



# FMD Situation and its Prevention & Control China

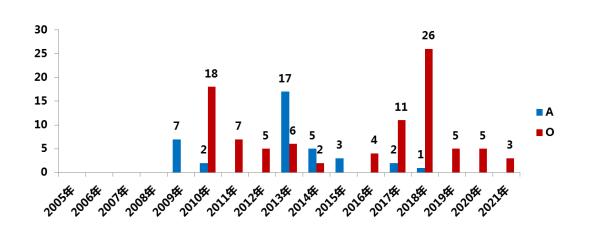
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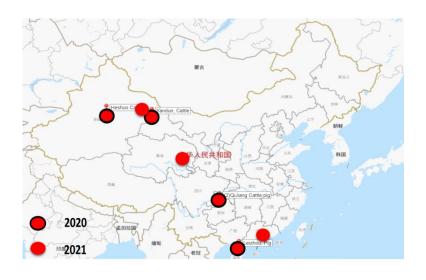
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# FMD situation in 2021

### Temporal and Spatial distribution





### Details of FMD outbreaks in China in 2021

Report Date	Туре	Species	Susceptible	Cases	Deaths	Destory	Location	Province	Strain
29/01	0	Cattle	52	37	0	52	Hami, Xinjiang	XINJIANG	Ind-2001
22/03	0	Pig	33	4	0	33	Huizhou	GUANGDONG	CATHAY
31/10	0	Cattle	41	40	0	41	Zeku, Qinghai	QINGHAI	Ind-2001

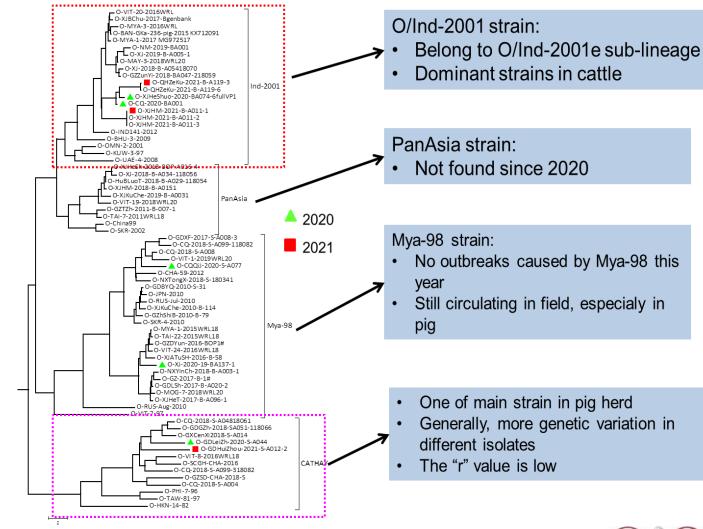




# FMD situation in 2021

### Epidemiological studies

- Type A is not detected since 2019
- Number of clinical cases is decreasing
- O/Ind-2001 is still mainly circulating
- Multiple strains (O/Ind-2001, O/Mya-98,
  O/CATHAY and A/Sea-97) are circulating
- A/Sea-97 strain detected in 2021 in active surveillance on the southwest border







# Key FMD Prevention and Control strategies

### The Activities in 2021

Vaccination and PVM

Animal	Serum	Up to standard	Qualification rate	
Pig	926807	815878	88.03%	
Cattle	552242	499220	90.40%	
Sheep/Goat	626681	546373	87.19%	
total	2105730	1861471	88.40%	





## Vaccine matching and animal challenge test

Field isolate	Lineage	Animal	Vaccine strain	Vaccine strain
rieiu isolate		Allilliai	O/BY/2010	Re-O
2021-008	Mya-98	pig	N	М
2021-A011	Ind-2001	cattle	М	М
2021-A052	CATHAY	pig	М	М
2021-021	CATHAY	pig	N	nd
2020-A136	Ind-2001	cattle	M	М

Name of Vaccine strain	Name of Challenge strain	Result	
Re-O (vaccine strain)	O /Mars 00	10/10 protective	
Re-O/17002 (alternative vaccine strain)	O/Mya-98 (O/2021008)	9/(10-1) protective	

# Key FMD Prevention and Control strategies

### The Activities in 2021

Surveillance

### FMDRL participates in the national surveillance,

- ✓ Sampling and testing in pig slaughterhouses from 12 provinces
- ✓ FMD surveillance in northeast of China
- ✓ FMD surveillance in northwest of China
- ✓ FMD surveillance around border areas in southwest of China
- ✓ Routine monitoring in FMD free zone with vaccination
- Training
- ✓ One international training on TADs
- ✓ 2 time nationwide training
- √ 14 times local training
- PTS-2021
- ✓ FMDV typing QRT-PCR
- √ 35 laboratories invited







### 农业农村部文件

农牧发[2021]11号

农业农村部关于印发《国家动物疫病监测与 流行病学调查计划(2021—2025年)》的通知

各省、自治区、直辖市及计划单列市农业农村(农牧、畜牧兽医)厅 (局、委),新疆生产建设兵团农业农村局,部属有关事业单位,各 有关单位。

为做好非洲猪瘟等动物疫病防控,持续加强监测和流行病当 调查工作,我部组织制定了《国家动物疫病监测与流行病学调查计 划(2021—2025年)》,现印发你们,请遵照执行。

农业农村部

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# Key FMD Prevention and Control strategies

- Key activities planned in 2022
  - Diagnosis and analysis on FMDV
  - Compulsory vaccination
  - ✓ vaccination against FMD type O and/or A for all cattle, sheep, camels and deer
  - ✓ vaccinated with type O FMD for all pigs, and type A FMD based on the risk evaluation results
  - ✓ Pushing the policy of "vaccinate first, pay later"
  - Surveillance and PVM
  - Prevention and control by regions
  - Control jointly with other major animal diseases(ASF, LSD...)

# 农业农村部关于印发《国家动物疫病强制免疫指导意见(2022—2025年)》的通知

发布时间: 2022年01月07日

字体: [大中小]

各省、自治区、直辖市及计划单列市农业农村(农牧)、畜牧兽医厅(局、委),新疆生产建设兵团农业农村局,部属有关事业单位: 为切实做好全国动物疫病强制免疫工作,根据《中华人民共和国动物防疫法》规定,结合当前动物防疫实际,我部制定了《国家动物疫病强制免疫指导意见(2022—2025年)》。现印发你们,请遵照执行。

> 农业农村部 2022年1月4日







# Main challenges and recommended solution

- Complex FMDV epidemic strains ← epidemiological studies and differential diagnosis
- Long-distance transport of animals ←prevention and control by regions
- Immune "short board" (especially in backyard) ← booster immunization
- Risk of introduction of foreign FMDV strains ← a collaborative response for control
- Pork prices falling-prevention and control costs may be reduced ←strengthen publicity
- Local veterinary teams are poor ←training; policy and financial support
- The impact of COVID-19 ←work together: one world, one health







# Thank You