

Intelligence Solutions: surveillance for emerging disease and collaborative working with government and industry



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What to do about a non-notifiable emerging disease?

Government is looking at better ways of gathering, sharing and using intelligence to inform animal health risks in the future.

Not simply disease surveillance or PMIs.

Cannot rely on unofficial reports – we need a combination



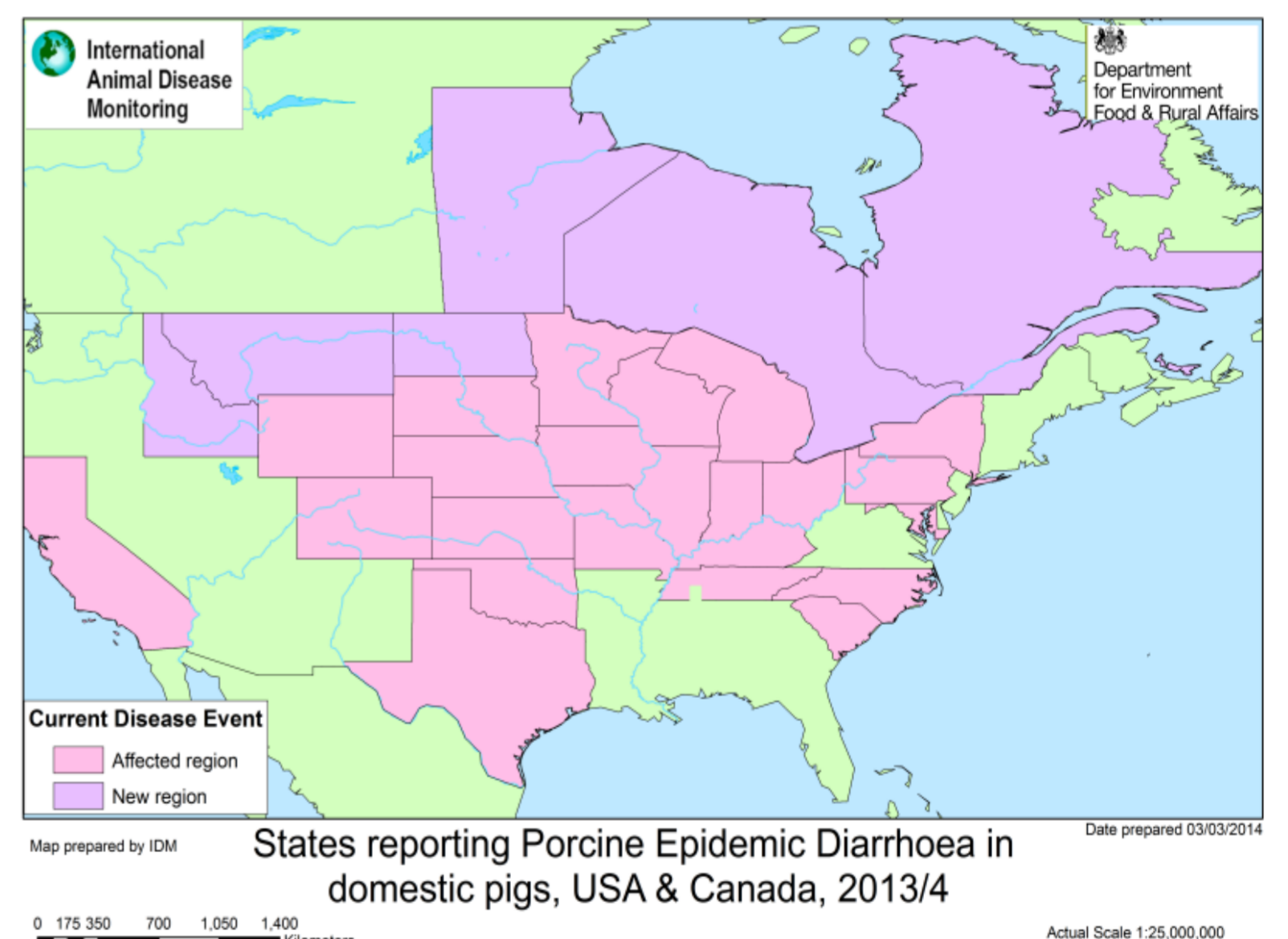
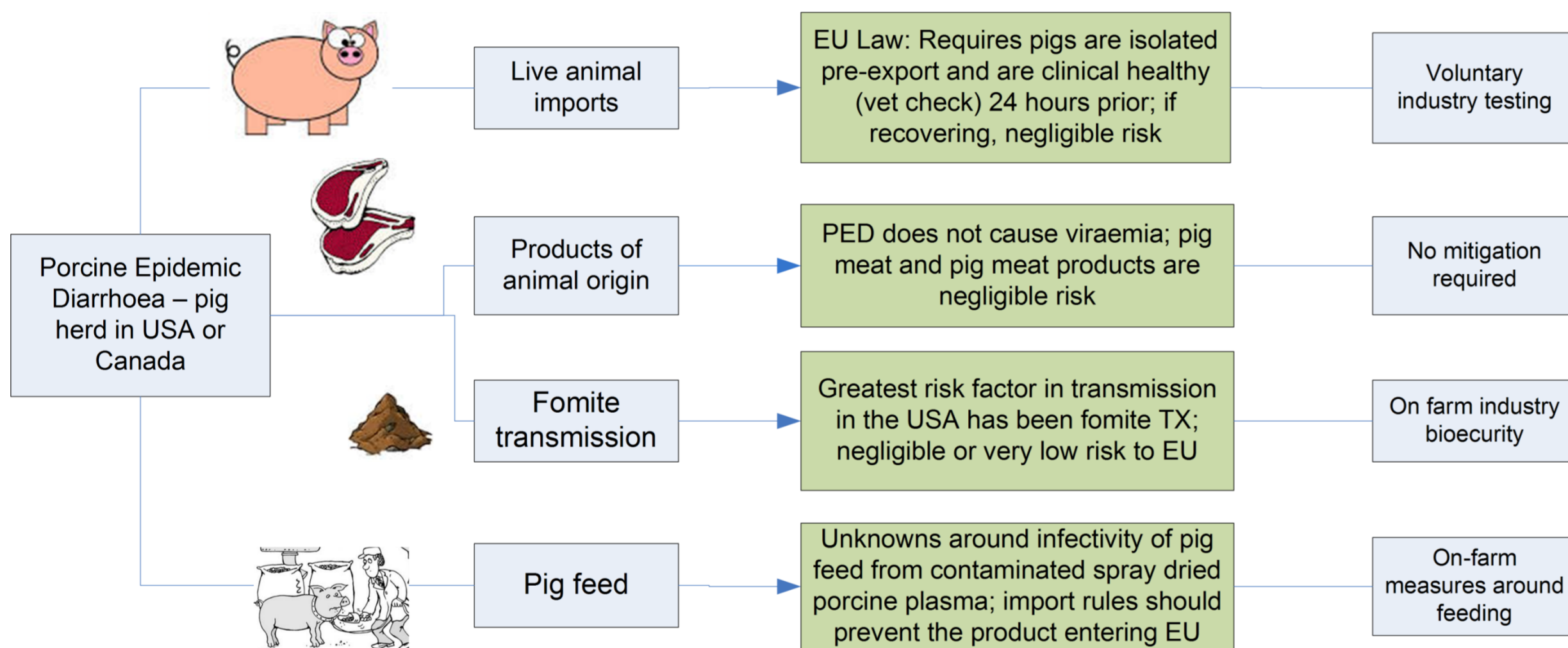
ProMed

The Pig Site



Recognising the importance of sharing intelligence between EU, GOV, industry and academia;

Data are held across different sectors for different reasons – shared access International Disease Monitoring and risk assessment – share with industry Horizon Scanning of unofficial disease reports as a new way of working



Reliance on industry surveillance for first signs of a non-notifiable disease – but what about notifiable diseases?

Law requires all suspicions of notifiable disease to be reported to authorities. Some (ltd) testing may be carried out by private vets
Gov interaction with EU and other MSs on trade issues is imperative to maintain UK's ability to trade

AHVLA Species Group and Defra Core Group discussions allow industry and expert interface

Investigating new ways of sharing information: social networks, blogs: analysing background noise of speculation or inconsistent language

Department for Environment, Food and Rural Affairs
Veterinary & Science Policy Advice
International Disease Monitoring
Reference: VIT11/200 PED in USA
Date: 24/07/2013

Porcine Epidemic Diarrhoea in USA Preliminary Outbreak Assessment

Note: Defra's International Disease Monitoring (IDM) team monitors outbreaks of high impact diseases around the world. Porcine Epidemic Diarrhoea (PED) is not notifiable but nevertheless increases in pathogenicity of previously low impact diseases are of concern to the UK.

1 Disease Report

The USA has reported test results of samples going back to mid-April 2013 detecting a highly pathogenic strain of Porcine Epidemic Diarrhoea (PED) in over 340 pig farms in multiple States causing high mortality in mainly piglets, and also resulting in clinical cases in adult sows and fattening pigs (APHIS, 2013; KSU, 2013; see map). This number of farms is equivalent to less than 1% of the national herd.

The strain involved is closely related to one which emerged in China in 2010 and which has caused high mortality in piglets. More than 10 Chinese provinces were involved and more than 1 million piglets died on farms where mortality rate was as much as 80-100% in many herds, despite vaccination (Sun, et al., 2012).



Sequencing indicated the virus belonged to a new cluster of strains and now this same strain appears to be present in the USA. PED has not been observed before in North America and therefore this is appearing in naive herds, with no natural immunological protection and causing high mortality, hence it is of concern.

Any thoughts or ideas are welcome:
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