

PROTECTING AGAINST BLUETONGUE WITH **ZULVAC[®] 8**



Zulvac 8 BOVIS



Zulvac 8 OVIS

zoetis

WHAT IS BLUETONGUE?

- Bluetongue is a notifiable disease of ruminants affecting both cattle and sheep.
- It is caused by infection with the bluetongue virus (BTV). There are a number of different strains or serotypes of the virus, the one currently circulating in France and of concern to the UK is serotype 8 (BTV-8).
- The main route of transmission of disease is via the *Culicoides* biting midge. Climate change and warmer winters has allowed wider distribution of these midges allowing bluetongue in recent years to extend into most of Europe and the UK.
- Infection is transmitted when biting midges are most active between May and October. Originally winter was seen as a 'vector free' period, however the virus is now known to be able to overwinter in both the midges and the host ruminant. BTV-8 can also pass from dam to offspring via the placenta.
- During the BTV-8 outbreak of 2006-2008 thousands of animals were affected across North West Europe.

WHAT IS THE CURRENT THREAT TO THE UK?

- Bluetongue re-emerged in France during August 2015, and cases have continued to be reported during 2016. Disease appears to be caused by the same BTV-8 virus as the one circulating in 2006-2008.
- Why re-emergence occurred is unknown, but the most likely explanation is that the disease has been continually circulating at a low level, unnoticed, in cattle in France since 2008 and this, coupled with a drop in herd immunity (compulsory vaccination in France ceased in 2010) has allowed the disease to re-emerge. Of relevance is the fact that during 2006-2008 France had the highest number of BTV-8 disease outbreaks in Europe.
- The effectiveness of disease control in France is key in terms of risk of a disease incursion into the UK. France have implemented movement restriction zones, and vaccination targeted at animals in pedigree breeding programmes, animals destined for trade and those moving out of the restriction to the free zone.
- Disease is most likely to enter the UK via midges which can travel considerable distances; by wind up to 250km over water and up to 16km a day. Weather patterns therefore affect the risk levels.
- **APHA predict an 80% risk of disease entering the UK from France in September 2016.**



**THE MAP OPPOSITE SHOWS THE
CONFIRMED BTV-8 OUTBREAKS
AND THE RESTRICTION ZONES IN
FRANCE AS OF JUNE 2016.**

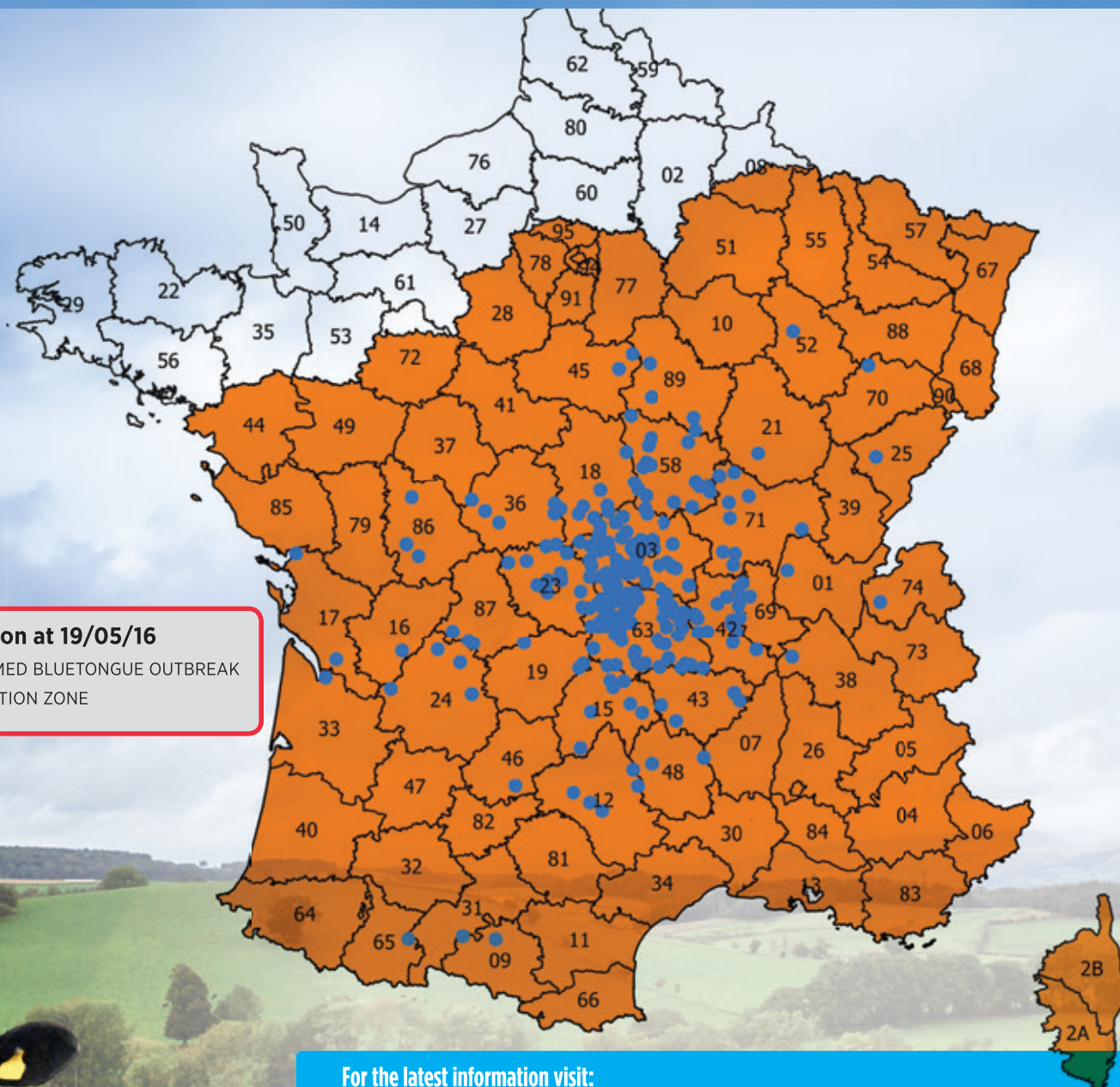
**THIS MAP CONTINUALLY
CHANGES AS NEW OUTBREAKS
ARE CONFIRMED AND THE
RESTRICTION ZONE IS EXTENDED.**

The risk of a disease incursion into the UK increases with spread of the disease in Northern France.

If disease enters the UK, the immune status of our animals will be key in determining how quickly disease spreads and the impact of infection.

Situation at 19/05/16

- CONFIRMED BLUETONGUE OUTBREAK
- RESTRICTION ZONE



For the latest information visit:
<http://agriculture.gouv.fr/liste-des-departements-et-des-communes-classes-en-zone-reglementee-fco>

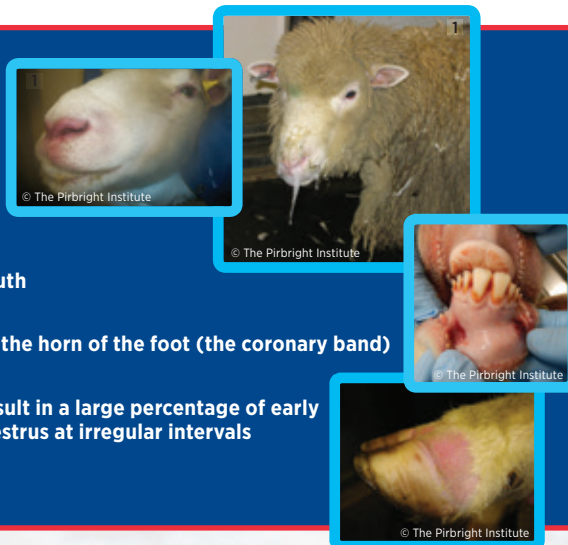


WHAT ARE THE CLINICAL SIGNS?

The incubation period (time between infection and symptoms) is 4 to 12 days. Cattle are infected more frequently than sheep, but sheep tend to be more severely affected. The disease cannot be diagnosed on clinical signs only; laboratory tests are required for confirmation.

SHEEP:

- Lameness, stiffness, unwilling to move
- Swelling of the mouth, head and neck
- Nasal discharges
- Fever (up to 42°C)
- Drooling as a result of ulcerations in the mouth
- Haemorrhages into or under the skin
- Inflammation at the junction of the skin and the horn of the foot (the coronary band)
- Difficulty breathing
- Infection during the breeding season can result in a large percentage of early embryonic losses with sheep returning to oestrus at irregular intervals
- Mortality



CATTLE:

- Swelling of the head and neck
- Crusty erosions around the nostrils and muzzle
- Nasal discharge
- Lethargy
- Saliva drooling out of the mouth
- Fever (up to 40°C)
- Stiffness and reluctance to move
- Reddening and erosions on the teats
- It is possible that cattle show few clinical signs so farmers should look out for signs of fatigue, and lower productivity including reduced milk yields



WHAT IS THE POTENTIAL IMPACT OF DISEASE?

Sheep:

- Adult breeding sheep are likely to experience most clinical impact with reduced reproductive performance and temporary ram infertility. Infection during the breeding season can result in failed pregnancies, abortions and birth deformities in the lamb.
- Sheep that survive the disease can lose condition during their protracted convalescence with a reduction in meat and wool production.

Dairy Cattle:

- Milk drop can be significant across the herd and across time.
- Reduced reproductive performance.

Beef Cattle:

- Meat is safe to eat and animals can still move to slaughter providing they are healthy at the time of the move.
- Movement restrictions can affect trade. The EU Bluetongue directive is there to allow trade to continue once there is an outbreak. Vaccination is part of the strategy to reduce some of the restrictions on movement.

The impact of disease on production and the ability to trade freely will affect farm profits.



WHAT CAN I DO NOW TO REDUCE THE RISK TO MY ANIMALS?

Protection against bluetongue is through keeping susceptible animals away from the vector (the midge) and vaccination. Pour-on insecticides such as 'Fly & Lice Spot On®' are helpful but do not achieve total freedom from the midge, and therefore vaccination is the only effective way for farmers to protect their animals against infection with bluetongue. Vaccination played a key role in keeping the UK free from circulating disease in 2008/09 following the prior outbreak.

Since 2012 there have been no restrictions on use of bluetongue vaccines meaning farmers can choose to vaccinate at any time. Pre-emptive vaccination offers the most effective strategy for ensuring animals are fully protected prior to disease entry into the UK. Control options should be discussed with your vet.

Benefits of vaccinating:

- **Protect stock from impact of BTV-8 should disease come into the UK**
- **Reduces losses and welfare problems**
- **Reduces risk of chronic effects – lameness, reduced milk production and weight loss**
- **Reduces risk of abortions and birth defects**
- **Facilitates movement and trade within restriction zones**

Vaccination is the only way of protecting animals against bluetongue infection.

WHAT RESTRICTIONS WILL BE IMPOSED IF DISEASE ENTERS THE UK?

- Bluetongue is a notifiable disease and suspected cases must be reported immediately to the Animal and Plant Health Agency (APHA).
- Upon confirmation of disease circulating in the UK, DEFRA will put in place movement control zones of up to 150km around the outbreak. This zone is large because the disease is vector born, and midges can travel long distances.
- There are no plans to implement a compulsory vaccination programme, but farmers will be strongly advised to vaccinate because
 - movement restrictions alone are unlikely to be effective in preventing the disease spreading.
 - vaccination is the only sure way of protecting your animals against losses from bluetongue infection.
 - under EU legislation vaccination is required to allow movement of animals between restriction zones, which therefore allows trade to continue. If animals are not vaccinated then movement is only allowed within the same type of zone (e.g. BTV-8 restriction zone, to BTV-8 restriction zone). If moving from a restricted to a free zone, animals must be vaccinated.
- Disease freedom cannot be regained until at least 2 vector seasons have passed without new outbreaks. This can be up to 3 years after the initial case was confirmed. The faster disease control can be achieved, the sooner the return to disease free status.
- More information and APHA contact numbers are available at:
<https://www.gov.uk/guidance/bluetongue>
<https://www.gov.uk/government/collections/animal-diseases-international-monitoring>



VACCINATING WITH ZULVAC 8

WHAT IS ZULVAC® 8 OVIS AND ZULVAC® 8 BOVIS?

- The Zulvac 8 vaccines are licensed against the bluetongue virus serotype 8 (BTV-8).
- Zulvac 8 Ovis is specifically licensed for sheep, and Zulvac 8 Bovis for cattle.
- Both products come as a ready to use suspension, containing inactivated virus with adjuvants added to help stimulate the immune response.

WHAT IS THE VACCINATION REGIME IN CATTLE?

- Cattle can be vaccinated from 3 months of age.
- The primary course requires two 2mL doses given intramuscularly 3 weeks apart.
- Cattle are protected 25 days after completing the vaccination course, with protection lasting for 12 months.

WHAT IS THE VACCINATION REGIME IN SHEEP?

- Sheep can be vaccinated from 6 weeks of age.
- The primary course requires two 2mL doses given subcutaneously (under the skin) 3 weeks apart.
- Sheep are protected 25 days after completing the vaccination course, with protection lasting for 12 months.

WHAT ARE THE LICENSED CLAIMS OF THE VACCINE?

- The vaccines are licensed to prevent viraemia in both cattle and sheep. This means if an animal is infected, vaccination will prevent the virus circulating in the animal's blood stream, protecting against disease and against onward spread of infection.

WHEN SHOULD I VACCINATE AND WHICH ANIMALS?

- All cattle can be vaccinated from 3 months of age and sheep from 6 weeks of age. The vaccine is licensed and can be used during pregnancy. Infection can result in reproductive losses in breeding animals, but also production losses in other animals therefore all eligible animals should be considered for vaccination. This should be discussed with your vet.
- APHA predict an 80% risk of disease entering the UK by September. Pre-emptive vaccination offers the most effective strategy for ensuring animals are fully protected prior to disease entry into the UK.

WHAT ARE THE PACK SIZES?

Zulvac® 8 Ovis is available in 100mL bottles.

Zulvac® 8 Bovis is available in 20mL and 100mL bottles.





ZOETIS ARE PROUD TO SUPPORT THE JOINT ACTION AGAINST BLUETONGUE CAMPAIGN

	Zulvac 8 Bovis (cattle)	Zulvac 8 Ovis (sheep)
When can I start vaccinating?	3 months of age	6 weeks of age
Dose rate and route	2mL/animal given IM	2mL/animal given SC
Primary vaccination course	2 doses 3 weeks apart	2 doses 3 weeks apart
Onset of immunity	25 days	25 days
Duration of immunity	1 year	1 year
Use in pregnant animals	Can be used during pregnancy	Can be used during pregnancy
Vial Size	20mL (10 doses) 100mL (50 dose)	100mL (50 dose)

Zulvac 8 Bovis contains inactivated Bluetongue Virus, serotype 8.

For the active immunisation of cattle from 3 months of age for the prevention of viraemia caused by Bluetongue Virus, serotype 8. **POM-V**

Zulvac 8 Ovis contains inactivated Bluetongue Virus, serotype 8.

For the active immunisation of sheep from 1.5 months of age for the prevention of viraemia caused by Bluetongue Virus, serotype 8. **POM-V**

Fly & Lice Spot-On® contains deltamethrin 1% w/v **POM-VPS**

For further information about side effects, precautions, warnings and contra-indications, please refer to the product packaging and package leaflet.

Zulvac 8 BOVIS Zulvac 8 OVIS

Further Information

DEFRA Risk Assessment for Bluetongue Virus (BTV-8): risk assessment of entry into the United Kingdom . Qualitative Risk Assessment February 2016 (<https://www.gov.uk/government/publications/qualitative-risk-assessment-bluetongue-virus-btv-8-entry-into-the-uk>)

1. Images from Dercksen D. and Lewis C., In Practice 2007 29: 314-318 doi: 10.1136/inpract.29.6.314

For further information please contact your veterinary surgeon or Zoetis UK Ltd, Walton Oaks, Tadworth, Surrey KT20 7NS.

www.zoetis.co.uk Customer Support: 0845 300 8034

Use medicines responsibly. (www.noah.co.uk/responsible)

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