

**Department of Veterinary Microbiology,  
Vanbandhu College of Veterinary Science and Animal Husbandry,  
NAU, Navsari-396450**

**EDUCATION:**

**Under-Graduate ( B.V.Sc. & A.H. )**

Course	Course title & Credit Hour
VMC-211	General Veterinary Microbiology (1+1)
VMC-221	Veterinary Immunology & Serology (1+1)
VMC-311	Veterinary Bacteriology & Mycology (2+1)

Course	Course title & Credit Hour
VMC - 321	Systematic Veterinary Virology (2+1)
VPB-321	Animal Biotechnology * (2+1)
VLD-421	Veterinary Clinical Chemistry & Lab Diagnosis* (0+1)
VLD-511	Veterinary Lab Diagnosis (0+2)

**Post-Graduate (Courses offered for M.V.Sc. and Ph.D.)**

Course	Course title & Credit Hour
VMC-608	Diagnostics of Infectious Disease (1+2)
VMC-609	Techniques in Microbiology & Immunology (0+3)
VMC-703	Bacterial Genetics (2+1)
VMC-705	Molecular Determinants of Bacterial Pathogenesis (2+1)
VMC-716	Modern Immunotechnology (1+2)
VMC-717	Current Topics in Infection and Immunity (3+0)
VMC-792	Doctoral Seminar -II ( 2 students) (0+1)
VMC-718	Veterinary Microbial Biotechnology (2+1)
VMC-710	Slow Viral Infection and Prions (2+1)
VMC-706	Advances in Virology (2+1)
VMC-791	Doctoral Seminar -1 ( 2 students) (0+1)

Course	Course title & Credit Hour
VMC-704	Microbial Toxin (2+1)
ABT-705	Advances in animal cell culture (2+1)
VMC-715	Advances in immunodiagnostics (1+1)
VMC-604	General virology(2+1)
VMC-607	Vaccinology (2+0)
ABT-704	Trends in vaccinology (3+0)
VMC-699	Master's research (0+12)
VFP-799	Doctoral research (0+10)
VMC-606	Principle of immunology(2+1)
VMC-707	Molecular and genetic aspect of viral pathogenesis (2+1)
VMC 601	Bacteriology-i (3+1)
VMC-714	Advances in virology (2+0)

## TRAINING ORGANIZED

### ASCAD

No	Topic	Department	Veterinary Officers/ Livestock Inspector	Number of Training Organized
1.	Advanced Diagnostic techniques for Animal disease diagnosis	Veterinary Microbiology	Veterinary Officers	2
2.	Laboratory techniques for disease diagnosis	Veterinary Microbiology, Parasitology, Pathology	Veterinary Officers	4
3.	Laboratory techniques for disease diagnosis	Veterinary Microbiology, Parasitology, Pathology	Livestock Inspectors	3
4.	Laboratory Management aspect for Livestock Inspectors	Veterinary Microbiology, Parasitology, Pathology	Livestock Inspectors	1
5.	Disasters and Professional Viral health hazards	Veterinary Public Health	Veterinary Officers	1
6.	Biosecurity measures and disease control	Veterinary Public Health	Veterinary Officers	1
7.	Diagnostic procedures for various mycoses	Veterinary Public Health	Veterinary Officers	1
8.	Professional infectious health hazards during natural calamities	Veterinary Public Health	Veterinary Officers	1

### Special Training Organized

Sr. No	Activity	Date
1	Special Training on Leptospirosis for Veterinary Officers	5 Batches (2012)

### Workshop/ Seminar Organized

Sr. No	Activity	Date
1	One-day Brain-storming workshop on "Role of Veterinarians in Control of Leptospirosis"	15-06-2012
2	One day Technical Seminar on "Strategies, Approach and Preparedness of Veterinarians in Control of Emerging and Re-emerging Zoonoses"	04-01-2015

**RESEARCH ACTIVITIES:**

No	Research Topic	Status	Remarks
1.	Prevalence of Rota virus and enterotoxigenic Escherichia coli infection in neonatal calf diarrhoea in South Gujarat.	Completed	P.G. research
2.	Detection of Bovine Sub-Clinical Mastitis from organized and unorganized farms in & around Navsari.	Completed	Departmental
3.	Comparison of PCR and ELISA for screening of Canine Parvo Virus (CPV) in diarrheal cases of Dogs.	Completed	Departmental
4.	Study of selected pathogenic attributes of <i>Escherichia coli</i> ( E.coli ) isolated from neonatal calf diarrhoea	Completed	Departmental
5.	Microbiological investigation of Neonatal calf diarrhoea with specific reference to detection of Rotavirus	Completed	Departmental
6.	Establishment of Regional Animal Disease Diagnostic Laboratory	On-going	Scheme
7.	Evaluation of oncolytic potential and immune response to Newcastle Disease Virus in mice ( <i>Mus musculus</i> ).	On-going	P.G. research
8.	Sero-epidemiological and Molecular Characterization of Bovine Herpes Virus- 1 (BoHV- 1) in Bovine of Southern Gujarat.	On-going	P.G. research

**DISEASE DIAGNOSIS****Number of Samples processed Under Plan Scheme (2012-2017)**

Year	2012	2013	2014
Microbiological Investigation	808	708	2583
Parasitological Investigation	115	1771	458
Pathological Investigation	602	365	518

## Number of Samples Processed - Microbiology Department

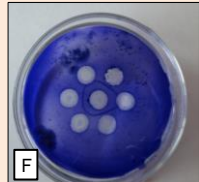
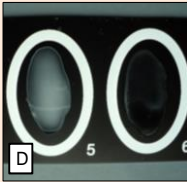
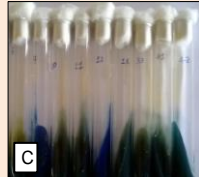
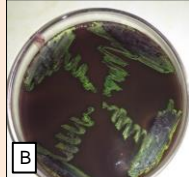
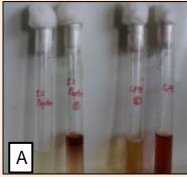
Sample Details / Year	2012	2013	2014	2015
Milk	12	246	22	60
Pus	5	32	7	05
Impression smear	6	18	8	04
organ	8	16	17	07
Blood sample	6	14	20	20
Faecal sample culture	59	52	29	38
Rotavirus	25	10	0	25
Nasal swab / sputum	25	38	86	46
Vaginal swab / uterine flushing / cervical mucus	6	16	3	12
Urine	6	7	4	03
Bile / intestine	3	4	2	00
Blood smear	0	14	20	10
Serum	620	174	2312	3850
Vermi compost	1	0	0	00
Miscellaneous	26	67	53	42
<b>TOTAL</b>	<b>808</b>	<b>708</b>	<b>2583</b>	<b>4122</b>

**Extension Activity :-**

<b>Sr.No.</b>	<b>Activity</b>
1	Krushih Mahotsav
2	Vaccination – H.S., FMD
3	Pashupalan Shibir
4	Delivered phone-in-live programme

**Other Activities :-**

<b>Sr.No.</b>	<b>Activity</b>
1	NSS (2011-12)
2	In-charge college library
3	Biological waste management



## LABORATORY TESTS

- A- Indole & Methyl Red Test  
 B- Metallic sheen of E.coli on EMB agar  
 C- Citrate Utilization test  
 D- Latex Agglutination Test  
 E- Lactophenol Blue Fungal Staining  
 F- Agar Gel Immuno Diffusion test



## Human Resource Development



## For Leptospirosis

## Activities By The Department



- A- Blood Donation Camp  
 B- Delivering Lecture at Krushi Mahotsav  
 C- Celebrating Vanmahotsav  
 D- NSS Camp - Cleanliness Programme  
 E- NSS Camp @ Village  
 F- Mastitis Camp

## Awareness regarding Zoonoses

