

Monitoring

Animal Health

Pigs

Highlights Report, Second Half 2015

Trends in monitoring pig health

In the second half of 2015, GD Animal Health received fewer submissions of pigs for pathological examination than in the second half of 2014. However, the number of submissions is comparable to earlier years. The six-monthly monitoring report shows that about half of all necropsy cases concern intestinal or bronchial diseases. The majority of necropsies were due to intestinal diseases, the most common of which was *E. coli*-enterotoxigenesis. Infections caused by *Streptococcus suis* were also common.

The Veekijker (veterinary helpdesk) for pigs received a similar number of questions as in the second half of 2014. These questions are classified into questions on specific illnesses and questions on farm health issues. As far

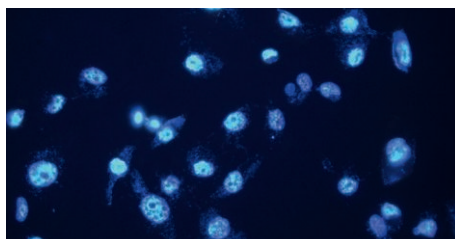
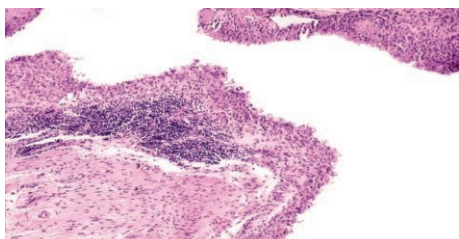
as diseases and pathogens were concerned, most of the questions were about PED, though fewer than in the first six months. Second on the list was *Salmonella*, once again including many questions on tackling infections in finishers and weaned piglets. The percentage of questions concerning PRRS has risen slightly again, but remained below the long-term average. With regard to general health issues, most questions concerned lameness, even more than ever before. Eastern European countries, and the Baltic states in particular, once again suffered from many outbreaks of African swine fever, mainly in wild boar but also in domestic pigs. This continues to be a point of concern in 2015.

Locomotion: role of *M. hyosynoviae*

In the second half of 2015, lame finisher pigs submitted for pathological examination were examined in detail within the scope of a pilot study. The question was whether *Mycoplasma hyosynoviae* plays a role in finishers which become lame at the start of the fattening period. A total of 35 joints of 19 lame animals were examined. In 9 of the pigs, arthritis

caused by infection with *Mycoplasma hyosynoviae* was detected, noticeably often in the knee joints. It also became apparent that 14 pigs suffered from cartilage defects (osteocondritis). The conclusion of the pilot study is that *Mycoplasma hyosynoviae* is regularly found in acutely lame finishers.

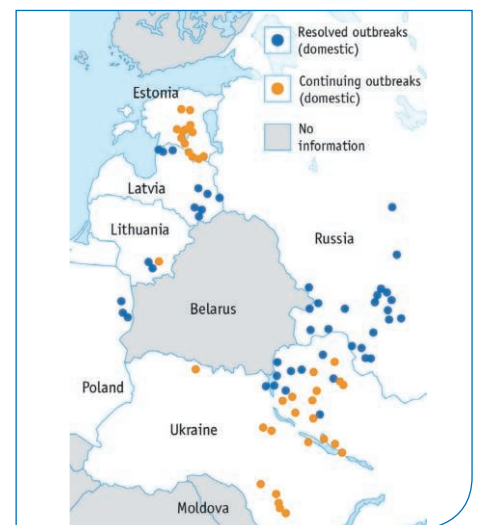
Figure right: microscopic photos of an arthritic joint and of *Mycoplasma*'s



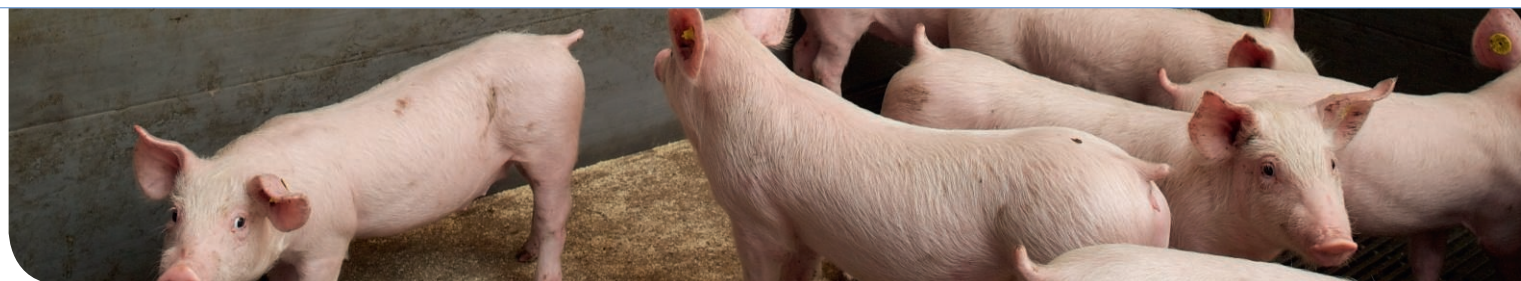
Short news

■ AVP & KVP

In the EU, there were no less than 1371 reports of outbreaks of African Swine Fever (ASF) among domestic pigs (47 outbreaks) and wild boar (1324 outbreaks), in the second half of 2015. Most of these occurred in the Baltic states, in Estonia and Latvia in particular.



Information that is used for the surveillance is collected from different sources. The initiative comes in part from veterinarians and farmers, and partly from GD Animal Health. The information is fully interpreted to achieve the objectives of the surveillance programme – the rapid identification of health problems on the one hand and the following of more general trends and developments on the other. The livestock farming sector, in the form of the Dutch inter-branch organisations DairyNL (ZuivelNL) and Calf Industry Association (SBK) and the Ministry for Economic Affairs (EZ) is co-financier of the surveillance programme.



Piglets with tremors: a 'new' virus?

The Veekijker sporadically receives questions about (congenital) tremors in piglets, as was the case in autumn 2015. There is still great uncertainty regarding the causes. Various possible causes are mentioned in literature, when microscopic abnormalities are detected in nerve cells of the piglets. Foremost, these are infectious diseases such as swine fever and Aujeszky's disease. However, an unknown virus is often responsible. A second possibility is a congenital defect found in certain breeds. The third possibility is an intoxication

during the gestation period, e.g. with organic phosphor compounds. Last year, a significant link was established in the United States, between tremor in piglets and an as yet unknown virus which to some extent is related to classical swine fever virus. Apparently this 'new' virus is largely prevalent among pigs, and therefore probably also in Europe. Conclusive evidence that this virus causes tremors in piglets has yet to be established. The virus was described by researcher Ben Hause and colleagues in an article entitled 'Discovery of a novel

putative atypical porcine pestivirus (APPV) in pigs in the USA' in the Journal of General Virology. A PCR test has been developed in the US in order to detect this APPV virus. Tremors / shaking reactions in newborn piglets can also be the result of strong cooling. Piglets have a limited storage capacity for glycogen (sugars) and soon have too low a blood sugar level in a cold environment. Consideration for excessive cooling after birth is therefore also essential.

Online Pig Health Monitor: latest news

As of 1 July 2015, pig veterinarians have gathered clinical information on more than 1000 individual farms, via Vee-Online, the online monitoring tool of GD Animal Health. The number of reports is increasing. Participation was voluntary until 1 January 2016. Health issues were detected by the veterinarians at approximately 40 percent of the farms visited.

The most commonly registered issues are fertility problems in sows, intestinal problems in suckling piglets, nervous

system disorders, digestive tract and respiratory problems in weaned piglets and respiratory issues in finishers (see table).

As the monitor is still in the start-up phase, we cannot yet make clear statements with regard to trends or regional differences. The obvious seasonal variations, such as sow fertility problems in autumn and respiratory problems in the cold period, are already observable. It is still too early to determine more subtle trends.



PED in the Netherlands

According to the information available to GD Animal Health, 19 pig farms suffered an infection with PED in the second half of 2015. The total number of infected farms in 2015 is 64. Most of these are located in the eastern Netherlands. By now, at least three farms have proven to be disease-free again. As there is no compulsory notification for cases of PED, it is impossible to determine how many farms are actually infected. Moreover, a specific diagnosis is not made for each suspected case. Two-thirds of the outbreaks were at finisher farms. While the contamination route is often unknown, the risk is believed to lie in inadequately disinfected lorries.

age category	organ system	%
suckling piglets	digestion	10
	locomotion	4
weaned piglets	central nervous system	18
	respiration	15
	digestion	9
	locomotion	4
	skin	3
finishers	respiration	21
	digestion	8
	locomotion	3
sows	fertility	8



Animal health barometer (second half of 2015)

The animal health barometer provides instant insight into the actual Dutch pig health status.

Disease/disorder/ health characteristic	Brief description	Quiet ¹	Increased attention ²	Further investigation ³
Article 15 diseases (compulsory notification and eradication)				
Foot and mouth disease (FMD)	The Netherlands has been disease-free since 2001. No outbreaks in Europe in second half of 2015, but outbreaks in Turkey and North Africa	*		
Classic swine fever (CSF)	The Netherlands has been disease-free since 1997. No outbreaks in Europe in second half of 2015, nor in Russia	*		
African swine fever (ASF)	The Netherlands has been disease-free since 1986. Outbreaks reported in the second half of 2015, in Italy (Sardinia), the Baltic states and Poland (especially wild boar). ASF is endemic in Sardinia.		*	
Swine vesicular disease (SVD)	The Netherlands has been disease-free since 1994. No outbreaks in Europe in the second half of 2015.	*		
Brucellosis	The Netherlands has been disease-free since 1969. No outbreaks in Europe in the second half of 2015.	*		
Aujeszky's disease	The Netherlands has been disease-free since 2007 (vaccination is prohibited); in the second half of 2015, no outbreaks in EU member states with art. 10 status ⁴ .	*		
Article 100 diseases (compulsory notification)				
Salmonellosis	Questions are frequent, particularly with regard to the demands of German clients for finishers	*		
From monitoring				
Lameness	More questions than ever before. Many necropsies with osteochondrosis. Pilot study showed role of <i>Mycoplasma hyosynoviae</i> + osteochondrosis to be feasible.		*	*
Aborters	Cause is often unknown. Relationship to group housing under investigation		*	*
Porcine epidemic diarrhoea (PED)	New outbreaks still occur; increased risk in winter period. Pilot study due for completion.	*		*
PRRS	Still many questions, but less than in the past.	*		
Erysipelas	Not many questions in the second half of 2015	*		

¹ Quiet: no action required or action is not expected to result in a clear improvement

² Increased attention: alert to a deviation

³ Further investigation: further investigation is ongoing or required

⁴ Article 10 status: free from Aujeszky's disease and vaccination is prohibited

