



भा.कृ.अनु.प.-राष्ट्रीय खुरपका मुँहपका रोग संस्थान  
(पूर्व भा.कृ.अनु.प.-खुरपका मुँहपका रोग निदेशालय)  
**ICAR- National Institute on Foot and Mouth Disease**  
(Formerly ICAR-Directorate of Foot and Mouth Disease)  
(FAO Reference Center for FMD)  
अंतर्राष्ट्रीय खुरपका मुँहपका रोग केन्द्र  
**International Centre for Foot and Mouth Disease**  
अरुगुल, भुवनेश्वर - 752050, ओडिशा  
Arugul, Bhubaneswar - 752050, Odisha



**Dr R.P. Singh**  
Director

Dated: 5<sup>th</sup> September, 2024

To  
All Officers, District Level  
All State Animal Husbandry Departments/UTs

**SUB: Announcement of 2<sup>nd</sup> level Capacity Building Programme Series for veterinary/Senior Veterinary officers below District level**

Dear Sir/Madam,

**Greeting from ICAR- National Institute on Foot and Mouth Disease, Bhubaneswar!**

You will be happy to know that ICAR-National Institute on Foot and Mouth Disease is going to organize 2nd level of capacity building programme series for control of Foot and Mouth Disease for different states.

The second level of the programme (current programme) is for all Veterinary/Senior Veterinary Officers at the level of hospitals/blocks/taluks. This is being carried out in different phases for different states/UTs etc.

The present communication is therefore meant for all veterinary officers below District level as given in the concept note (attached). **CVOs/DAHOs are requested to forward this communication to all Veterinary/Senior Veterinary Officers working under their Jurisdiction.** CVOs/DAHOs of respective states/UTs may also join as they play very crucial role in FMD vaccination at field level.

Prior registration through the link as given in the table (last page) is mandatory for attending the programme.

**After registering, you will receive a confirmation email containing information about joining the meeting.**

Yours Sincerely,

Rabindra  
Prasad  
Singh

Digitally signed by  
Rabindra Prasad  
Singh  
Date: 2024.09.05  
10:33:23 +05'30'

**(R.P. Singh)**  
Director



## 2<sup>nd</sup> Level Capacity Building Series on

### “Foot & Mouth Disease Elimination with Vaccination”

#### Target audience:

**Veterinary/Senior Veterinary Officers of Respective Animal Husbandry Departments**  
(Veterinary Officers/Senior Veterinary Officers, DAHOs/CVOs)

**Register in advance by clicking the meeting link of your state:**

After registering, you will receive a confirmation email containing information about joining the meeting.



Organized by  
By

**ICAR-National Institute on Foot and Mouth Disease, Bhubaneswar-752050**

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भा.कृ.अनु.प.-राष्ट्रीय खुरपका मुँहपका रोग संस्थान  
(पूर्व भा.कृ.अनु.प.-खुरपका मुँहपका रोग निदेशालय)  
**ICAR- National Institute on Foot and Mouth Disease**  
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अंतरराष्ट्रीय खुरपका मुँहपका रोग केन्द्र

International Centre for Foot and Mouth Disease

अरुगुल, भुवनेश्वर - 752050, ओडिशा

Arugul, Bhubaneswar - 752050, Odisha

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## Concept Note

### Foot & Mouth Disease Elimination with Vaccination

#### Target audience:

**Veterinary/Senior Veterinary Officers of Respective Animal Husbandry Departments**  
(Veterinary Officers/Senior Veterinary Officers, DAHOs/CVOs)

Foot and Mouth Disease (FMD) is the most significant animal disease in India in terms of economic losses and the trade involved. It affects livestock productivity, impacting farmers' livelihoods and the broader agrarian economy. India is affected by three FMD virus serotypes: O, A, and Asia1. Serotype C has not been reported in India since 1995. South African serotypes (SAT-1,2,3) have never been reported in India. India has been actively working to control FMD since 2004, with 100% financial support from Government of India, now. The programme has progressively expanded in terms of regional coverage, ensuring a more comprehensive approach to disease control. The National Animal Disease Control Programme (NADCP) was launched in 2019 by the Hon'ble Prime Minister which included FMD and Brucellosis. This initiative marks a significant commitment by the Indian government to control and eventually eliminate FMD from the country. Subsequently the programme was named as Livestock Health and Disease Control Programme (LHDCP), which also included PPR and classical swine fever as well.

The Department of Animal Husbandry and Dairying (DAHD) has been implementing the FMD control programme with technical support from ICAR institutes, primarily the ICAR-National Institute on Foot & Mouth Disease (ICAR-NIFMD), Bhubaneswar, which is dedicated solely to FMD research and development and knowledge-based services with a Vision statement for "FMD Free Country". Effective vaccination and comprehensive vaccination coverage have led to a reduction in disease incidences in many parts of the country. Even in outbreak scenarios, the severity of the disease has decreased significantly. Effective (vaccination with complete cold chain) and timely vaccination, good vaccination coverage (95% or more), prompt disease reporting, seromonitoring (vaccine effectiveness after vaccination), and serosurveillance (indicator of infection) are important technical elements that aid in FMD control. There are 32 FMD network laboratories across the country working under the guidance/technology and knowledge support of ICAR-NIFMD, that carry out outbreak investigation, FMD diagnosis, seromonitoring, and serosurveillance. The samples for seromonitoring and serosurveillance are collected by state animal husbandry departments and sent to the network

laboratories for testing including ICAR-NIFMD. The results are compiled and communicated to DAHD by ICAR-NIFMD.

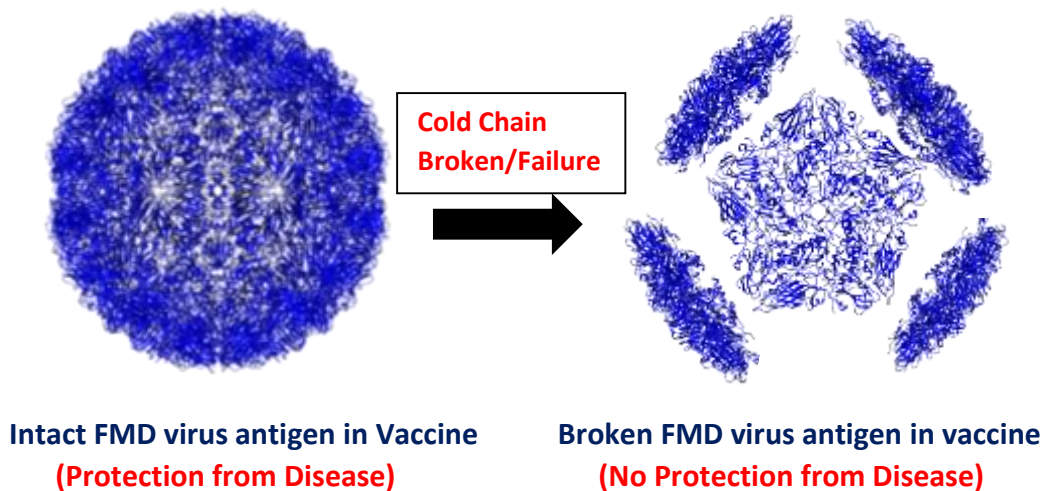
In terms of implementing the control program, FMD vaccines are supplied to state AH departments in a centralized manner by DAHD through outsourced agency. Only quality-approved vaccines, tested by three central laboratories (ICAR-NIFMD, ICAR-IVRI, Bengaluru, CCS-NIAH Baghpat), are supplied to the states. FMD vaccination needs to be carried out biannually (every 6 months interval), cold chain maintenance and vaccination coverage have a major impact on FMD vaccine effectiveness in the field. The vaccine's effectiveness can be assessed directly by observing the declining trend of FMD outbreaks and reduced severity in case of any outbreak. Indirectly, it can be assessed by FMD seromonitoring, which indicates the level of seroconversion an important indicator for herd immunity and FMD serosurveillance, which suggests a decline in NSP antibody prevalence—an underlying indicator of reduced FMD virus circulation.

**From the FMD Seromonitoring data & series of interactions at different platforms (state level and national level) it has been experienced that , there is a huge gap in the performance of the different states when it comes to the effective implementation of FMD control programme with a final vision of “FMD Free India”. The important gaps include management of a flawless cold chain for vaccine storage and transportation till it is inoculated in the animal, correct and timely sampling for sero-monitoring before and after vaccination, correct and timely sampling for sero-surveillance, deficiencies in effective disease reporting system & prompt action on disease prevention & control & poor stakeholders involvement etc. It has also been observed that those states which have prompt disease reporting, effectively implement the disease control programme.**

On the other hands, some of the states have performed very efficiently in FMD control and will have very good scope for FMD free compartments/zones in future. Learnings from these states for good practices like last mile cold chain management (Andhra Pradesh, Karnataka), strong veterinary services (Haryana), effective animal movement with check points (Maharashtra) and combing vaccination strategies (Karnataka) are to be encouraged through such platforms for the benefit of all other states . It has also been experienced from nationwide vaccine efficacy/sero-monitoring data that the states which have robust vaccine cold chain infrastructure till last mile of vaccination performed much better and resulted in high herd immunity in short time with disease reduction as compared to the states who are lagging behind in such a cold chain infrastructure. Stakeholder's involvement and awareness (involvement of livestock farming community) is key to success in such efforts. There is huge possibility of learning and cross learning from each other for very effective implementation of the FMD control programme so as to realize our dream of “FMD Free India”. FMD being a disease

**“The FMD Vaccine Quality and Quantity Is Now Sufficient to Eliminate the Disease. It Is Time Now to Look in to the **Quality and Quantity of Realistic Vaccination at the Ground Level** with Stakeholder's Involvement”**

with strong transboundary nature, does not restrict with specific geography (state or the country). Therefore collective efforts are required to achieve the objectives. The results which may be achieved on disease free compartments/zones may not be sustainable in longer run until entire country becomes free from disease.



In view of this the current programme will act as a catalyst and refresher course for effective implementation of FMD control in the country. The likely participants of this programme will be all veterinary officers/Senior Veterinary Officers/DAHOs/CVOs of respective state animal husbandry departments as per schedule across the country who implement FMD vaccine and vaccination including last mile vaccine cold chain in the field. This is 2<sup>nd</sup> level of the programme for Veterinary Officers of Hospital/Block/Taluk level. DAHOs/CVOs of respective states who participated/plan to participate the 1<sup>st</sup> level of Programme (on 11.09.2024) may also join this as they play crucial role in FMD Vaccination disease control under field conditions.

### **Programme Schedule**

<b>Time</b>	<b>Topic of Presentation and Discussion</b>	<b>Resource Person</b>
10.00 AM	Welcome address & a brief about the Programme	Dr R.P. Singh, Director ICAR-NIFMD, Bhubaneswar
10.15 AM	Opening Remarks	ICAR-NIFMD and DAHD Officials
11.00 AM	<ul style="list-style-type: none"><li>• Sharing of Good Practices for effective FMD vaccination and its Impact</li><li>• Management of last-mile cold chain for FMD vaccination.</li><li>• Mechanism for animal movement control</li></ul>	<ul style="list-style-type: none"><li>• PI, LHDCP, ICAR-National Institute on Foot and Mouth Disease, Bhubaneswar</li><li>• PI FMD Laboratory Network and LHDCP Nodal officer, Andhra Pradesh</li><li>• PI FMD Laboratory Network and LHDCP Nodal officer, Karnataka</li><li>• PI FMD Laboratory Network and LHDCP Nodal officer, Haryana</li><li>• PI FMD Laboratory Network and LHDCP Nodal officer, Maharashtra</li></ul>
12.00 PM	FMD Outbreak prevention, biosecurity, emergency response to outbreak, ring vaccination and other contingency measures including emergency vaccine banks	Dr J.K. Mohapatra, Principal scientist, ICAR-NIFMD
12.30 PM	<ul style="list-style-type: none"><li>• FMD Sero-monitoring and its significance in assessment of Vaccine efficacy</li><li>• FMD Sero-surveillance/Sentinel surveillance- An indicator of FMD Infection and its significance</li></ul>	Dr S. Saravanan, Principal Scientist, ICAR-NIFMD  Dr Manoranjan Rout, Senior scientist, ICAR-NIFMD
1.00 PM	Closing Remarks	ICAR-NIFMD & DAHD Officials
1.20 PM	Vote of thanks	Dr Manoranjan Rout

**Please register under your State with the link given below in table**

**After registering, you will receive a confirmation email containing information about joining the meeting.**



**Time: 10 AM**

**Please register through link of your respective State/UT on respective dates.**

After registering, you will receive a confirmation email containing information about joining the meeting.

Sl No	States/UTs	Date and Time of Programme	Click Link for Registration
1.	Uttar Pradesh	12.09.2024, 10 AM	<a href="https://us06web.zoom.us/join/https://us06web.zoom.us/meeting/register/tZYpdu2qrzwGdE3NXI_0GYFfim7RBw-4qPA">https://us06web.zoom.us/meeting/register/tZYpdu2qrzwGdE3NXI_0GYFfim7RBw-4qPA</a>
2.	Bihar	13.09.2024, 10 AM	<a href="https://us06web.zoom.us/join/https://us06web.zoom.us/meeting/register/tZMvdOqogDHtwEZlj0-C5XeJRDb-bBwocE">https://us06web.zoom.us/meeting/register/tZMvdOqogDHtwEZlj0-C5XeJRDb-bBwocE</a>
3.	West Bengal & Tripura	17.09.2024, 10 AM	<a href="https://us06web.zoom.us/join/https://us06web.zoom.us/meeting/register/tZEtcuqhrTgo9ehKZaBLZfSPaV2EidCD1ST">https://us06web.zoom.us/meeting/register/tZEtcuqhrTgo9ehKZaBLZfSPaV2EidCD1ST</a>
4.	Gujarat	18.09.2024, 10 AM	<a href="https://us06web.zoom.us/join/https://us06web.zoom.us/meeting/register/tZ0vcOqgrzou9R8Td3BfqEz3kKSDZor9wuC">https://us06web.zoom.us/meeting/register/tZ0vcOqgrzou9R8Td3BfqEz3kKSDZor9wuC</a>
5.	Rajasthan	19.09.2024, 10 AM	<a href="https://us06web.zoom.us/join/https://us06web.zoom.us/meeting/register/tZUrce2vqDksG93Ohwcu_q9xdpiarvsyEXOE">https://us06web.zoom.us/meeting/register/tZUrce2vqDksG93Ohwcu_q9xdpiarvsyEXOE</a>
6.	Madhya Pradesh & Chhattisgarh	20.09.2024, 10 AM	<a href="https://us06web.zoom.us/join/https://us06web.zoom.us/meeting/register/tZYtf-Gtpj8vGNaiN1aeFIrem_Wkjal3XX">https://us06web.zoom.us/meeting/register/tZYtf-Gtpj8vGNaiN1aeFIrem_Wkjal3XX</a>
7.	J & K, Laddakh, Himachal Pradesh, Uttarakhand	23.09.2024, 10 AM	<a href="https://us06web.zoom.us/join/https://us06web.zoom.us/meeting/register/tZclfuGopz0EtMZlrefhbHijDxJvZz-xKul">https://us06web.zoom.us/meeting/register/tZclfuGopz0EtMZlrefhbHijDxJvZz-xKul</a>
8.	Odisha & Jharkhand	24.09.2024, 10 AM	<a href="https://us06web.zoom.us/join/https://us06web.zoom.us/meeting/register/tZctfuGrpjotHNHXL7ZmXaxcMLCf9azR0eyK">https://us06web.zoom.us/meeting/register/tZctfuGrpjotHNHXL7ZmXaxcMLCf9azR0eyK</a>
9.	Manipur, Mizoram, Arunachal Pradesh, Meghalaya, Nagaland Sikkim, Assam	25.09.2024, 10 AM	<a href="https://us06web.zoom.us/join/https://us06web.zoom.us/meeting/register/tZMscOiqpj4tGdCrpvxFN1QeB8fWZUvF1pyn">https://us06web.zoom.us/meeting/register/tZMscOiqpj4tGdCrpvxFN1QeB8fWZUvF1pyn</a>
10.	Maharashtra & Goa	26.09.2024, 10 AM	<a href="https://us06web.zoom.us/join/https://us06web.zoom.us/meeting/register/tZlscCopzMvGtzGEUsg1aheC-37Wdnz84L">https://us06web.zoom.us/meeting/register/tZlscCopzMvGtzGEUsg1aheC-37Wdnz84L</a>
11.	Punjab, Haryana & Delhi	27.09.2024, 10 AM	<a href="https://us06web.zoom.us/join/https://us06web.zoom.us/meeting/register/tZwoceuuqT4rHNPKr6vPm65WvDE4QnrXh36p">https://us06web.zoom.us/meeting/register/tZwoceuuqT4rHNPKr6vPm65WvDE4QnrXh36p</a>
12.	Telangana & Andhra Pradesh, Karnataka	30.09.2024, 10 AM	<a href="https://us06web.zoom.us/join/https://us06web.zoom.us/meeting/register/tZUpduqrT8qGdatyqNONxAHSLfDS5r8uGmU">https://us06web.zoom.us/meeting/register/tZUpduqrT8qGdatyqNONxAHSLfDS5r8uGmU</a>
13.	Kerala, Tamil Nadu, A&N & Puducherry	01.10.2024, 10 AM	<a href="https://us06web.zoom.us/join/https://us06web.zoom.us/meeting/register/tZYtce-grDMjGt0tWAVuOjd8bj9Lf03Rrv8P">https://us06web.zoom.us/meeting/register/tZYtce-grDMjGt0tWAVuOjd8bj9Lf03Rrv8P</a>