

Mission of MVA

1. To develop updated technologies of Veterinary Medicine and Animal Husbandry.
2. To develop and initiate socio – economic status of all entire people of Myanmar in line with the time frame.

Main responsibility of MVA

- Communication, Negotiation with teams/ organizations/ institutions, which are the same mission / vision and expectation.

Main objective of MVA

- To participate in the activities of the country's "One Health Program".

Cooperation and Coordination with local / International Organizations

-With local organizations

1. Myanmar Veterinary Council (MVC)
2. Livestock Breeding and Veterinary Department (LBVD)
3. Department of Livestock Research (DLR)
4. University of Veterinary Science (UVS)
5. Myanmar Livestock Federation (MLF)
6. Organizations of City Development (YCDC, MCDC, NPTDC)
7. Organizations of Bio-diversity (BANCA)
8. Others (If any)

-With International Organizations

1. World Veterinary Association (WVA)
2. Federation of Asian Veterinary Associations (FAVA)
3. World Organization for Animal Health (WOAH)
4. World Animal Protection (WAP)
5. Japan International Cooperation Agency (JICA)
6. Japan Veterinary Medical Association (JVMA)
7. Gaia Veterinary Hospital, Chitose City, Hokkaido – Japan
8. Worldwide Veterinary Services (WVS)
9. Food and Agriculture Organization (FAO)

“Sharing the activities on One Health in Myanmar “

I. Antimicrobial Resistance (AMR) and Role of Myanmar Veterinary Association (MVA)

Food control system framework

- Under the food chain, the responsibilities for primary production; fishery and livestock products are controlled by Ministry of Livestock, Fishery and Irrigation.
- Secondary food processing commodities and semi-finished products such as canning, brewing, snacks, juice etc. are controlled by Ministry of Industry, Ministry of Health and City Development Committee.
- Food importation: raw for processing and ready to eat food are controlled by Ministry of Health, Ministry of Commerce and Trade and Custom Department.
- Several organizations are responsible for antimicrobial use, so that control of AMR is difficult

Imported Antimicrobial agents in Myanmar

Imported pharmaceutical products including antimicrobial agents (imported drugs samples) –

<i>Period</i>	<i>No. of Samples</i>
2010 – 2011	880
2011 – 2012	1037
2012 – 2013	1029

Uses of antimicrobial agents

- Generally mixed into feed and water for mainly poultry & pig farms.
- Injection for large animals and small animals.

Over uses of antimicrobial agents is leading to multiple drugs resistance problem in consumer of foods from those animal origin.

Common antimicrobial agents in Livestock (Powder)

- Oxytetracycline,
- Doxycycline,
- Chlortetracycline,
- Norfloxacin,
- Amoxicillin,
- Colistin,
- Tylosin

- Sulfadiazine,
- Trimethoprim,
- Neomycin for poultry (given as additive to feed and drinking water).

Remarks

- Most of poultry farmers use antimicrobials without any consultation from Veterinarians.
- Antibiotics are available easily.
- So improper uses of drugs leading to antimicrobial resistance problem.

Common antimicrobial agents in Livestock (injection)

- ❖ Penicillin,
- ❖ Streptomycin,
- ❖ Lincomycin,
- ❖ Enrofloxacin,
- ❖ Gentamycin,
- ❖ Kanamycin,
- ❖ Oxytetracycline,
- ❖ Amoxicillin,
- ❖ Norfloxacin,
- ❖ Ciprofloxacin,
- ❖ Trimethoprim, and
- ❖ Sulfa compound groups.

Remarks

- Lack of knowledge in food safety guideline for producing foods from animal origin among farmer and producers leading to mistake and careless of withdrawal periods.
- Therefore those all factors are leading to AMR for people in Myanmar.

Role of Livestock Breeding and Veterinary Department

For the improvement of Livestock Section which is a major priority in the National Plan of Myanmar.

For the increased production of safe and quality meat, milk and egg for the public.

- To enact these objectives, Veterinary Assay Lab is implementing for pharmaceutical products quality control and drug residues testing for foods from animal origin, according to the following guidance.

1. National Food and Drug law of MOH (1992)
2. The Animal Health and Development law of LBVD (1993)
3. OIE manual (2012)
4. British Pharmacopoeia Veterinary Codex (1997)
5. Official Method of Association of Official Agricultural Chemists (AOAC) (17th Ed: 2000)

Current capacity of veterinary assay lab for drugs and drugs residues

- Assay of imported veterinary drugs, raw materials, Vitamins and premix, and vaccine.

Research works for antibiotic residues

- Antibiotic residues testing by microbiological methods for mutton, beef samples are delivered from Myanmar restaurant association.
- Nutritional analysis in milk powder, condense milk, eggs samples.

Prioritized needs of capacity building for effective AMR control system

- Human resources development for food safety and food security in Myanmar. (International trainings, workshop and national training for grass root level farmer)
- Participation in international food safety program.
- Upgrading National Assay Laboratory in Yangon to be a OIE Reference Lab
- Upgrading National and Regional Laboratories.

Banned Antibiotic in Myanmar

- Chloramphenicol
- Nitrofurantoin had been banned in animal

Areas of Research – animal health

Operational Project (2015–2018)

- Myanmar Pig Partnership: Zoonosis in Emerging Livestock System and Antimicrobial Resistant

Challenges

- Weakness of Awareness
- Low commitment
- Weak coordination among sectors
- No National AMR Control Policy and Plan

- Weak Surveillance
- Weak Good Animal Husbandry Practices
- Improper use of antibiotic
- Weak control on Antibiotic
- Limited Research
- Poor Infection Control Procedure

II. Avian Influenza (AI) and Role of Myanmar Veterinary Association (MVA)

Prevention and Control of Infectious Animal Diseases in Myanmar

MVA, is going to participate in Prevention and Control of Infectious Animal Diseases, including transboundary and zoonotic with LBVD, MLF and partner organizations especially in below activities;

- (1) reporting of infectious animal disease information to LBVD based on 'Animal Health and Livestock Development Law, 2020',
- (2) raising awareness on farm biosecurity and GAHP identified by LBVD and
- (3) supporting outbreak response measures lead by LBVD based on the 'Contingency plans, Control plan and Action plan'.

As of 31 December 2020, the Ministry of Agriculture, Livestock and Irrigation listed 12 List A and 12 List B contagious animal diseases shown in the following tables.

Table 1. List A contagious diseases

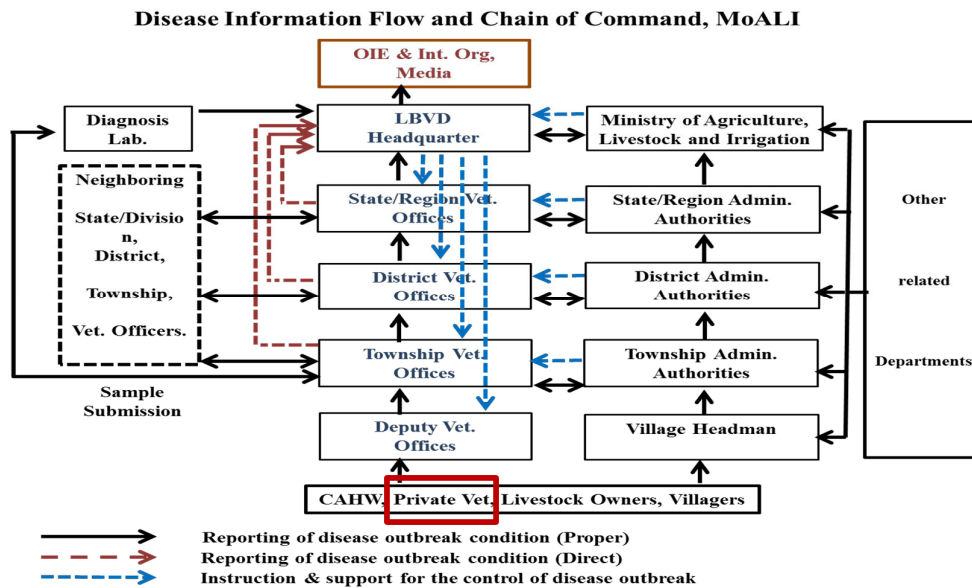
No.	Name of disease	Affected animals
1.	Foot and Mouth Disease (FMD)	Buffalo, cattle, sheep, goat, pig and elephant
2.	Anthrax	Buffalo, cattle, sheep, goat, pig, elephant, horse, ass, mule and dog
3.	Hemorrhagic Septicemia (HS)	Buffalo, cattle, pig and elephant
4.	Black quarter (BQ)	Buffalo, cattle, sheep and goat
5.	Classical swine fever (CSF)	Pig
6.	Newcastle disease (ND)	Fowl, turkey and quail
7.	Infectious bursal disease (IBD)	Fowl
8.	Rabies	Dog, cat, buffalo, cattle, sheep, goat, horse, ass, mule and elephant
9.	Highly Pathogenic Avian Influenza (HPAI)	Poultry and wild birds

10.	Porcine Reproductive and Respiratory Syndromes (PRRS)	Pig
11.	African Swine Fever (ASF)	Pig
12.	Lumpy Skin Disease (LSD)	Cattle and buffalo

Table 1. List B contagious diseases

No.	Name of disease	Affected animals
1.	Brucellosis	Buffalo, cattle, sheep, goat, pig, horse, ass and mule
2.	Tuberculosis (TB)	Buffalo, cattle, sheep, goat, pig, elephant and horse
3.	Surra	Horse, ass, mule, buffalo, cattle and elephant
4.	Glanders	Horse, ass and mule
5.	Avian Pasteurellosis (Fowl cholera)	Fowl, duck, turkey and quail
6.	Infectious Bronchitis (IB)	Fowl
7.	Pullorum Disease (PD)	Fowl, turkey and quail
8.	Marek's Disease (MD)	Fowl
9.	Duck Viral Enteritis (Duck plague)	Duck
10.	Bovine Spongiform Encephalopathy (BSE)	Cattle
11.	Peste des Petits Ruminants (PPR)	Sheep and goat
12.	African Horse Sickness (AHS)	Horse

Myanmar disease information flow & chain of command



The veterinarian shall immediately report to the nearest Veterinary Office, if any animal under his or her treatment is suspected of having an infectious animal disease. (AHLD Law, section 35)

Diagnostic Tests on Avian Influenza

Virology

(2023–2024)

Total Test	4746
Positive	135
Negative	4611

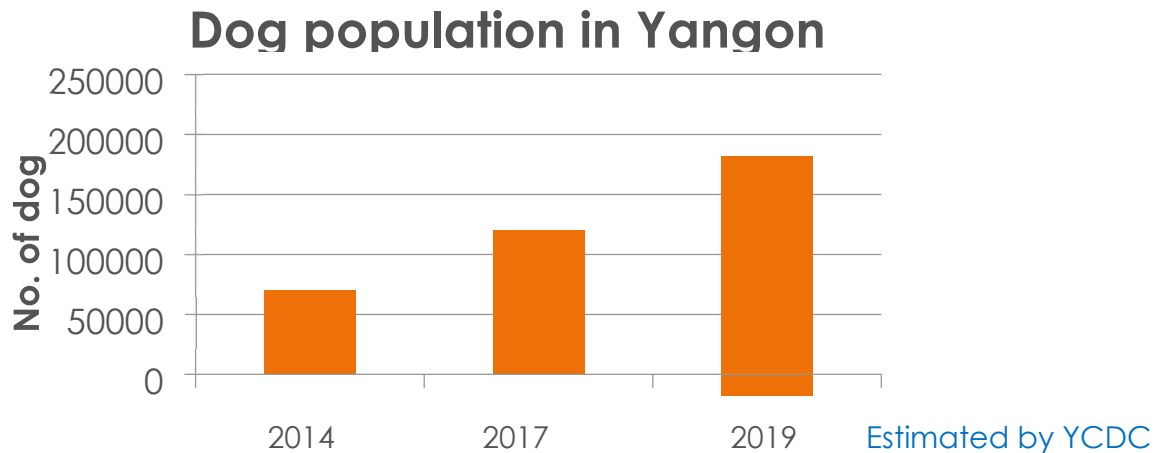
(2024 – 2026)

Total Test	1519
Positive	1519

III. Rabies Control and Role of Myanmar Veterinary Association (MVA) (including Animal Birth Control (ABC) & Rabies Vaccination)

DOG POPULATION IN MYANMAR

- 4.5 million (OIE, 2017)
- 7 million (estimated based on a local area)
- 70% of population is stray dog (Hnin Wai Myo Naing et al., 2016; Yamine Thiri Htay et al., 2017)



CURRENT ACTIVITIES FOR RABIES CONTROL

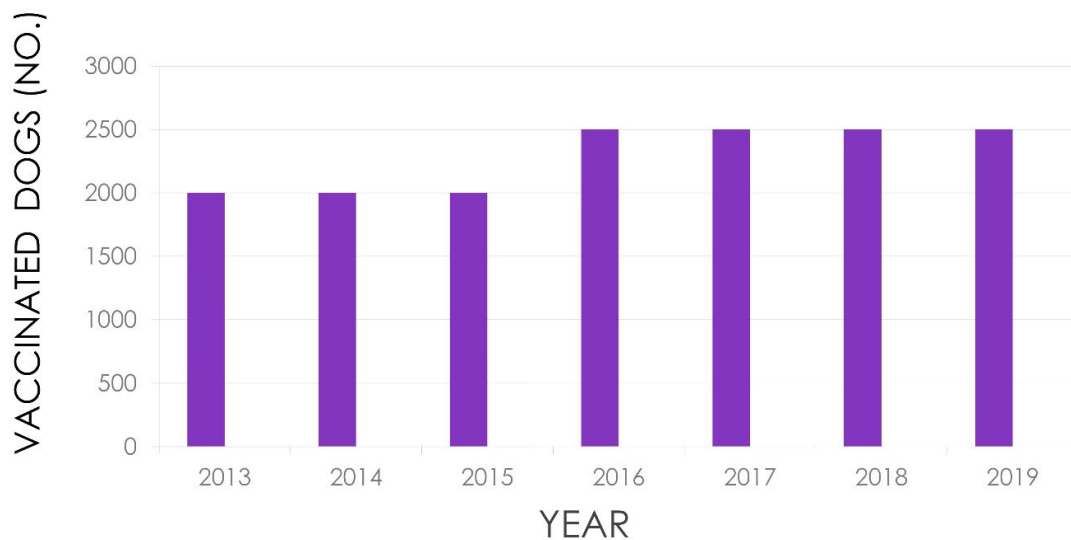
1. Mass Vaccination (LBVD, INGO and local NGO)
2. Animal Birth Control (MVA, YCDC, Yangon Canine Foundation, Infinity Vet Myanmar,, local NGOs)
3. Public education and & Awareness.

MASS VACCINATION

Kunchan Kone township, Yangon Region (2013–2018) mass vaccination

- Mass vaccination combined with ABC surgical training to young vets
- 25 Volunteered Vets.
- Marked the vaccinated dogs and cats.
- Issued Vaccinated Certificate by MVA
- Contribution of rabies related posters, and cats.
- Issued Vaccinated Certificate by MVA
- Contribution of rabies related posters, and providing school education on rabies.

TOTAL VACCINATED DOGS/YEAR ORGANIZED BY MVA (2013–2019)



The Risk of Rabies in Myanmar

Diagnostic Test on Virology Rabies (2024 – 2026)

Total Test	15
Positive	14
Negative	1

The Risk of Rabies in Myanmar

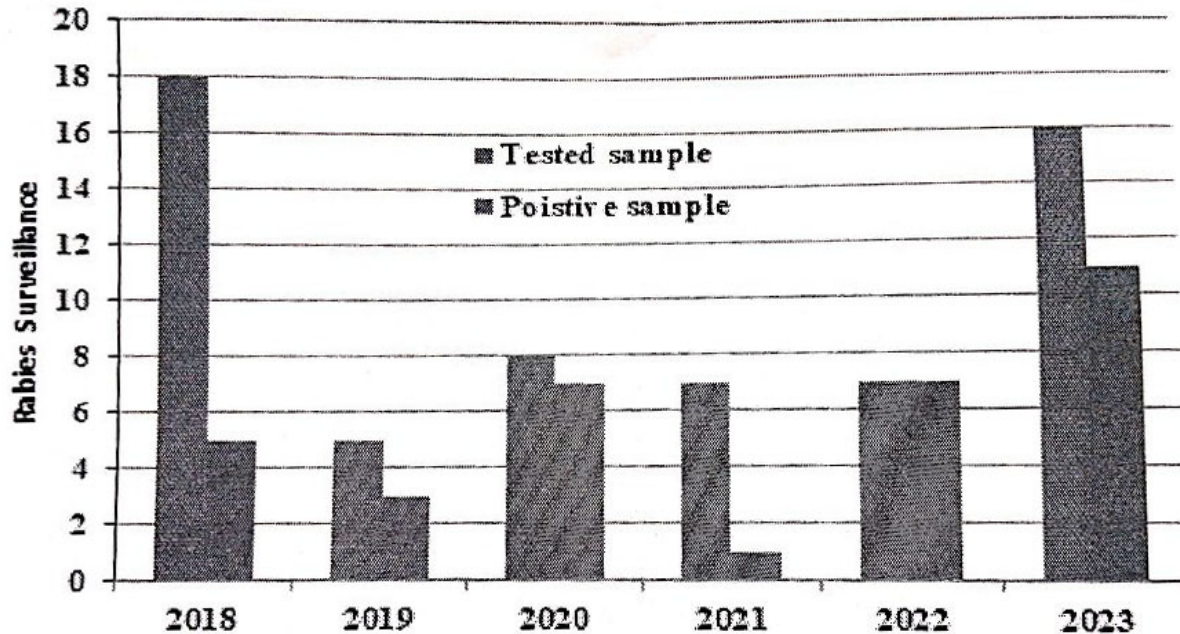
- Myanmar's Area	26122	Square kilo meters
- Human Population		52 millions
- State / Region		15
- Total T/S	330	
- Total village	649,170	
- Dog POP	4–4.5 million (estimated)	
- Ratio bet. Dog & Human	1:6	
- Dog bites / yr	(15000 – 20000)	
- Yearly infected population	200	

Rabies situation in Myanmar (Dog bite cases in Human)

2007	250
2009	200
2011	250
2014	175
2015	100
2019	50

Surveillance

- There is no systematic surveillance
- Suspected samples in dog bite cases were diagnosed.



Remarks: Detailed activities of “ Animal Birth Control (ABC) & Rabies Vaccination” is mentioned as the separated attachment “.

IV. Environmental conservation and Myanmar Veterinary Association (MVA)

According to the guidelines from

1. World Organization for Animal Health (WOAH)
2. World Veterinary Association (WVA)
3. Federation of Asian Veterinary Associations (FAVA)
4. Organizations of Biodiversity (Biodiversity and Nature Conservation Association – BANCA)

MVA planted monsoon trees amounted to 200 at Paung Ngu Livestock Research Farm, which was situated at Megalodon, Livestock Breeding and Veterinary Department on 27.7.2024 with 40 MVA member veterinarians, in order to hail monsoon planting season and to recommend the environmental conservation nationwide performance.

In addition, we'll conduct similar activity on this year at suitable place and time, for your additional information.

Thank you for your kind attention.