

Monitoring

Diergezondheid

Pigs

Highlights Report, First half of 2016

Trends in monitoring pig health

In the first half of 2016, GD Animal Health received slightly more submissions of pigs for pathological examination than in the second half of 2015. The six-monthly monitoring report shows half of all the necropsy cases to concern intestinal or bronchial diseases. The majority of necropsies were diagnosed with intestinal diseases, the most prevalent of which was *E. coli*-enterotoxigenesis. Infections caused by *Streptococcus suis* were also common. The most common pathogen causing respiratory problems has shown to be *Actinobacillus pleuropneumoniae* (App).

The Veekijker (veterinary helpdesk) for pigs received slightly fewer questions than in the second half of 2015. The questions are classified into questions on specific illnesses and questions on farm health issues. With regard to pathogens, PRRS was once again top of the list, as was the case before the PED outbreak of

2014. The number of questions regarding PED is clearly declining. There is a striking increase in the number of questions about *Mycoplasma hyosynoviae*. This pathogen has received extra attention recently due to its relationship with lameness among finishers. With regard to general health issues, the majority of questions by far concerned lameness. Very many questions were raised, in comparison with the moving average. Most of the questions concerned finishers and older pigs (breeding gilts). The percentage of questions on mortality, of piglets and sows in particular, has increased structurally in recent years, and is well above the long-term average. Eastern European countries, and the Baltic states in particular, once again suffered from more than 1000 outbreaks of African swine fever, mainly in wild boar but also in domestic pigs. This is a permanent cause of concern.

Short news

■ ASF, also in the EU

In the EU, there were a total of 1035 reports of outbreaks of African Swine Fever (ASF) among domestic pigs (19 outbreaks) and wild boar (1016 outbreaks), in the first half of 2016. Most of these occurred in the Baltic states, in Estonia and Latvia in particular. Most of the domestic pig outbreaks (17) reported in this period were on Sardinia. The outbreak among domestic pigs in Poland gives cause for concern, as this poses the risk of ASF spreading further within the EU. There is also frequent contact between the Netherlands and Poland. The ASF virus can be transmitted due to human carelessness, via meat products, means of transport and by wild boar. It is very important to provide information on the risks of spreading.

For background information on ASF: see www.gddiergezondheid.nl/dierziekten

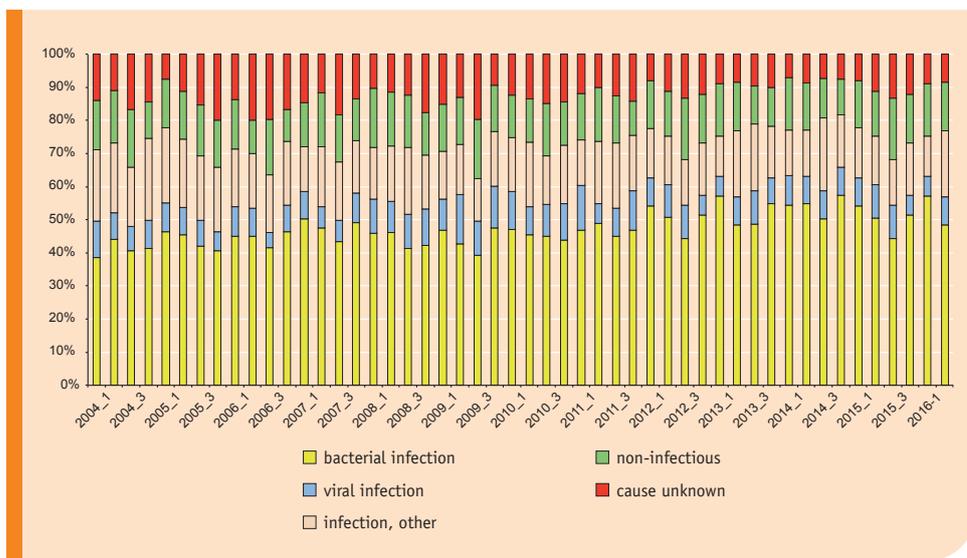


This Pig Monitor newsletter provides a summary of a number of important and striking matters from the first half of 2016. The basic pig health monitoring is financed by the pig industry, the Ministry of Economic Affairs and contributions from farmers.

In this edition, topics include online monitoring, African Swine Fever and bacterial infections



Bacterial infections over the years



During the course of the GD monitor, the percentage of diagnoses among pigs submitted for pathological examination whereby a *bacterial infection* was found to be the cause of a health problem, has structurally increased from 40 percent in 2004 to 52 percent now. This trend is accompanied by a decline in the number of animals for which no causative pathogen is diagnosed in case of an infection (*infection, other*: from 20 to 15 percent) or even for which no cause at all could be determined (*cause unknown*: from 16 to 9 percent). In all those years,

a strikingly constant percentage of animals was submitted with a virus infection as the cause (*viral infection*: 9 percent) as was the percentage of animals in which a non-infectious health problem was found (*non-infectious*: 15 percent). By far the most bacterial diseases were diagnosed in finishers, particularly respiratory problems caused by App and *Mycoplasma hyopneumoniae*. In sows, non-infectious diseases such as acute cardiac death and torsion of stomach, spleen and intestines were the main causes.

PED in the Netherlands

According to the information available to GD Animal Health, 15 pig farms suffered an infection with PED in the first half of 2016. Most of these PED infected farms are located in the eastern Netherlands. As there is no compulsory notification for cases of PED, it is impossible to determine precisely 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 main risk is believed to lie in lorries.

Pathogen resistance patterns

The situation is favourable regarding sensitivity to antibiotics, with the percentages of resistant isolates declining in recent years. The first half of 2016 was once again marked by significantly lower percentages of *Actinobacillus pleuropneumoniae* isolates resistant to tiamulin and tildipirosin/tilmicosin/tulathromycin. The increased percentage of *Bordetella bronchiseptica* isolates found to be resistant to trimethoprim-sulfonamides in 2015, has not continued in 2016. The percentage of enteropathogenic *Escherichia coli* resistant to amoxicillin-clavulanic acid did not decline further in 2016 following last year's decline versus 2014 and 2013. Likewise, the percentage of enteropathogen *Escherichia coli* isolates resistant to colistin did not further decline in the first half of 2016. The significant decline in the percentage of *Pasteurella multocida* isolates resistant to sulfonamides and tildipirosin/tilmicosin/tulathromycin detected in 2015, continued in 2016.





Online Pig Health Monitor

During visits to farms, veterinarians are recording more and more information for the online monitor. Health issues were reported by the veterinarians at approximately 40 percent of the farms visited. Most of the problems were reported for weaned piglets, especially disorders of the central nervous system (brain conditions) and respiratory system (see table).

Now that the online monitor has been operational for approximately 12 months, we can cautiously assess a number of trends. It is clear, for example, that the percentage of respiratory problems

identified in finishers during farm visits decreases strongly in the spring, from approximately 28 percent in January to 18 percent in June. This is in line with the observation that App and PRRS are more frequently diagnosed by GD in the winter period. Hence the online monitor confirms the findings of GD Animal Health during pathological examinations.

The online monitor is an important additional tool for other issues, for example when determining seasonal variations in fertility problems among sows.

Online Monitor: main organ systems for which a disorder has been reported, per age category (Jan. - June 2016)

age category	organ system	%
suckling piglets	digestion	10
	locomotion	4
weaned piglets	nervous system	18
	respiration	17
	digestion	8
	locomotion	3
	skin	2
finishers / breeding gilts	respiration	19
	digestion	7
	locomotion	3
sows	fertility	4



Animal health barometer (first half of 2016)

The animal health barometer provides instant insight into the most important observations concerning pig health.

Disease/disorder/health issue	Brief description	Quiet ¹	Increased attention ²	Further investigation ³
Article 15 diseases (notifiable diseases)				
Foot and mouth disease (FMD)	The Netherlands has been disease-free since 2001. No outbreaks in Europe in first half of 2016, but outbreaks in Turkey and Algeria	*		
Classical swine fever (CSF)	The Netherlands has been disease-free since 1997. No outbreaks in Europe in first half of 2016, but outbreaks in wild boar in Russia	*		
African swine fever (ASF)	The Netherlands has been disease-free since 1986. Outbreaks reported in the first half of 2016 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 first half of 2016.	*		
Brucellosis	The Netherlands has been disease-free since 1969. No outbreaks in Europe in the first half of 2016.	*		
Aujeszky's disease	The Netherlands has been disease-free since 2007 (vaccination is prohibited); In the first half of 2016, no outbreaks in EU member states with art. 10 status 4. Czech Republic: Aujeszky's disease in a dog	*		
Article 100 diseases (notifiable zoonoses)				
Salmonellosis	Much fewer questions than before	*		
From monitoring				
Lameness	Once again more questions, also on <i>Mycoplasma hyosynoviae</i>		*	
PED	Much fewer questions, few outbreaks	*		
PRRS	Increase in the number of questions, on sequence analysis for example	*		
Mortality of piglets and sows	Increased number of questions.		*	

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

