


PORCINE DISEASES DIAGNOSED AT ADDRL 2013 - 2017



Magdalena S. Cruz, DVM, MSc, FPCSP
Veterinary Laboratory Division
Bureau of Animal Industry

**Department
of
Agriculture**

Organizational Structure



OFFICE OF THE SECRETARY

LIVESTOCK AGENCIES
Veterinary Services

**Philippine
Carabao
Center (PCC)**

**National
Dairy
Authority
(NDA)**

**Bureau of
Animal
Industry
(BAI)**

**National Meat
Inspection
Service (NMIS)**

**DA REGIONAL
FIELD
OFFICES
(DARFOs)**

**Support
Staff**

**Technical
Staff**

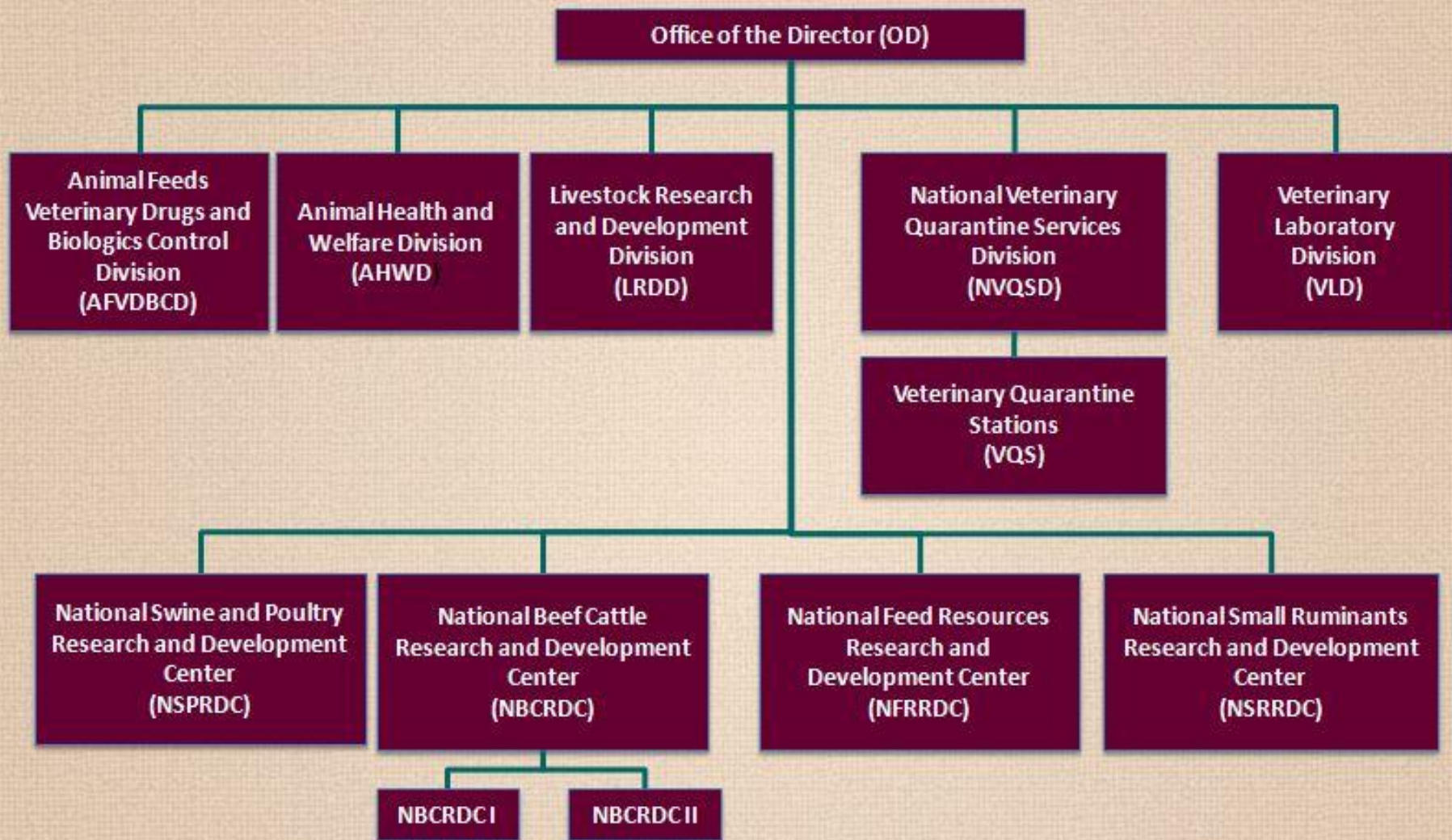
**Stakeholder
s**

**Farmers/Industry
Groups**

**Local
Government
Units (LGUs)**

**Allied
Industries**

**Academe and
Other Institutions**



VETERINARY LABORATORY DIVISION

Head of the Division

Production Laboratories

VETERINARY BIOLOGICS PRODUCTION SECTION (VBPS)

Bacterial Veterinary Biologics Production Lab. (BVBPL)

Viral Veterinary Biologics Production Lab. (VVBPL)

Laboratory Animal Production Unit (LAPU)

VETERINARY DRUG PRODUCTION SECTION (VDPS)

Injectable Preparation Unit

Topical Preparation Unit

CHEMICAL & FEED ANALYSIS SECTION (CFAS)

Animal Feed Analysis Laboratory (AFAL)

Veterinary Drug Analysis Laboratory (VDAL)

Toxicology Laboratory (Aflatoxin/Mycotoxin) (TL)

Analytical Laboratories

ANIMAL DISEASE DIAGNOSIS & REFERENCE LABORATORY (ADDRL)

Laboratory Disease Investigation & Evaluation Unit (LaDIEU)

Pathology Laboratory (PL)

Parasitology Laboratory

Bacteriology / Mycology Laboratory (BML)

Virology Laboratories (VL)

Specialized Laboratories

AI LAB.

VIROLOGY LAB

RABIES LAB.

FMD LAB.

PORCINE MOLECULAR LAB.

VETERINARY BIOLOGICS ASSAY SECTION (VBAS) OR

POULTRY VIRAL LIVE BIOLOGICS ASSAY UNIT (PVLBAU)

POULTRY VIRAL KILLED BIOLOGICS ASSAY UNIT (PVKBAU)

BACTERIAL BIOLOGICS ASSAY UNIT (BBAU)

LARGE ANIMAL VIRAL AND COMPANION ANIMAL BIOLOGICS ASSAY UNIT (LAVACABAU)

STERILITY TESTING UNIT (STU)

MEDIA PREPARATION UNIT (MPU)

*"a center of excellence in providing
quality veterinary diagnostic services
compliant to international standards and
responsive to the needs of a dynamic
animal industry"*

USDA

REGIONAL LABORATORY NETWORK TRAINING WORKSHOP
ON PROFICIENCY TESTING OF BRUCELLOSIS DISEASE

18-22 April 2016
Quinton City, Philippines

USDA ASSISTANT MANAGER, BUREAU OF ANIMAL INDUSTRY

BUREAU OF ANIMAL INDUSTRY

Major Functions of ADDRL

- 1. Laboratory Testing/Analysis for Animal Disease Diagnosis**
- 2. Accreditation of Government and Non-Government Veterinary Diagnostic Laboratories**

Functions of ADDRL

- ❑ **technical assistance** to various regional and other government/private diagnostic laboratories
- ❑ **repository of technical data** for the formulation of policy, guidelines, rules and regulations relative to animal diseases in the country
- ❑ **regulatory function** - Adm. Order No. 27 Series of 2004 to accredit government and non-government diagnostic laboratories

Functions of ADDRL

- ❑ **Offers diagnostic services** to the livestock and poultry industry for the prompt control of disease outbreaks
- ❑ **Conducts researches** on the economically important diseases affecting domestic and wild animals, and man
- ❑ **Gives support to the monitoring and surveillance, and regulatory activities** for various animal health control programs of the Bureau of Animal Industry
- ❑ **training and continuing education** for BAI staff and other stakeholders

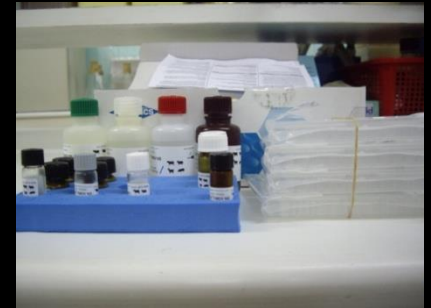
Functions of ADDRL

- ❑ **Gives technical assistance** to various regional and other government/private diagnostic laboratories
- ❑ **Acts as repository of technical data** for the formulation of policy, guidelines, rules and regulations relative to animal diseases in the country
- ❑ **Performs regulatory function** - Adm. Order No. 27 Series of 2004 to accredit government and non-government diagnostic laboratories

Specialized Laboratory

FMD Laboratory

- ❑ **serum samples for routine surveillance, farm accreditation and compliance to quarantine requirements for live animal importations**
- ❑ **non-structural protein ELISA (NSP-ELISA)**
- ❑ **antigen detection using ELISA with reagents obtained from the World Reference Laboratory for FMD at Pirbright, United Kingdom**
- ❑ **Real-time Reverse Transcription PCR for early and rapid detection of virus incursion**



Specialized Laboratory



Dr. Selleck of the Australian Animal Health Laboratory (AAHL) with ADDRL and RADDL staff on serology and egg inoculation training



Mr. Hansson from AAHL on molecular work



ADDRL staff giving on-site training on serology at the Regional Lab

Specialized Laboratory

Porcine Disease Molecular Laboratory




**FAO expert Dr. Ken Inui
as trainor for the
"Training on Laboratory
Diagnosis of Swine
Diseases"**




Serology work



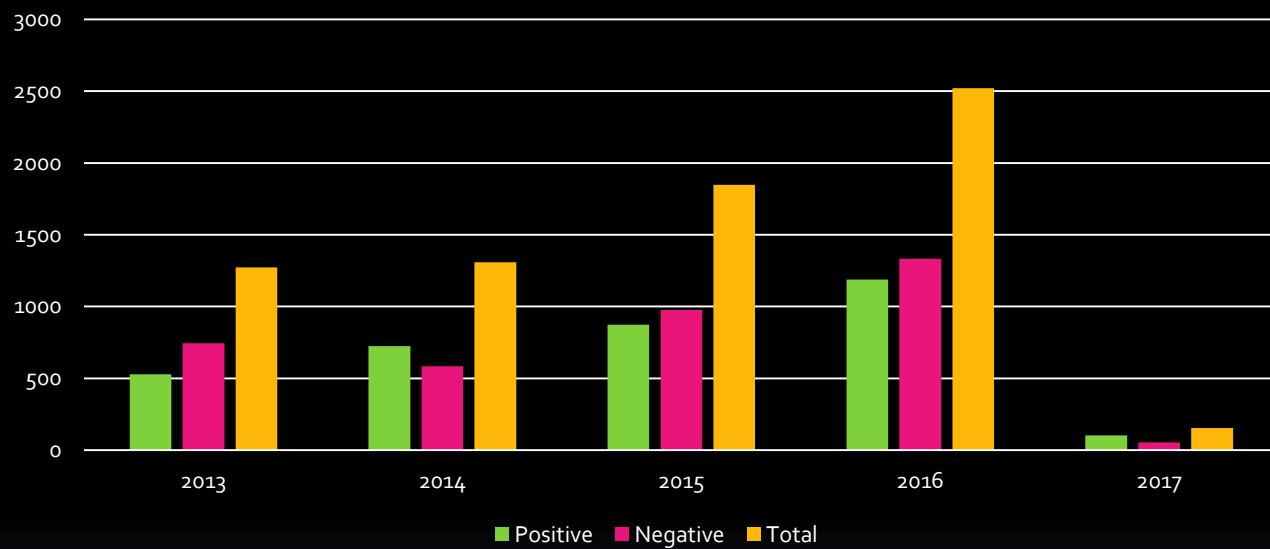
**Ms. Cannon from Center
for Disease Control and
Prevention (USA) with
ADDRL staff on serology
and RT-PCR training**



Diagnostic Results of Major Porcine Diseases

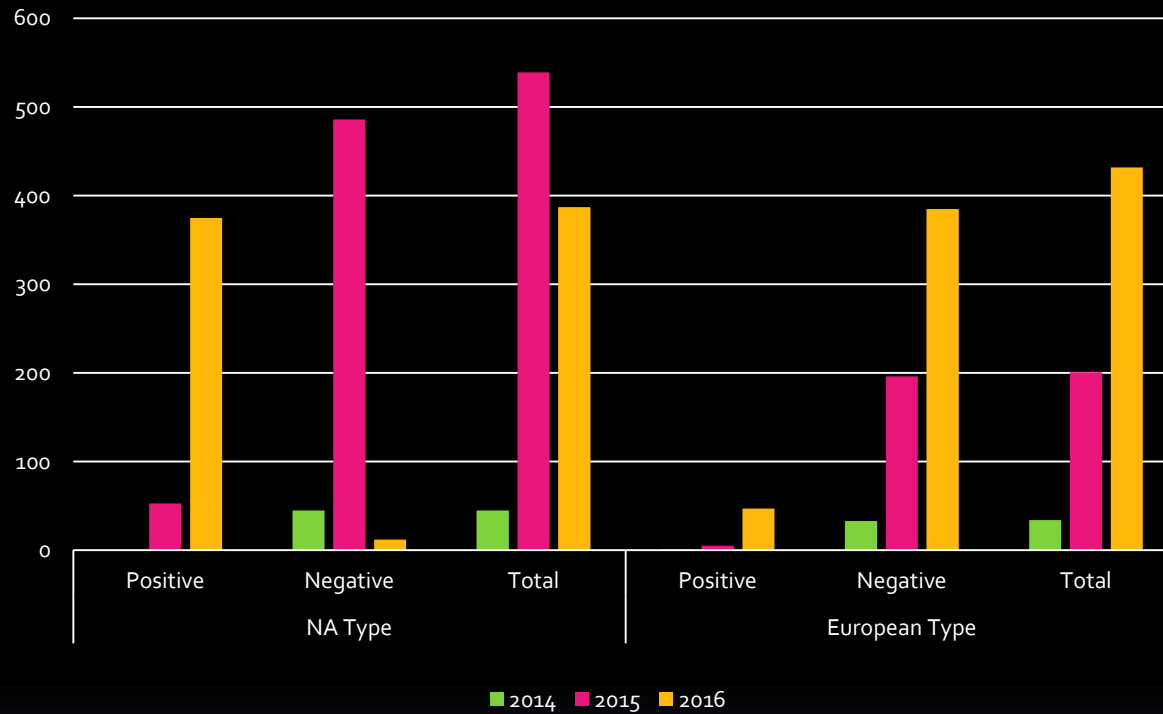


PRRS ELISA

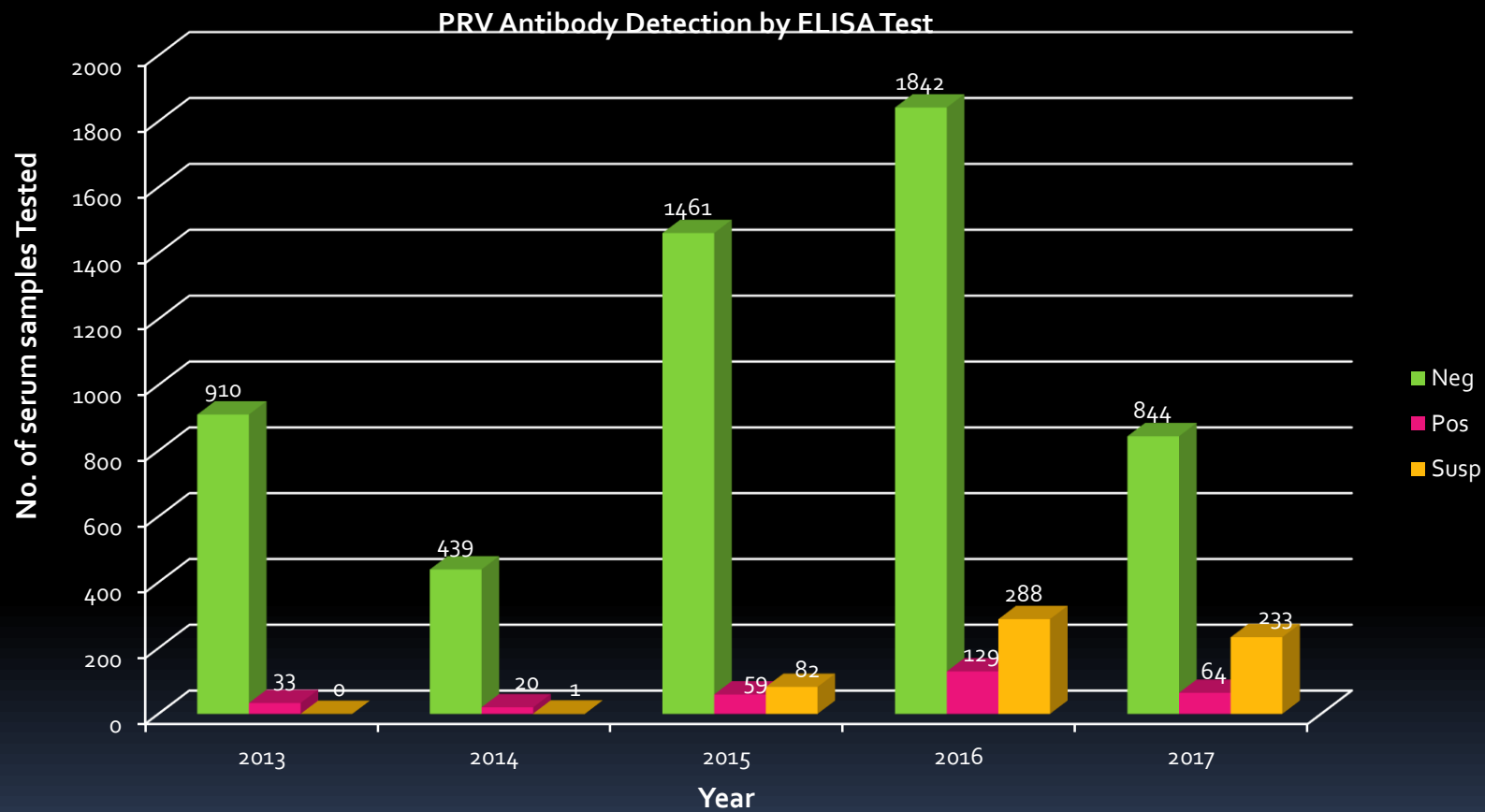


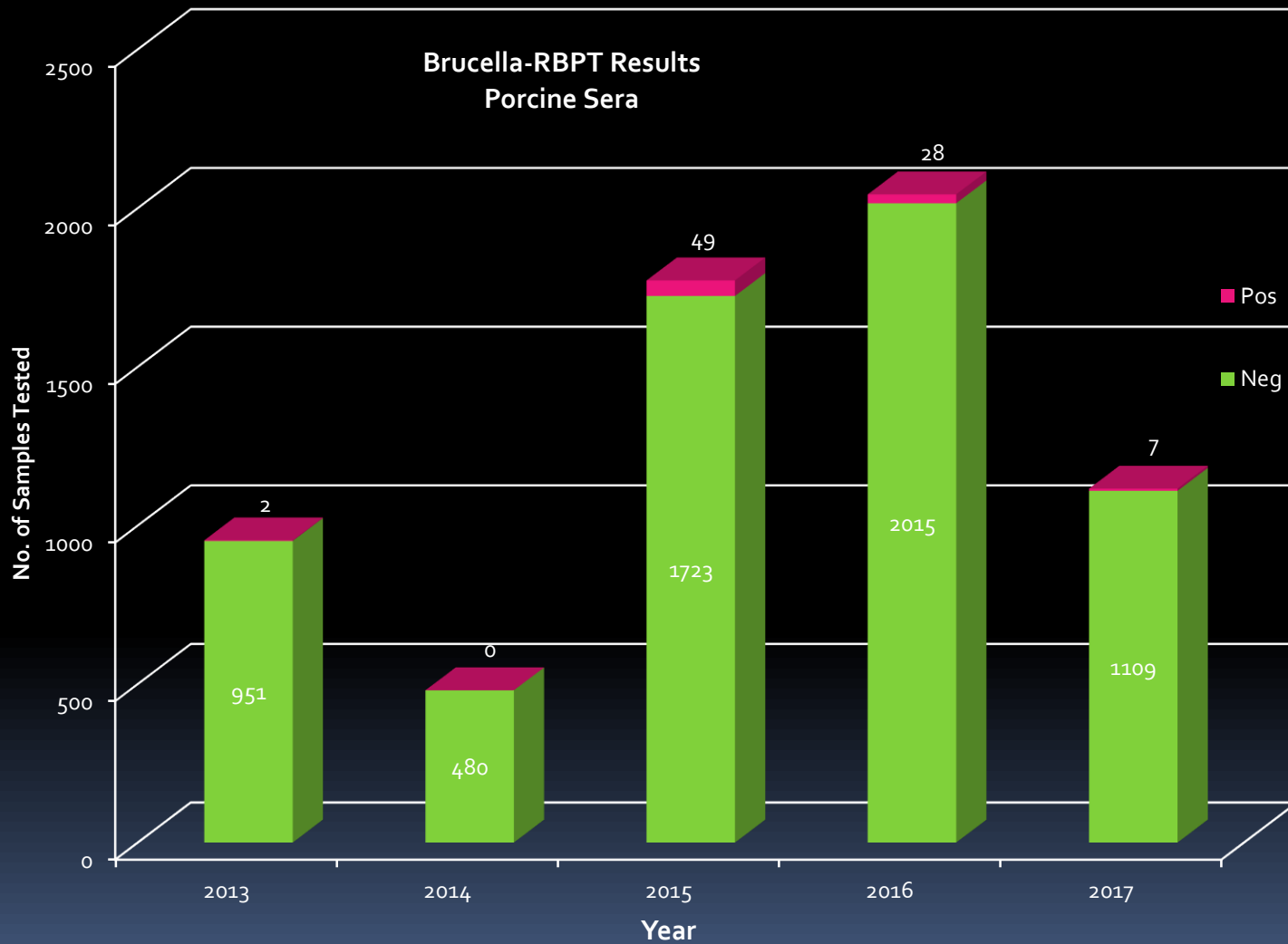
	Positive	Negative	Total
2013	528	744	1272
2014	724	584	1308
2015	873	976	1849
2016	1189	1332	2521
2017	102	53	155

PRRS-RRTPCR

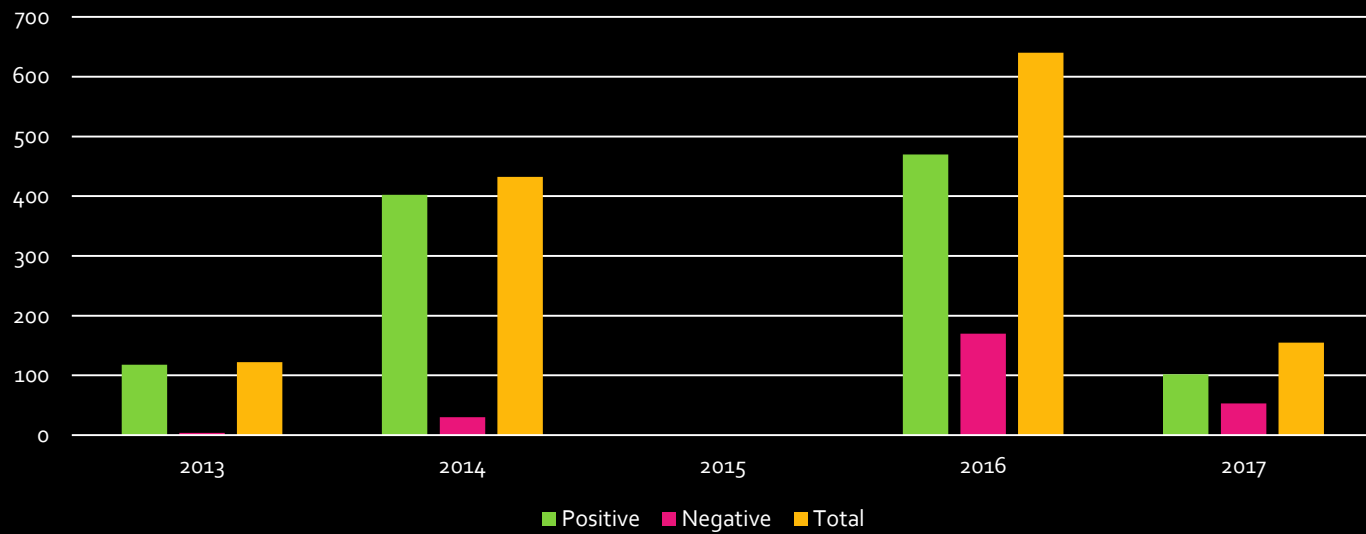


	NA Type			European Type		
	Positive	Negative	Total	Positive	Negative	Total
2014	0	45	45	1	33	34
2015	53	486	539	5	196	201
2016	375	12	387	47	385	432






PCV₂ ELISA



	Positive	Negative	Total
2013	118	4	122
2014	402	30	432
2015			
2016	470	170	640
2017	102	53	155




Observations

- On the farm level, the eradication of Aujeszky's Disease maybe possible due to its continuing low incidence.
 - PRRS has still the highest positivity rate among porcine samples brought to the diagnostic laboratory.
 - The detection of both PRRSV North American strain and PRRSV European strain is on the rise.
 - Surveillance of these diseases must be strengthened to paint a more realistic picture.
 - Utilize laboratory services as a guide for proper intervention measures.
- 



Acknowledgment

- The dedicated and passionate staff of ADDRL-despite many limitations, they give their all to serve our stakeholders;
 - The staff of the Laboratory Disease Investigation and Evaluation Unit of ADDRL, for their adherence to the sanctity of the data/information entrusted to them; making sense of things that may not be important;
 - To our stakeholders, for their continues trust/confidence.
- 



Thank you!

