of Pará State, Brazil.
United Against Rabies (UAR) Forum	PANAFTOSA is participating in the UAG, a tri partite initiative (FAO, OIE, WHO) to promote efforts, political will, and additional resources to end human deaths from dog-mediated rabies by 2030. The participation in mainly on Working group 2-to generate, innovate, and measure impact, but also contributes in the other WG1 - Effective use of vaccines, medicines, tools, and technologies and WG3 Generating sustained commitment and resources.
Comprehensive approach for the surveillance and control of brucellosis	PANAFTOSA/PAHO has provided direct technical cooperation to several countries of the region, such as PAN, PER, ECU, COL and MEX, regarding the surveillance and control of human and animal brucellosis, promoting and participating in some virtual meetings, seminars and courses (check section 8).
Surveillance and control of bovine tuberculosis in Panama.	PANAFTOSA/PAHO has been working with the Ministry of Agriculture (MIDA) and the Ministry of Health (MIDA) of Panama to develop and implement a comprehensive approach for the surveillance and control of bovine tuberculosis. Several meeting to discuss surveillance and control programmes in place have taken place during 2021 and a national study to understand the epidemiological situation of the diseases is currently under implementation (check section 8).
Elimination of taeniasis/cysticercosis in the Americas	PANAFTOSA is collaborating with PAHO/CDE in the Regional Program for the Elimination of taeniasis/cysticercosis complex (<i>Taenia solium</i>) in the Americas, particularly regarding the implementation of control actions (treatment and vaccination) in pig populations implementation (check section 8).
Zoonosis regional and international initiatives	PANAFTOSA/PAHO has been involved in the development, planning and proposal submission of several zoonosis-related regional and international initiatives, such as the "Preventing Zoonotic Disease Emergence (PREZODE)", the "Zoonotic Disease Integrated Action (ZODIAC)", the German "Global Programme for Pandemic Prevention and Control - One Health (GV PPOH)", the "Shoulder to Shoulder: Accompanying Ministries of Health in Central America in Strengthening Local and Global Health Security (CDC-RFA-GH21-2164)", and the "International Climate Initiative of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (IKI)" implementation (check section 8).

Wildlife	
Title of activity	Scope
WHO R&D Blueprint	Surveillance of CoV-like virus and rabies virus in hematophagous bats (<i>Desmodus rotundus</i>) in riverside populations affected by COVID-19 in the state of Para, in rural areas.
Avian diseases	
Title of activity	Scope
Guidelines for Avian Influenza survey design	PANAFTOSA has contributed to the elaboration of the national surveillance strategy for AI in Brazil which include the strategies for wildlife, backyard and commercial poultry.
Diagnosis, biotechnology and laboratory	
Title of activity	Scope
Regional interlaboratory proficiency testing for AI and NCDs	Within the framework of the proposed activities of the South American Network of Avian Influenza and Newcastle Disease Diagnostic Laboratories (RESUDIA), PANAFTOSA supported the Federal Agricultural Defense Laboratory of the Ministry of Agriculture, Livestock and Supply of Brazil (MAPA) in São Paulo (LFDA-SP/MAPA), OIE reference laboratory for avian influenza and Newcastle disease, in the 2021 interlaboratory round of diagnostic capacity for avian influenza and Newcastle disease, where the participating laboratories maintained excellent results , demonstrating its capacity for laboratory diagnosis.
Organized Regional proficiency test for foot-and-mouth disease and vesicular stomatitis diagnostic methods to ensure equivalence of results between laboratories	<ul style="list-style-type: none"> • Determine the laboratory's ability to perform antibody detection tests for FMD and VS virus structural proteins • Determine the ability of laboratories to perform FMD and VSV molecular biology tests • Determine the capacity of laboratories to perform foot-and-mouth disease and VSV antigen detection tests • Determine the laboratory's ability to perform foot-and-mouth disease virus antibody detection tests for foot-and-mouth disease non-structural proteins
Technical cooperation on FMD and vesicular stomatitis diagnosis - Bolivia	Support for strengthening the foot-and-mouth disease eradication program in Bolivia by donating diagnostic kits and technical expertise through Panaftosa's technical cooperation to countries.
Provision of new diagnostic kit for FMD	In 2021, PANAFTOSA released the distribution of this new test to the countries. The FMD gIII kit is a multispecies beELISA developed by PANAFTOSA in collaboration with international partner entities.
Vaccines	
Title of activity	Scope
Provision of canine and human rabies immunobiologicals	PANAFTOSA is responsible for the technical analysis of all canine and human rabies immunobiological provided to the countries of the Region of the Americas by the PAHO Revolving Fund in support to the national rabies programs: 10 countries have acquired more than 20.000.000 canine rabies vaccine doses for dog mass vaccination programs; 9 countries have acquired around 90.000 vials of immunoglobulin for PEP; and 10 countries have acquired more than 2.000.000 human rabies vaccine doses for PEP and PrEP.

Food safety	
Title of activity	Scope
Inter American Network of Food Analysis Laboratories	<p>The Inter American Network of Food Analysis Laboratories (INFAL) in partnership with renowned institutions offered specialised trainings courses to personnel of different network laboratories. A total of 101 participants from laboratories of 19 countries in Latin America could join the trainings.</p> <p>The INFAL organized two regional interlaboratories one in food microbiology with the participation of 17 laboratories from 13 countries and another in food chemistry with the participation of 19 laboratories from 5 countries.</p> <p>The INFAL launched two webinars to mark the World Accreditation Day and World Metrology Day that were followed by more than 650 participants from 17 countries in the Americas.</p>
Food Safety Capacity Building	<p>PANAFTOSA/PAHO and FAO leads the Food Safety Risk Analysis Network (FSRisk) that aims to strength and share experiences in risk analysis among international and regional organizations, government, academia and other specialists. On behalf of the network, the Secretariat (PANAFTOSA/PAHO and FAO) launched an online questionnaire to assess the food safety risk analysis capabilities of different countries in the Americas. The outcome of this report served as the basis to offer technical support to the countries based on South-South cooperation principles.</p> <p>PANAFTOSA/PAHO co-organized with ACHIPIA, BFR, FAO and IICA the 2nd Latin American Risk Assessment Symposium that was conducted virtually and followed by an average of 282 participants/day.</p> <p>PANAFTOSA/PAHO conducted an online training on Food Safety Risk-based Inspection for Jamaica and another one on Risk Analysis for Bahamas and Guyana.</p> <p>A training manual on good practices in wet markets to prevent potential human-animal-food spillovers between the animal and human interface was developed by PANAFTOSA with Member States. It will be used in 2022 to train authorities involved in wet markets.</p> <p>A food safety risk-based inspection manual with particular focus on food establishments was developed to guide countries in the implementation of a preventive food-safety inspection system.</p>
Risk Communication	<p>PANAFTOSA/PAHO has built a great number of infographics, brochures, videos and other communication materials to increase awareness about food safety in the Americas.</p> <p>An online Food Handlers training was translated into Dutch and French to be launched in Suriname and Haiti, respectively.</p>
World Food Safety Day	<p>PANAFTOSA/PAHO, FAO, IICA, OIRSA and CCLAC jointly organized an online regional event to commemorate the World Food Safety Day to increase awareness on Food Safety and emphasize the importance of safe food markets. The event counted with 4554 visualizations from Latin America and the Caribbean.</p>

Food Safety and Climate Change	PAHO is leading the EU funded Project “Strengthening Climate Resilient Health Systems in the Caribbean”. The project includes a Food Safety component that aims to increase awareness and prevent the spread of environmental contaminants derived from the food value chain. During this year, a foodborne disease surveillance manual was primarily focusing on strengthening surveillance on FBDs caused primarily by environmental food contaminants and/or pathogens.
Other (Name the category)	
Title of activity	Scope
AMR Tripartite EU Project	To strengthen integrated AMR surveillance in the Americas, the PAHO-FAO-OIE Tripartite was awarded the project “Working Together to Combat Antimicrobial Resistance” funded by the EU to help selected countries implement their National Action Plans (NAP), share experiences, advocate for best practices and stimulate collaboration. During 2021, the three organizations have been jointly managing the project under the overall supervision of PAHO. The beneficiary countries of the project are Argentina, Brazil, Chile, Colombia, Paraguay, Peru and Uruguay. Five beneficiary countries, presented in a webinar the progress in the pilot implementation of an AMR Integrated surveillance plan. Government officials could share and receive feedback from other countries on their workplans.
AMR Codex Task Force	PAHO/WHO-FAO through its Codex Intergovernmental Task Force on Antimicrobial Resistance is developing science-based guidance on how to assess and manage the risks to human health associated with the presence of antimicrobial resistant bacteria in food and feed and their transmission along the food chain. Codex Alimentarius approved the guidelines on integrated monitoring and surveillance of foodborne antimicrobial resistance while the code of practice to minimize and contain antimicrobial resistance is still under revision by Member States. Collaboration and support with Cuba and Bolivia for a multicentric study for the assessment of AMR in Salmonella spp. from foodstuffs under a One Health approach. (in course). Collaboration with Brazil (Ministry of Agriculture) on shared experiences in sampling caecum at slaughterhouse facilities for AMR strains for E.coli. Collaboration with the SENASA of Costa Rica for a training on the WHONET software tool; development of ToRs for diffusion and media development based on Good Antimicrobial Medicines use.
AMR Awareness Week	PANAFTOSA/SPV-PAHO supported the development of a series of communication materials related to One Health and AMR that are of public domain and are accessible in the following websites: https://www.paho.org/en/together-fight-antimicrobial-resistance , and https://www.paho.org/es/panaftosa/resistencia-antimicrobiana-produccion-animal To mark the World Antimicrobial Awareness Week, PANAFTOSA/PAHO organised and participated in different activities with third parties and official agencies from different countries, the statue of Christ the Redeemer was lit up in blue according to the WHO “Go Blue campaign” (. Besides, there was an active participation as invited speaker in 3 webinars for Brazil and Bolivia with topics regarding Integrated surveillance and Good Agricultural/Farming practices for AMR.

ToR : To propose or develop methods and procedures that facilitate harmonisation of international standards and guidelines applicable to the designated specialty

2. Proposal or development of any procedure that will facilitate harmonisation of international regulations applicable to the surveillance and control of animal diseases, food safety or animal welfare

Proposal title	Scope/Content	Applicable area
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Glanders diagnostic kit	Registration in the Manual of Diagnostic Tests and Vaccines for Terrestrial Animals has been requested for a glanders disease diagnostic ELISA kit developed by PANAFTOSA's Production Laboratory (LPRO) with the collaboration of the Instituto Biológico of São Paulo and MAPA Brazil.	<input checked="" type="checkbox"/> Surveillance and control of animal diseases <input type="checkbox"/> Food safety <input type="checkbox"/> Animal welfare
FMD diagnostic kit	PANAFTOSA's Production Laboratory (LPRO) started the development of a new ELISA 3ABC kit, which was adjusted to the new epidemiological situation in the region (free with or without vaccination). Improvements to produce new clones of the current proteins used in the FMD Western Blot kit (EITB) as confirmatory test, were also developed in collaboration with the National Center for Exotic Diseases (NCFAD) of the Canadian Agency for Inspection of Food (CFIA).	<input checked="" type="checkbox"/> Surveillance and control of animal diseases <input type="checkbox"/> Food safety <input type="checkbox"/> Animal welfare
Action Plan of PHEFA 2021-2025	Action Plan 2021-2025 of PHEFA was approved at the end of 2020 and gives guidance to the FMD National Programs to prevent and eradicate the FMD by the end of 2025.	<input checked="" type="checkbox"/> Surveillance and control of animal diseases <input type="checkbox"/> Food safety <input type="checkbox"/> Animal welfare

ToR: To establish and maintain a network with other OIE Collaborating Centres designated for the same specialty, and should the need arise, with Collaborating Centres in other disciplines

ToR: To carry out and/or coordinate scientific and technical studies in collaboration with other centres, laboratories or organisations

3. Did your Collaborating Centre maintain a network with other OIE Collaborating Centres (CC), Reference Laboratories (RL), or organisations designated for the same specialty, to coordinate scientific and technical studies?

Yes

Name of OIE CC/RL/other organisation(s)	Location	Region of networking Centre	Purpose
Caribbean Animal Health Network (CaribVET)	Virtual	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East	PANAFTOSA/PAHO is a CaribVET Steering Committee member, involved in veterinary public health topics.

4. Did your Collaborating Centre maintain a network with other OIE Collaborating Centres, Reference laboratories, or organisations in other disciplines, to coordinate scientific and technical studies?

Yes

Name of OIE CC/RL/other organisation(s)	Location	Region of networking Centre	Purpose
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OIE Reference Laboratory for avian influenza and Newcastle disease	LFDA-SP/MAPA, Rua Raul Ferrari, s/n° Jardim Santa Marcelina CEP 13100-105 Campinas SP BRASIL	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East	Collaborating work on avian Influenza diagnosis capacity building
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ToR: To place expert consultants at the disposal of the OIE.

5. Did your Collaborating Centre place expert consultants at the disposal of the OIE?

Yes

Name of expert	Kind of consultancy	Subject
Dr. Alejandro Rivera	Advisor	FMD
Dr. Ana Paula Alvim	Advisor	Laboratory
Dr. Baldomero Molina Flores	Advisor	Zoonosis
Dr. Edviges Maristela Pituco	Advisor	Laboratory and FMD
Dr. Guilherme F. Marques	Advisor	Veterinary Public Health
Dr. Julio Pompei	Advisor	Zoonosis
Dr. Manuel Sánchez Vázquez	Advisor	Epidemiology and FMD
Dr. Marco Vigilato	Advisor	Veterinary Public Health and Zoonosis
Dr. Margarita Corrales	Advisor	Food Safety/AMR
Dr. Germán Vásquez	Advisor	AMR
Dr. Monica Martini	Advisor	Cooperation Programmes
Dr. Ottorino Cosivi	Advisor	Veterinary Public Health
Dr. Rodrigo García	Advisor	FMD

ToR: To provide, within the designated specialty, scientific and technical training to personnel from OIE Member Countries

6. Did your Collaborating Centre provide scientific and technical training, within the remit of the mandate given by the OIE, to personnel from OIE Member Countries?

Yes

a) Technical visits: 0

b) Seminars: 22

c) Hands-on training courses: 2

d) Internships (>1 month): 0

Type of technical training provided (a, b, c or d)	Content	Country of origin of the expert(s) provided with training	No. participants from the corresponding country
c	Risk-based surveillance and geographic information systems	Peru	75
b	Considerations on the implementation of surveillance strategies based on risk-Example on foot-and-mouth disease.	Brazil	30
b	e-training course on attending suspected vesicular disease - Foot and Mouth Disease: Surveillance and Investigation Procedures of Vesicular Disease	Brazil	688
b	Meeting of the Working Group for the Preparation of the Regional Program for the Control of Herbivore Rabies in the Americas. Mar 2021.	Argentina, Brazil, Colombia, Ecuador, Mexico, Paraguay, Peru and Uruguay	8
c	Training in the use of GIS for the Surveillance, Prevention and Control of Herbivore Rabies in Peru. PANAFTOSA-PAHO/WHO and SENASA. Sep 2021.	Peru	10
b	IV Virtual Meeting with the Rabies Program Directors in the Americas - Launch of the new version of the Regional Information System for the Epidemiological Surveillance of Rabies (SIRVERA). Mar 2021.	Argentina, Bolivia, Brazil, Canadá, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, United Sates of Americas, Uruguay and Venezuela	136
b	V Virtual Meeting with the Rabies Program Directors in the Americas - Epidemiological Surveillance of Rabies and its Application in the Control Programs. Jun 2021.	Argentina, Bolivia, Brazil, Canadá, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, United Sates of Americas, Uruguay and Venezuela	126

b	VI Virtual Meeting with the Rabies Program Directors in the Americas – Presentation of the Regional Program for the Control of Rabies in Herbivores Animals. Sep 2021.	Argentina, Bolivia, Brazil, Canadá, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, United Sates of Americas, Uruguay and Venezuela	78
b	Seminar on methodologies for estimating feline and canine population applied to the prevention of zoonoses	Argentina, Bolivia, Brazil, Canadá, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, United Sates of Americas, Uruguay and Venezuela	400
b	IV Virtual Workshop of Latin American Network of Public Antivenom Manufacturing Laboratories (RELAPA) - Serpentarium organization, preparation of poisons and quality control. March 2021.	Costa Rica	79
b	V Virtual Workshop of Latin American Network of Public Antivenom Manufacturing Laboratories (RELAPA) - Selection and veterinary care of the animals used in the production of antivenoms, Immunization schedules and use of adjuvants. May 2021.	Mexico and Argentina	87
b	VI Virtual Workshop of Latin American Network of Public Antivenom Manufacturing Laboratories (RELAPA) - Results of the survey on the current epidemiological situation of accidents caused by poisonous animals in Latin America and Caribbean. July 2021.	Argentina, Belize, Brazil, Chile, Colombia, Costa Rica, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Paraguay, Peru, Uruguay and Venezuela	51
b	VII Virtual Workshop of Latin American Network of Public Antivenom Manufacturing Laboratories (RELAPA) - Collection and quality control of hyperimmune plasma. December 2021.	Brazil and Colombia	64
b	Webinar: Antidotes and Antivenoms. Prospects for regional collaboration - PAHO/WHO. November 2021.	Brazil, Uruguay, Paraguay, Guatemala, Costa Rica, Colombia and United States	231
b	Calificación de equipos de cromatografía de líquidos y cromatografía de gases. September 2021.	Argentina, Bolivia, Brasil, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Mexico, Panama, Peru, Uruguay and Venezuela.	28

b	Especialista en micotoxinas de alimentos. 2021.	Argentina, Bolivia, Chile, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Nicaragua, Mexico, Panama, Uruguay, Venezuela, Dominican Republic.	28
b	Auditor Líder ISO 17025/2017 requisitos generales para la competencia de los laboratorios de ensayo y calibración. October 2021.	Argentina, Brasil, Cuba, Ecuador, El Salvador, Honduras, Nicaragua, Mexico, Panama, Peru, Uruguay, Venezuela	23
b	Análisis microbiológico de los Alimentos: Especialista en técnicas bioquímicas y análisis microbiológicos en alimentos. 2021	Argentina, Mexico, Haiti.	5
b	Refresher online training on risk-based food inspection for the Caribbean. March 2021.	Jamaica	20
b	Transformación digital de un Sistema de gestión de calidad. April 2021.	Regional	200
b	Preparación para el Ensayo de aptitud - Determinación de plaguicidas en naranja. September 2021.	Regional	89
b	Mecanismos emergentes de Resistencia a los Antimicrobianos en Salmonella spp. Y E. coli: epidemiología, detección y caracterización. October 2021.	Regional	150
b	Online Training on risk analysis principles. December 2021.	Bahamas, Guyana.	38
b	Integrated surveillance seminars for AMR from 5 beneficiary countries of the RAM-Tripartite-UE project. April-December 2021	Argentina, Colombia, Chile, Paraguay, Brazil, Peru, Uruguay	35

ToR: To organise and participate in scientific meetings and other activities on behalf of the OIE

7. Did your Collaborating Centre organise or participate in the organisation of scientific meetings on behalf of the OIE?

Yes

National/International	Title of event	Co-organiser	Date (mm/yy)	Location	No. Participants
International	OIE ad hoc Group for FMD status	-	Oct - Nov 2021	Online	0

International	OIE ad hoc Group on COVID-19 and safe trade in animal and animal products	-	Several dates in 2021	Online	0
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ToR: To collect, process, analyse, publish and disseminate data and information relevant to the designated specialty

8. Publication and dissemination of any information within the remit of the mandate given by the OIE that may be useful to Member Countries of the OIE

a) Articles published in peer-reviewed journals: 8

1. Ana Nilce S, M., Daniel Magalhães Lima, Oscar Daniel Salomón, Lia Puppim Buzanovsky, Martha Idalí Saboyá-Díaz, Samantha Y.O.B. Valadas, Manuel J. Sanchez-Vazquez 2021. Interaction between environmental and socioeconomic determinants for cutaneous leishmaniasis risk in Latin America. In press. Pan American Journal of Public Health
2. Sanchez-Vazquez, M., L. C. Zanette, L. de Campos Binder, A. M. Rivera, B. Molina-Flores, R. S. Vianna, M. A. N. Vigilato, J. C. A. Pompei, O. Cosivi. 2021. Chapter 8: Perspectives of disease at the wildlife-livestock interface in Central and South America". In J. Vicente et al. (eds.), Diseases at the Wildlife -Livestock Interface, Wildlife Research Monographs 3, Springer Nature Switzerland https://doi.org/10.1007/978-3-030-65365-1_9
3. David J Paton, Antonello Di Nardo, Nick J Knowles, Jemma Wadsworth, Edviges M Pituco, Ottorino Cosivi, Alejandro M Rivera, Labib Bakkali Kassimi, Emiliana Brocchi, Kris de Clercq, Consuelo Carrillo, Francois F Maree, Raj K Singh, Wilna Vosloo, Min-Kyung Park, Keith J Sumption, Anna B Ludi, Donald P King, The history of foot-and-mouth disease virus serotype C: the first known extinct serotype?, Virus Evolution, Volume 7, Issue 1, January 2021, veab009, <https://doi.org/10.1093/ve/veab009>
4. Meske, Mauro; Fanelli, Angela; Rocha, Felipe; Awada, Lina; Soto, Paula Caceres; Mapitse, Neo; Tizzani, Paolo. Evolution of Rabies in South America and Inter-Species Dynamics (2009-2018). Trop. Med. Infect. Dis. 2021, 6, 98. <https://doi.org/10.3390/tropicalmed6020098>
5. Monroe B, Ludder F, Dilius P, Crowdis K, Lohr F, Cleaton J, Gamble L, Blanton J, Etheart M, Pieracci EG, Natal Vigilato MA, Molina-Flores B, Millien M, Gibson AD, Wallace RM. Every Dog Has Its Data: Evaluation of a Technology-Aided Canine Rabies Vaccination Campaign to Implement a Microplanning Approach. Frontiers in Public Health. 2021;9:757668. DOI: 10.3389/fpubh.2021.757668. PMID: 34790645; PMCID: PMC8591122.
6. Gabrielle Laing, Marco Antonio Natal Vigilato, Sarah Cleaveland, S M Thumbi, Lucille Blumberg, Naseem Salahuddin, Bernadette Abela-Ridder, Wendy Harrison, Corrigendum to: One Health for Neglected Tropical Diseases, Transactions of The Royal Society of Tropical Medicine and Hygiene, Volume 115, Issue 8, August 2021, Page 940, <https://doi.org/10.1093/trstmh/trab086>
7. Gutiérrez JM, Zanette L, Vigilato MAN, Pompei JCA, Martins D, Fan, HW. (2021) Appraisal of antivenom production in public laboratories in Latin America during the first semester of 2020: The impact of COVID-19. PLOS Neglected Tropical Diseases 15(6): e0009469. <https://doi.org/10.1371/journal.pntd.0009469>
8. Kirkhope, R. T., Gibson, A. D., Augustin, P. D., Crowdis, K., Fénelon, N., MacLeod, E. T., Vigilato, M. A. N., Pieracci, E. G., & Wallace, R. M. (2021). Bite Injuries among Vaccination Staff Participating in a Mass Canine Rabies Vaccination Campaign, Haiti 2016-2017, The American Journal of Tropical Medicine and Hygiene, 105(6), 1582-1589. Retrieved Jan 10, 2022, from <https://www.ajtmh.org/view/journals/tpmd/105/6/article-p1582.xml>

b) International conferences: 19

1. GFRA 2021 Scientific Meeting. Nov-2021. Virtual. Sanchez-Vazquez, M.J., "Recent evolution and perspectives on the foot-and- mouth disease situation in South America". <https://www.gfra2021.com/agenda-3/>
2. COSALFA 48. Aug-2021. Sanchez-Vazquez, M.J., "Situación Sanitaria de los Programas Nacionales de erradicación de la Fiebre Aftosa en 2020". Paraguay (virtual) <https://www.youtube.com/watch?v=AGgQwlmSwjs>
3. Seminario Internacional Pre-COSALFA 48. Aug-2021. Sanchez-Vazquez, M.J., "Elementos en la toma de decisión de la estrategia de retirada de la vacuna de fiebre aftosa". Paraguay (virtual) <https://www.youtube.com/watch?v=fFAHSR9TFio>
4. III WEBINAR RESUDIA. Jul-2021. Virtual. Sanchez-Vazquez, M.J & Magalhães-Lima, D "Consideraciones para la vigilancia y diseño de muestreos para influenza aviar"
5. REDIPRA 2021. Jun-2021. Sanchez-Vazquez, M.J. & Magalhães-Lima, D "Applied surveillance to support rabies elimination programs". Virtual

6. GFRA-EuFMD. Mar-2021. Sanchez-Vazquez, M.J. "Some examples of targeted surveillance approach for FMD in South America". Argentina (virtual). <https://www.youtube.com/watch?v=IalnZZ1lp9k>
7. Edviges Maristela Pituco - PANAFTOSA - OPS/OMS - COSALFA 48. Activities developed by the OIE / FAO Reference Laboratory for foot-and-mouth disease and vesicular stomatitis - Online meeting via Zoom, host country Paraguay; 19 - 20 August 2020. <https://youtu.be/3V-7BcjMjp8> - Report of the ex officio secretariat <https://iris.paho.org/handle/10665.2/54787>
8. Alejandro Rivera - PANAFTOSA - OPS/OMS - COSALFA 48. Resolutions and technical cooperation of the 48th ordinary meeting of the South American Commission for the fight against Foot-and-Mouth Disease (Online meeting via Zoom, host country Paraguay; 19 - 20 August 2020). https://www.paho.org/sites/default/files/cosalfa48-presentacion-informeseecretaria_0.pdf - Report of the ex officio secretariat <https://iris.paho.org/handle/10665.2/54787>
9. Anna Paula Alvim - PANAFTOSA - OPS/OMS - COSALFA 48. Development, production and distribution of reference material for FMD and VSV diagnosis (kits and reagents) - Online meeting via Zoom, host country Paraguay; 19 - 20 August 2020. https://www.paho.org/sites/default/files/cosalfa48-presentacion-informelaboratorioprod_0.pdf - Report of the ex officio secretariat <https://iris.paho.org/handle/10665.2/54787>
10. Edviges Maristela Pituco - PANAFTOSA - OPS/OMS - SEMINARIO INTERNACIONAL
11. PRE-COSALFA 48. Proficiency tests in the diagnosis of foot-and-mouth disease and vesicular stomatitis - Online meeting via Zoom, host country Paraguay; 17-18 August 2020. INFORME DEL SEMINARIO INTERNACIONAL
12. PRE-COSALFA 48 https://www.paho.org/sites/default/files/cosalfa48-panaftosa-informe-seminario_0.pdf
13. XXX Rabies in the Americas International Meeting (RITA). Oct 2021. Estructura del Programa Regional de las Américas para el Control de la Rabia de Animales de Producción Susceptibles.
14. XXX Rabies in the Americas International Meeting (RITA). Oct 2021. Surveillance of SARS-COV-2 and RABV occurrence in common vampire bat population of the amazon region.
15. XXX Rabies in the Americas International Meeting (RITA). Oct 2021. Serological investigation in vulnerable riverside population of the Brazilian Amazon basin 01 year after the execution of a rabies vaccination as a public health measure.
16. XXXV National Conference of Hydatidosis and LVII International Conference of Hydatidology. Dec 2021. South American Initiative for the Control and Surveillance of Hydatidosis/Cystic Echinococcosis.
17. 2nd Latin-American Risk Assessment Symposium (LARAS). Regional networks to strengthen capacity in risk analysis related to food safety. October 2021.
18. XXV Latin-American congress of Microbiology Roundtable moderation on the experiences of the 1st year of AMR National Pilots on Integrated Surveillance for 5 Latin-American countries. August 2021
19. Mecanismos emergentes de resistencia a los antimicrobianos en Salmonella spp. y E. coli: epidemiología, detección y caracterización. Red Inter-Americana de Laboratorios de Análisis de Alimentos (RILAA). PANAFTOSA-SPV/OPS. October 2021

c) National conferences: 18

1. III Fórum Goiás Livre de Febre Aftosa Sem Vacinação. Dec-2021. Virtual. Sanchez-Vazquez, M.J., Retirada da vacina contra febre aftosa, o porquê e componentes do processo dentro da perspectiva regional. <https://www.youtube.com/watch?v=rmG4avcrLKc>; <https://sistemafaeg.com.br/faeg/noticias/14-horas/3-forum-goias-livre-de-febre-aftosa-sem-vacinacao-acontece-na-tarde-desta-quinta-feira>
2. Assembleia Geral Ordinária do Conselho Nacional da Pecuária de Corte. Oct-2021. Virtual. Pituco M. & Sanchez-Vazquez, M.J., Possível ocorrência de nova cepa de vírus de febre aftosa na África- o que sabemos até agora
3. Pituco M. & Sanchez-Vazquez, M.J. Possível ocorrência de nova cepa de vírus de febre aftosa na África, Assembleia Geral Ordinária do Conselho Nacional da Pecuária de Corte. Oct-2021. Virtual.
4. Edviges Maristela Pituco - PANAFTOSA - OPS/OMS - PAPEL DO PANAFTOSA COMO CENTRO DE REFERÊNCIA DA OIE PARA OS PROGRAMAS SANITÁRIOS /MAPA - Profissionais do MAPA/Brasil
5. Edviges Maristela Pituco - PANAFTOSA - OPS/OMS - Talking about Foot-and-Mouth Disease: From Diagnosis to Notification", promoted by the Animal Health Defense of the State of Pará (ADEPARÁ) (You Tube)/Veterinarians and Producers <https://www.youtube.com/watch?v=rtf3sSua1IY&t=84s>
6. Edviges Maristela Pituco - PANAFTOSA - OPS/OMS - VESICULAR DISEASES IN THE AMAZON:
7. SITUATION OF SENECAVIRUS A (SVA) AND DISEASE HISTORY (You Tube)/Veterinarians and producers <https://www.youtube.com/watch?v=nilOhWvw7cY>
8. Edviges Maristela Pituco - PANAFTOSA - OPS/OMS - Sorotipos/topotipos e linhagens do vírus da febre aftosa/MAPA, entrevista gravada disponível Instagram MAPA BRASIL <https://nam12.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.gov.br%2Fagricultura%2Fpt-br%2Fas-suntos%2Fsanidade-animal-e-vegetal%2Fsaude-animal%2Fprogramas-de-saude-animal%2Ffebre-aftosa%2Feducacao-e-comunicacao-febre-aftosa%2Fpodcasts&data=04%7C01%7Crgarcia%40paho.org%7C642d4eeab3c848661d7c08d9d6a11f0f%7Ce610e79c2ec04e0f8a141e4b101519f7%7C0%7C0%7C637776809782717057%7CUnknown%7CTWFpbGZsb3d8eyJWlj>

oiMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=hwkc8mQLN5SiTVpBZDRb yfHqCm94LcQuUNnUjR3aptM%3D&reserved=0

9. Seminário sobre Avaliação Planejamento da Vigilância da Raiva dos Herbívoros, Virtual. Abr 2021. Presentation: Perspectiva regional sobre a raiva transmitida por morcego hematófago (*D. rotundus*) aos animais de produção susceptíveis nas Américas.
10. World Food Safety Day. Jun. 2021. Resistencia antimicrobiana e Inocuidad de los Alimentos. Virtual, Honduras.
11. World Food Safety Day. Jun. 2021. Una Salud. Virtual, Honduras.
12. World Food Safety Day. Jun 2021. Riesgos Microbiológicos de los Alimentos- Enfoque consumidor. Virtual, Colombia.
13. Simposio de la Comisión Argentina de Inocuidad Alimentaria. Jun 2021. Experiencias y desafíos en inocuidad alimentaria en la Región de las Américas. Virtual, Argentina.
14. International Features Standards (IFS). Sep. 2021. As 10 principais causas de doenças transmitidas por alimentos. Virtual, Brasil.
15. Seminario: A força-tarefa do Codex Alimentarius para RAM terminou. E agora?. Nov 2021. “Buenas prácticas y su relación con la RAM”. Brasil
16. Seminario conmemorativo semana WAAW en Brasil. Ministerio de Saude y Ministerio de Agricultura. Nov 2021. “Vigilancia integrada para la RAM”.
17. Seminario conmemorativo semana WAAW en Bolivia. SENASAG. Nov 2021. “Buenas prácticas y su relación con la RAM”.
18. I Seminario Internacional Brucelosis. Universidad Nacional y Ministerio de Salud y Protección Social (MSPS) de Colombia. Julio 2021. Lecture: Abordaje de la Brucelosis: directrices para una integración “Una Salud”.

d) Other

(Provide website address or link to appropriate information): 14

1. COSALFA 48. Resolutions of the 48th ordinary meeting of the South American Commission for the fight against Foot-and-Mouth Disease (Online meeting via Zoom, host country Paraguay; 19 - 20 August 2020). <https://iris.paho.org/handle/10665.2/54840>
2. COSALFA 48. Report of the Ex Officio Secretariat for the 48th Meeting of the South Commission for the Fight Against Foot and Mouth Disease (Virtual Session, 19 August 2021) <https://iris.paho.org/handle/10665.2/54787>
3. COSALFA 48. Seminario Internacional Pre COSALFA 48. Erradicación de la Fiebre Aftosa: El Plan de Acción del PHEFA 2021-2025, la preparación y transición hacia países/zonas libres sin vacunación: informe final (Seminario virtual - Paraguay, 17-18 de ago. 2021) <https://iris.paho.org/handle/10665.2/55234>
4. COSALFA 48. Informe de Situación de los Programas de Erradicación de la Fiebre Aftosa. Sudamérica y Panamá en 2020. COSALFA https://www.paho.org/sites/default/files/informe_situacionpaíses-2020-borrador_1.pdf
5. Preventing Zoonotic Disease Emergence (PREZODE) - Co-construction workshops. July 2021, Sept 2021 and Nov 2021.
6. 4º Conversatorio del projAB. 4º Conversatorio sobre vigilancia sanitaria en jabalíes y cerdos asilvestrados. Grupo projAB (UDELAR, Uruguay. Oct 2021 (Observer)
7. Reunión para el abordaje integral de la Tuberculosis bovina en Panamá. MIDA, MINSA, y PANAFTOSA-OPS/OMS. Oct 2021.
8. Reunión para el abordaje integral de la Brucelosis de los rumiantes en Panamá. PANAFTOSA-OPS/OMS y Sept 2021.
9. MSc in Infectious Disease and One Health - Erasmus+ Programme of the EU. Universitat Autònoma Barcelona (UAB) Veterinary School. Sept 2021. Lectures: Integrated Surveillance & One Health.
10. Zoonotic Disease Integrated Action (ZODIAC) - Consultancy Meeting on Development of Tools for the Mining, Monitoring and Tracing of Zoonotic Pathogens in the Americas and the Caribbean. Aug 2021.
11. I Seminario Internacional Brucelosis. Universidad Nacional y Ministerio de Salud y Protección Social (MSPS) de Colombia. Julio 2021. Lecture: Abordaje de la Brucelosis: directrices para una integración “Una Salud”.
12. II CaribVET General Assembly. Virtual. June 2021 (SC Member).
13. Reunión Regional Programa de Eliminación del complejo teniasis/cisticercosis (*Taenia solium*) en las Américas. PAHO/WHO. April 2021. Communication: Perspectivas del área de zoonosis de PANAFTOSA.
14. Zoonotic Disease Integrated Action (ZODIAC) - Project’s Senior Consultant Meeting. International Atomic Energy Agency (IAEA). Virtual. Feb 2021.

9. Additional comments regarding your report:

