



Food and Agriculture  
Organization of the  
United Nations



European  
Commission



43<sup>rd</sup> General Session of the EuFMD

# Report on the status of FMD antigen and vaccine banks in the European region and neighbourhood

Kiril KRSTEVSKI, EuFMD

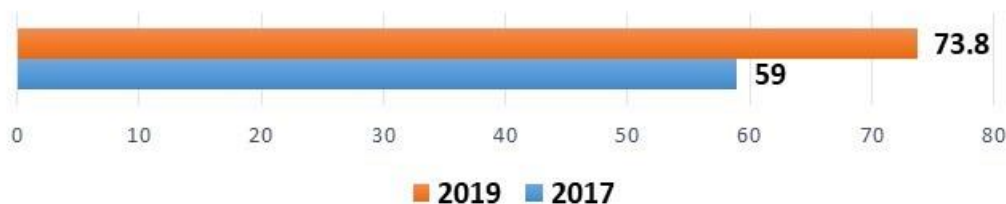


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### Background

- **March 2019** EuFMD circulated a questionnaire to all 39 EuFMD Member States and 3 countries from the European neighborhood
- **31 responses** received till publishing (30 EuFMD MS + 1 country from the European neighbourhood) ; and 1 more afterwards

Overall response rate (%)



European Commission for the Control of Foot-and-Mouth Disease



Questionnaire on readily-available stocks of formulated vaccine and/or inactivated antigen for emergency use against FMD and other transboundary animal diseases in EuFMD member countries and the European neighbourhood

Please complete in type or in block capitals.

Please address all replies by e-mail: [Kiril.Krstevski@fao.org](mailto:Kiril.Krstevski@fao.org)

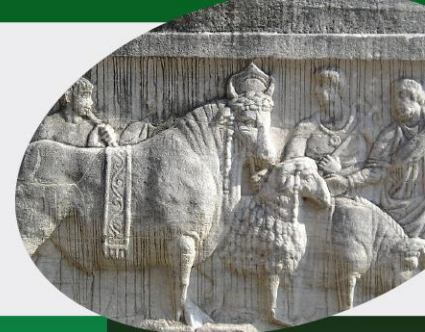
Please return no later than **8<sup>th</sup> April 2019**

Country:

#### NOTES

- The information provided will form the basis of the presentation to European CVOs to be made at the 43<sup>rd</sup> General Session of the EuFMD Commission, 17-18<sup>th</sup> April 2019. Specific, potentially sensitive information on vaccine/inactivated antigen stocks will be summarized separately and it is NOT expected that the information will be made publicly available.





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### Summary of the survey

- **91%** of respondent countries **include emergency vaccination** in their FMD contingency plans (same as 2017)
- **89%** of these countries indicated that **have mechanism to support decision making** in relation to **whether to proceed with emergency vaccination and vaccination strategy**:
  - subject matter expert committees will support the decision making
  - models are used for this purpose (increased number compared to 2017)



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### Summary of the survey

- **The most important constraints** on the capacity to rapidly **implement an emergency vaccination**:
  - sourcing a suitable human resource pool to conduct vaccination
  - management of vaccinated animals, including post-vaccination monitoring and surveillance
  - biosecurity protocols and property-level risk assessment, including pre-vaccination surveillance.



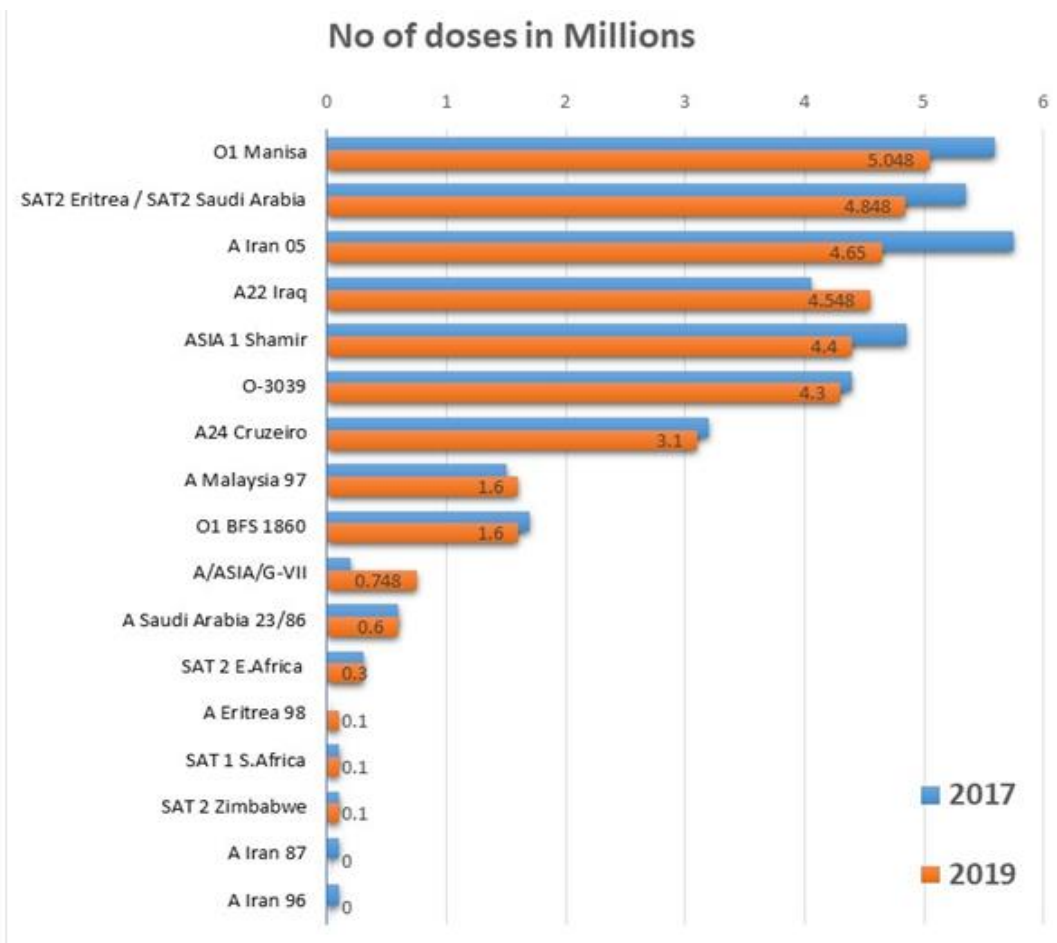
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### Summary of the survey

Approximately **39 002 000 doses**  
across **5 serotypes** and **15**  
**antigens** are held (**NB:** Excluding  
EU bank)

No significant change in the total  
of antigen stocks held since 2017  
(38 mil.)

*NB: Results from 1 country are not presented on the chart  
because no data on vaccine strains was provided*





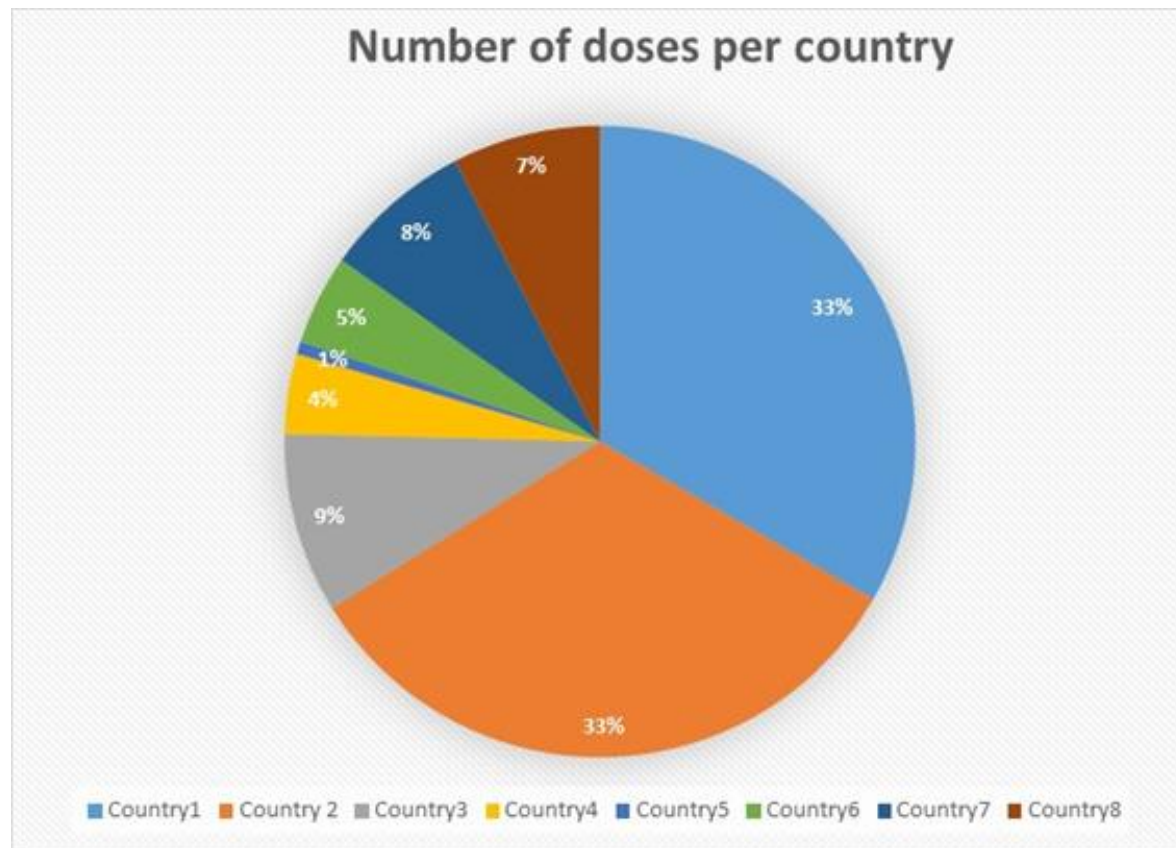
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### Who holds FMD antigen?

**8 EuFMD Member States**  
(5 EU MS; 3 non-EU MS)

Commercial contract      8  
with third party supplier

**66 % of all antigen doses  
are held by 2 countries**

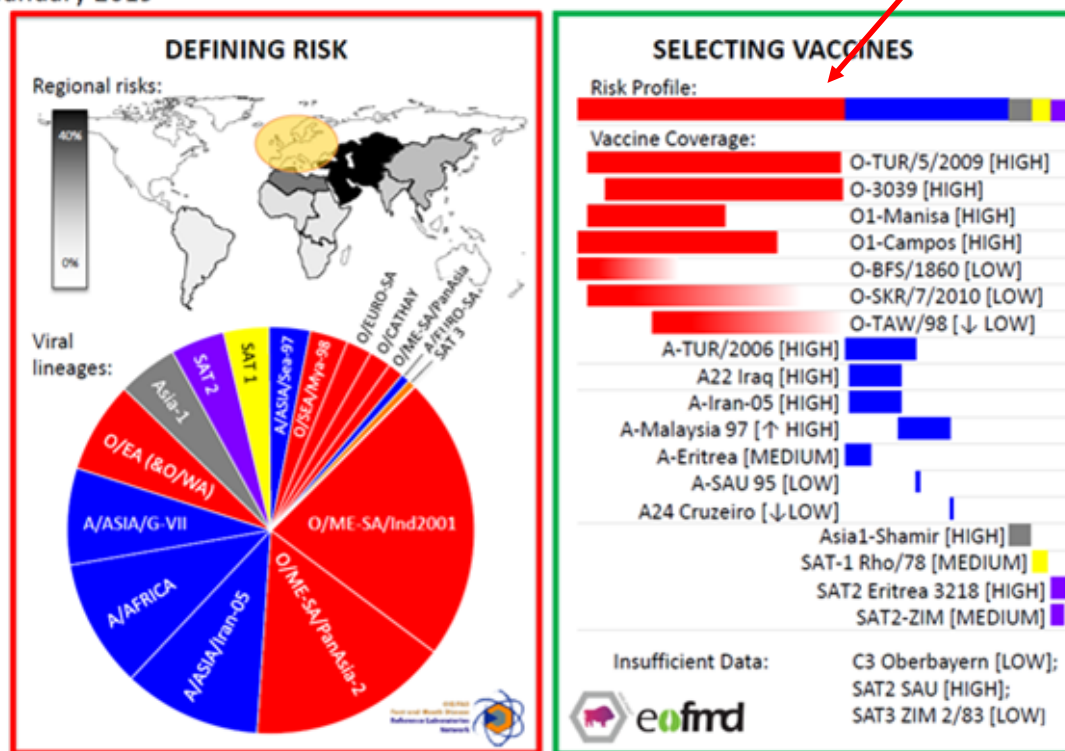




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### RESULTS FROM THE EuFMD and WRLFMD PRAGMATIST TOOL FOR RISK BASED DECISIONS (January 2019)

January 2019



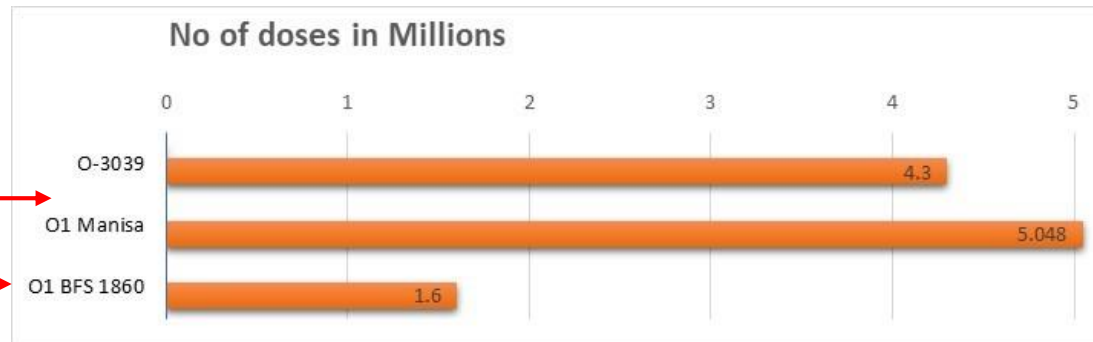
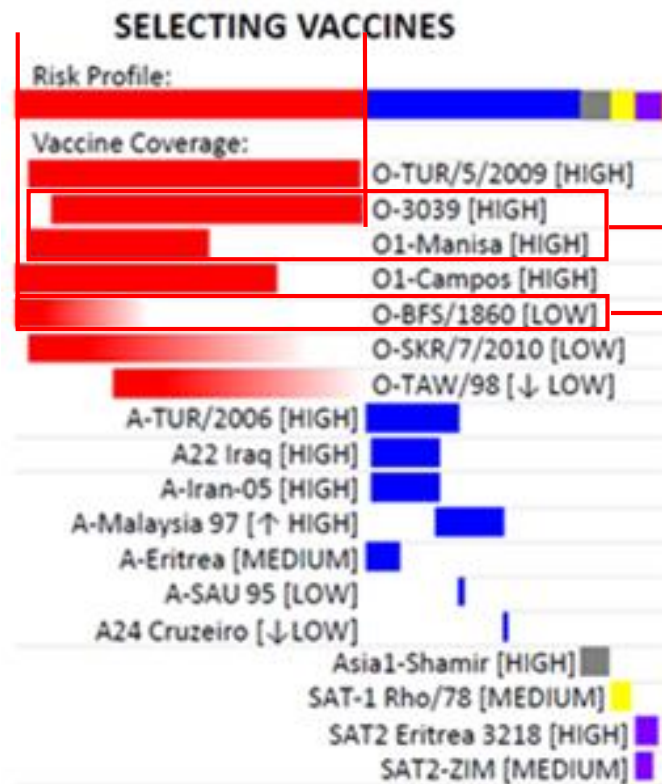
NB: Analyses uses best available data, however there are gaps in surveillance and vaccine coverage data

[www.pirbright.ac.uk](http://www.pirbright.ac.uk)



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### Evaluation of the antigens held in relation to the risk profile (recent PRAGMATIST results)



**O-3039 and O-Manisa would cover most of the risk**

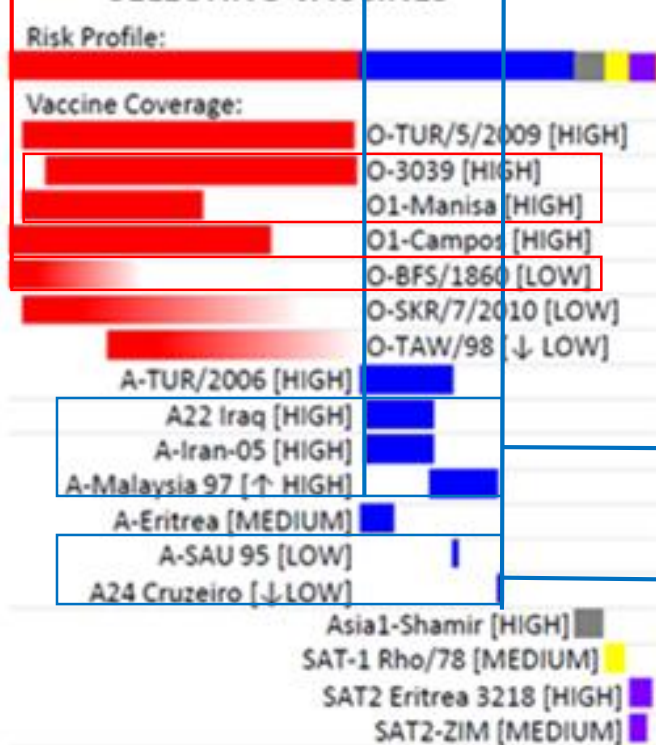
**However:**

**O1-Manisa is not enough if held alone**

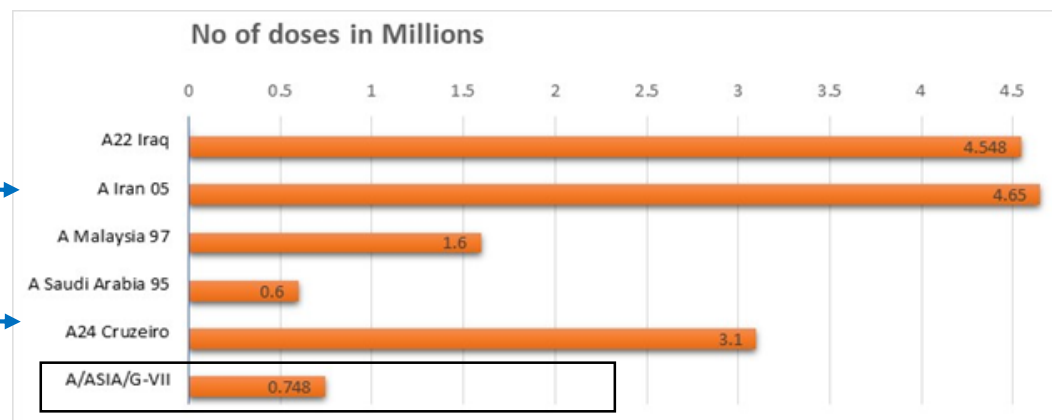


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### SELECTING VACCINES



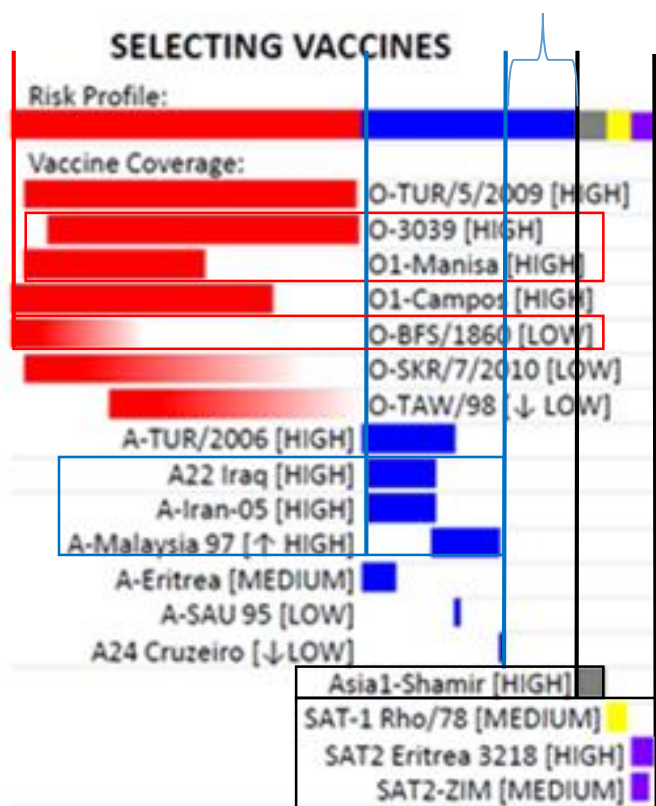
**A-22 and A-Iran-05 are not enough  
without A-Malaysia 97 and A G-VII!**



**A/ASIA/G-VII is not included in the output**

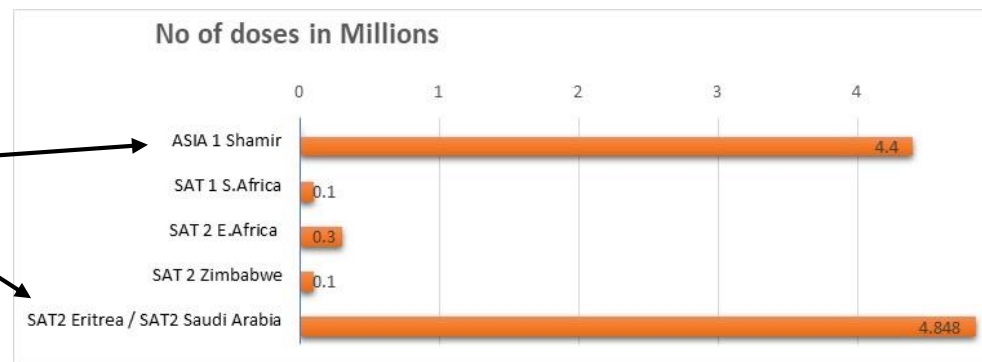


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**ASIA 1 Shamir and SAT 2 Eritrea cover most of the risk, well represented in national antigen holdings**

**However, SAT-1 only by one country**





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### Overview of antigens held by country

A-22 and A-Iran-05 are not enough  
without A-Malaysia 97 and A G-VII



A-22 and A-Iran-05 cover the  
same part of the risk, one  
would be sufficient



O1-Manisa is not  
enough if held alone!

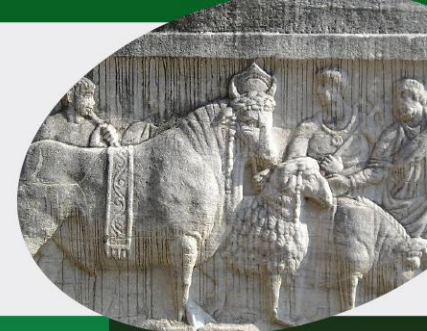


	O-3039	O1 Manisa	A Iran 05	A22 Iraq	A Malaysia 97	A/ASIA/G-VII	ASIA 1 Shamir	SAT2 Eritrea
Country 1								
Country 2								
Country 3								
Country 4								
Country 5								
Country 6								
Country 7								
Country 8								
	IN the vaccine bank							
	NOT in the bank							
	O BFS	A Saudi Arabia 23/86	A Eritrea 98	A24 Cruzeiro	SAT 1 S.Africa	SAT 2 E.Africa	SAT 2 Zimbabwe	
Country 1								
Country 2								
Country 3								
Country 4								
Country 5								
Country 6								
Country 7								
Country 8								



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- **90%** of respondent countries indicated continued interest in, or joining **vaccination network**.
- **Priority discussion topics include:**
  - **Decision making** on vaccination strategies
  - **Operational planning for FMD emergency vaccination programs**
  - **Vaccinated animal management policies**



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### National vaccine banks or other arrangements (commercial contract) for the supply of vaccines for emergency use for other TADs

- **6 countries** (3 national banks and 3 with commercial contracts)

Transboundary animal disease	Number of doses	Number of countries that hold vacc.
Bluetongue	3,000,000	1
Classical swine fever	2,960,000	3
Lumpy skin disease	750,000	2
Rabies	530,000	3
Rift Valley Fever	25,000	1



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### Conclusions

- Investment in antigen banks in Europe remain significant:  
**39, 002, 000 doses, 5 serotypes, 15 antigens.**
- Results from the PRAGMATIST tool can be used to determine the extent to which national antigen holdings sufficiently cover against exposure to risk.
- **Contingency plans** and **operational capacity** to implement **emergency vaccination** is a critical component of FMD emergency preparedness.



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Thank you for your attention