

# OIE Collaborating Centres Reports Activities

## *Activities in 2018*

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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
SEACFMD - Baseline survey analysis for Xiengkhouang province, Lao PDR	Data analysis and report of serological prevalence, FMD reported incidence, risk factors and socioeconomic outcomes of 356 households
SEACFMD - Design of animal movement surveys in Myanmar and Lao PDR	Workshops were held with project staff in both Myanmar and Lao PDR. Design and implementation plan of the survey at levels of household, village, markets and traders
SEACFMD - Report about animal movements in Myanmar	Data analysis and report of the animal movement survey in Myanmar.
SEACFMD - Post Vaccination Monitoring in Laos and Myanmar	Analysis and reporting of Post FMD Vaccination Monitoring (PVM) data for evaluating FMD vaccination efficiency in Laos and Myanmar; development of PVM guidelines.
Implementation of National Epidemiological Investigation Plan and Performance Scheme in Major Animal Diseases in China	Avian influenza, FMD, ND, PRRS, PPR, CSF, Brucellosis, ect. Mainland China.
Annual Performance of the "OIE Official Control Program for FMD of China" in 2018	Mainland China.
African swine fever outbreak investigation	Liaoning, Anhui, Zhejiang, Jiangsu, Guizhou, Shaanxi, etc. 23 provinces of Mainland China.
Epidemiology, surveillance, risk assessment, modelling	
Title of activity	Scope
Survey of dairy and beef cattle populations in New Zealand to determine absence or presence of <i>Mycoplasma bovis</i> .	Planning and implementation of a survey of dairy farms; scenario tree including survey results, a large beef finishing producer, veterinary laboratory specimen and a bulk tank study of contingent districts.
Intra-flock prevalence of shedders and multi-shedders of <i>Mycobacterium avium</i> susp. <i>paratuberculosis</i>	Faecal qPCR and serum ELISA testing and data analysis of sheep flocks to determine prevalence and the correlation between level of shedding and ELSIA S/P.
Survey on the sanitary condition and value chain of swine	Heilongjiang, Guangxi, Guangdong, Hunan, Henan, Chongqing, Shandong, 7 provinces of China
Modeling the local transmission dynamics of African swine fever in China	Haizhou District in Jiangsu Province, Xuanzhou District in Anhui Province
Training, capacity building	

Title of activity	Scope
Interpretation and Validation of Diagnostic Tests in Veterinary Science	ISVEE15, post-conference workshop, Chiang Mai, Thailand, 17-19 Nov 2018, 24 participants from 13 countries
SEACFMD - Training of Trainers TOP1 in Lao PDR	Workshop and Development of modules for target trainee groups, Vientiane, Lao PDR, 12-16 March 2018, 35 participants from Lao PDR
SEACFMD - Training of Trainers TOP2 in Myanmar and Lao PDR	Follow-up workshop of Training of Trainers for FMD Control, Mandalay, Myanmar, 22-24 May 2018, and in Champasak province of Lao PDR from 28-30 May 2018, 40 participants from Lao PDR and Myanmar.
SEACFMD - Advanced GIS training	Bangkok, Thailand, 16-19 Oct 2018, 36 participants from 11 SEACFMD member countries (Cambodia, China, Indonesia, Lao PDR, Malaysia, Mongolia, Myanmar, Philippines, Singapore, Thailand, Vietnam) and from OIE, SRR-SEA, FAO.
SEACFMD - Epidemiology and data analysis	Basic epidemiology certificate training and hands on project related data analysis; Palmerston North, New Zealand, 28May-22Jun 2018; 10 participants from Myanmar, Lao PDR, Cambodia, Vietnam.
SEACFMD - In-country follow up and IRIS	<p>NZ trainees and their managers advised on-the-job in countries (Myanmar, Cambodia, Lao PDR), 40 participants, 25Jul-03Aug 2018.</p> <p>Purpose: to apply acquired skills to the current national FMD control program and to continue developing IRIS to be used as national database for disease reporting, vaccination monitoring and animal census data.</p>
SEACFMD - Emergency response procedures	Outbreak investigation training workshops including a field investigation in one village each country, Myanmar 13-16Aug 2018, and Lao PDR 20-23Aug 2018, 37 Participants from Myanmar and Lao PDR.
Advanced spatial epidemiology	OIE Sub-Regional training on applying Geographic Information Systems (GIS) for advanced spatial analysis of animal health data, Bangkok, Thailand, 16-19 Oct 2018, 36 participants from 11 SEACFMD member countries (Cambodia, China, Indonesia, Lao PDR, Malaysia, Mongolia, Myanmar, Philippines, Singapore, Thailand, Vietnam) and from OIE SRR-SEA and FAO.
4th Cohort of China Field Epidemiology Training Program for Veterinaries	<p>Module4, 3 weeks (April), advanced application of epidemiology skills; Module5, 2 weeks (September), wrap-up, thesis defense and graduation.</p> <p>26 trainees from 17 provincial ACDC, 2 national institutes and 1 agricultural university, took part in module 4 and 5; 1 trainee from Tai Lung Veterinary Laboratory /AFCD, Sheung Shui, New Territories, Hong Kong SAR, took part in module 4; 2 trainees from Yellow Sea Fisheries Research Institute, Chinese Academy of Fishery Sciences.</p>
5th Cohort Introductory Course of China Field Epidemiology Training Program for Veterinaries	Nov 19 to Dec 14, 4 weeks; Qingdao; 43 trainees from 20 provinces, 4 national institutes and 1 agricultural university graduated.

CFETPV Veterinary Epidemiology for Executives: Epidemiology & Disease Control Strategies	Aug, 2 days; Xi'an City; 53 trainees from 31 provinces, 6 cities, 2 national institutes.
Regional Training Course of Veterinary Epidemiology and Outbreak Investigation	June, 4 days; more than 30 staffs from 7 eastern china animal CDCs in Nanjing, Jiangsu province
Training of Animal Disease Surveillance Technique	August, 2 days; more than 70 technical staffs from animal CDCs at prefecture and county level of Shandong province.
Training of ASF Emergency Response and Outbreak Investigation	November, 1.5 days; about 120 technical staffs from animal CDCs and Animal Health Inspection Institutes at provincial level.
Surveillance and Epidemiological Survey in Special Animal Disease Free Zone	November, 1 days; more than 50 technical staffs from animal CDCs at county level of Qingdao
<b>Zoonoses</b>	
<b>Title of activity</b>	<b>Scope</b>
Epidemiological study discovers emerging Leptospira strain that causes public health concerns.	Survey data of 2016/17 analysed and reported at national and international conferences in 2018: NZVA New Zealand, Buiatrics Japan, ISVEE Thailand, One-Health Aotearoa New Zealand, >2500 participants worldwide.
Main risk factor analysis about brucellosis in several provinces	Shaanxi, Guizhou, Guangxi, Xinjiang, Shanxi, Henan, inner Mongolia.
Risk communication of rabies and stakeholder KABP study	Shaanxi, Guangxi, Henan, Xinjiang.
Risk communication of brucellosis and stakeholder KABP study	Guangxi
<b>Avian diseases</b>	
<b>Title of activity</b>	<b>Scope</b>
Survey on the effect of avian influenza prevention and control measures	Guangxi, Guangdong, Hunan, Anhui, Jiangsu, 5 provinces of China

***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
National Epidemiological Investigation Plan and Performance Scheme in Major Animal Diseases in China	Mainland China /drafted the plan	<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
FLI-Germany	Berlin, Europe	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Implemented the Memorandum of Understanding on Cooperation between CAHEC and FLI, applied Sino-Germany Cooperation on Agricultural Science and Technology in Veterinary Epidemiology.
BfR-Germany	Berlin, Europe	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Implemented the Memorandum of Understanding on Cooperation between CAHEC and BfR, applied Sino-Germany Cooperation on animal health risk assessment, risk analysis, and training.
Massey University - New Zealand	Palmerston North, Oceania	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East	Implemented the Work Plan of cooperation in animal disease prevention and control between CAHEC and MPI, undertook an advanced training course in applied epidemiology at Massey University's Epi Centre.

**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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WHO Collaborating Centre for Children's Health and the Environment	Brisbane, Queensland, Australia	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East	Cooperation on One Health and the Environment.
Lanzhou Veterinary Research institute, Chinese Academy of Agricultural Sciences	Lanzhou, China	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East	Cooperation project on FMD elimination technology integration and demonstration in livestock breeding farms: FMD risk analysis modelling.

**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?**

No

**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: 1
- b) Seminars: 2
- c) Hands-on training courses: 6
- d) Internships (>1 month): 4

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
b,c	Multi-level modelling	China	4
b,c	Latent class Bayesian evaluation of diagnostic tests	China	4
a,d	Tutor support of project related data analysis	China	4
c	DataCamp (R)	China	4

c	4thCohort Module 4 Training Course of China Field Epidemiology Training Program for Veterinaries	Hong Kong SAR	1
c	The use of GIS in animal disease response	China	62
c	Regional Short-term Training on Swine Disease Control and Diagnosis	China, Chinese Taipei, Laos, Korea RO, Philippines, Mongolia, Myanmar, Thailand and Vietnam)	40

**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	SEACFMD - Myanmar and Laos w/shops for Risk-based strategy	OIE	06/18	Bangkok	12
International	SEACFMD Sub-commission meeting	OIE	11/18	Ho Chi Minh City	60
International	Global Health Security Agenda & ASEAN Veterinary Epidemiology Group	Ministry of Public Health of Thailand, USAID, FAO	2/2018	Bangkok, Thailand	51
International	Regional FETPV training Module 1 and Module 2	FAO Regional office, DLD	7/2018,10/2018	Bangkok, Thailand	20

International	3rd Regional Workshop on Swine Disease Control in Asia	OIE regional representation for Asia and the Pacific (OIE RR AP)/ FAO Regional Office for Asia and the Pacific (FAO RAP)/Philippines Department of Agriculture	10/2018	Cebu, Philippines	40
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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: 69

1. Barkema, H W; Orsel, K; Nielsen, S S; Koets, A P; Rutten, V P M G; Bannantine, J P; Keefe, G P; Kelton, D F; Wells, S J; Whittington, R J; Mackintosh, C G; Manning, E J; Weber, M F; Heuer, C; Forde, T L; Ritter, C; Roche, S; Corbett, C S; Wolf, R; Griebel, P J; Kastelic, J P; De Buck, J. Knowledge gaps that hamper prevention and control of Mycobacterium avium subspecies paratuberculosis infection. *TRANSBOUNDARY AND EMERGING DISEASES* 65(1):125-148, 2018
2. Bayley, K.D., Read, R.A., Gates, M.C. [2018] Superficial keratectomy as a treatment for non-healing corneal ulceration associated with primary corneal endothelial degeneration. *Vet Ophthalmol.* doi
3. Bloomfield, S.J., Midwinter, A.C., Biggs, P.J., French, N.P., Marshall, J.C., Hayman, D.T.S., Carter, P.E., Thornley, C., Yap, R., Benschop, J. [2018] Long-term Colonization by *Campylobacter jejuni* Within a Human Host: Evolution, Antimicrobial Resistance, and Adaptation, *The Journal of Infectious Diseases*, v217:1 p103-111 doi:10.1093/infdis/jix561
4. Browne, A.S., Biggs, P.J., Elliott, A., Jaros, P., French, N.P., Midwinter, A.C. [2018] Draft Whole-Genome Sequences of Three Diarrheagenic *Escherichia coli* Strains Isolated from Farmed Deer in New Zealand. *Genome Announc* 6[16]. doi:10.1128/genomeA.00300-18
5. Browne, A.S., Midwinter, A.C., Withers, H., Cookson, A.L., Biggs, P.J., Marshall, J.C., Benschop, J., Hathaway, S., Haack, N.A., Akhter, R.N., French, N.P. [2018] Molecular Epidemiology of Shiga Toxin-Producing *Escherichia coli* (Stec) on New Zealand Dairy Farms: Application of a Culture-Independent Assay and Whole Genome Sequencing. *Appl Environ Microbiol.* doi
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7. Davies, T.M., Marshall, J.C., Hazelton, M.L. [2018] Tutorial on kernel estimation of continuous spatial and spatiotemporal relative risk. *Statistics in medicine* 37[7]:1191-1221. doi:10.1002/sim.7577
8. Dreyfus, A., Wilson, P., Benschop, J., Collins-Emerson, J., Verdugo, C., Heuer, C. [2018] Seroprevalence and Herd-Level Risk Factors for Seroprevalence of *Leptospira* Spp. In Sheep, Beef Cattle and Deer in New Zealand. *N Z Vet J* (Aug 19 2018): 1-27. doi
9. Ekong, P.S., Cardona, C.J., Bryssinckx, W., Ikechukwu-Eneh, C., Lombin, L.H., Carpenter, T.E. [2018] Spatial clustering of pathology submissions during the initial introduction and spread of avian influenza H5N1 in poultry in Nigeria in 2006-2007. *Vet Ital* 54[1]:13-20. doi:10.12834/VetIt.870.4301.3
10. Franz, E., Rotariu, O., Lopes, B.S., MacRae, M., Bono, J.L., Laing, C., Gannon, V., Soderlund, R., van Hoek, A.H.A.M., Friesema, I., French, N.P., George, T., Biggs, P.J., Jaros, P., Rivas, M., Chinen, I., Campos, J., Jernberg, C., Gobius, K., Mellor, G.E., Chandry, P.S., Perez-Reche, F., Forbes, K.J., Strachan, N.J.C. [2018] Phylogeographic analysis reveals multiple international transmission events have driven the global emergence of *Escherichia coli* O157:H7. *Clinical Infectious Diseases.* doi
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13. Gates, M.C., Odom, T.F., Sawicki, R.K. [2018] Experience and confidence of final year veterinary students in performing desexing surgeries, *New Zealand Veterinary Journal*, 66:4, 10-21. doi
  14. Gates, M.C., Zito, S., Thomas, J., Dale, A. (2018). Post-adoption problem behaviours in adolescent and adult dogs rehomed through a New Zealand animal shelter. *Animals* 8(6). doi
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  21. Han, J.H., Weir, A.M., Weston, J.F., Heuer, C., Gates, M.C. [2018] Elimination of Bovine Viral Diarrhoea Virus in New Zealand: A Review of Research Progress and Future Directions. *N Z Vet J* (Aug 28 2018): 1-8. doi
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b) International conferences: 12

1. BUIATRICS, Sapporo, Japan, 27-31 Aug 2018
2. International Society for Veterinary Epidemiology and Economics (ISVEE), Chiang Mai, Thailand, 12-16 Nov 2018
3. Wang Youming, Keynote speech on ASF Control in China. 15th International Symposium of Veterinary Epidemiology and Economics (ISVEE 15). Chiang Mai, Thailand, Nov 12 -16, 2018.
4. Kang Jingli, Keynote speech on China field epidemiology training program for Veterinarians (CFETPV). Global epidemiology coordination and development workshop on FETPV. Rome, Italy, Feb 19-21, 2018.
5. Zhao Xiaodan, Huang Baoxu, Song Junxia, Wang Youming, Kang Jingli, Xu Farong, Yu Qi, Tang Hao. Poster of epidemiology Capacity Building in China. 15th International Symposium of Veterinary Epidemiology and Economics (ISVEE 15). Chiang Mai, Thailand, Nov 12 -16, 2018.
6. H. Tang\*, M. Bruce, B. Huang, J. Edwards, I. Robertson, C. Cai, Y. Wang, C. Shen, J. Kang. Poster of economic and social analysis of avian influenza A (H7N9) control strategies in southern China. 15th International Symposium of Veterinary Epidemiology and Economics (ISVEE 15). Chiang Mai, Thailand, Nov 12 -16, 2018.
7. Liu Ping, Kang Jingli, Wang Youming, Huang Baoxu, Sun Xiangdong. Poster of the situation and potentially influential factors of Echinococcosis awareness in sheep farmers. 15th International Symposium of Veterinary Epidemiology and Economics (ISVEE 15). Chiang Mai, Thailand, Nov 12 -16, 2018.
8. Y. Li, G. Zhang, I. D. Robertson, M. Zhao, B. Huang, J. Edwards. Poster of risk factors for swine influenza infection on pig farms in Guangdong province, China. 15th International Symposium of Veterinary Epidemiology and Economics (ISVEE 15). Chiang Mai, Thailand, Nov 12 -16, 2018.
9. Xia Luming, Sun Quanyun, Wang Jingjing, Chen Qi, Liu Peihong, Shen Chaojian, Sun Jianhe, Tu Yiping, Shen Sufang, Zhu Jiuchao. Poster of epidemiology of pseudorabies in intensive pig farms in Shanghai, China: herd seroprevalence and risk factors. 15th International Symposium of Veterinary Epidemiology and Economics (ISVEE 15). Chiang Mai, Thailand, Nov 12 -16, 2018.
10. Li Shubo, Wu Mingyan, Li Huilan, Cui Jixian, Gu Guibo. Poster of compulsory inoculation against porcine reproductive and respiratory syndrome: evaluation of cost, coverage and compliance. 15th International Symposium of Veterinary Epidemiology and Economics (ISVEE 15). Chiang Mai, Thailand, Nov 12 -16, 2018.
11. Shen Chaojian. Poster of the Survey of Poultry Market Chain and the H7N9 Risk Assessment of Wholesale LBMs in Guangxi, Yunnan, Hunan Provinces of China. The Prince Mahidol Award Conference 2018 on "Making the World Safe from the Threats of Emerging Infectious Diseases". Bangkok, Thailand, 29 January - 3 February 2018.
12. Shen Chaojian. Keynote speech on Poultry Value Chain Mapping in China. Technical Consultation on Application of Technology to Strengthen H7N9 Control through Rapid Detection and Response. Beijing, China P.R., 18-19 January 2018.

c) National conferences: 7

1. New Zealand Veterinary Association, Hamilton NZ, 18-20 Jun 2018

2. One Health Aotearoa, Wellington NZ, 12-13 Dec 2018

3. Liu Ping. Poster of the situation and potentially influential factors of brucellosis awareness in occupational groups. CFETPV 6th Annual Seminar, Qingdao, China, Sep 21, 2018.

4. Dong Yaqin. Poster of investigation of porcine epidemic diarrhea virus infection in scaled pig farms of Junan county, Shandong province. CFETPV 6th Annual Seminar, Qingdao, China, Sep 21, 2018.

5. Wang Kaicheng. Poster of survey of the avian influenza virus infection situation in live-bird markets in part region of China. CFETPV 6th Annual Seminar, Qingdao, China, Sep 21, 2018.

6. Liu Ping, Jingli Kang, Youming Wang, Baoxu Huang, Xiangdong Sun. Keynote speech on design of echinococcosis-related materials for health communication and the effects of these materials in western provinces of China. China FETP 13th Annual Seminar, Chinese Center for Disease Control and Prevention, Wuhan, China, Sep. 25-28, 2018.

7. Li Jingning. Keynote speech on investigation on brucellosis infection of animal disease control workers at village level in a county of Ningxia. China FETP 13th Annual Seminar, Chinese Center for Disease Control and Prevention, Wuhan, China, Sep. 25-28, 2018.

d) Other

(Provide website address or link to appropriate information): 0