***Neospora Caninum***

* Protozoan parasite.
* Not new, but **newly diagnosed**.
* Around **13.5% of abortions** are down to this, due to infection of the foetus.
* 6-10% of cows in GB are infected.
* **Dogs are the main host** (not cats and probably not foxes). Dogs are infected by eating afterbirths or infected foetuses.
* **Cattle are the intermediate hosts** and are infected through dogs defecating in feed or water supplies.
* Cattle **can** have a **lifelong infection**.
* There is vertical transmission from cow to foetus **95%** of the time, but infection of the foetus does **not** always result in abortion (some infected calves are born clinically normal). However a **cow that is infected is considered 3.5 times more likely to abort than an uninfected cow.**
* Due to the lifelong infection mentioned above some cows will go on to **abort again and again.**
* Usually abortion in a herd is **sporadic** but you can get epidemics if a large number of protozoan oocysts contaminate feed/water.
* Diagnosis is based on;
1. Demonstration of **oocysts in the brain or heart** of aborted foetuses

AND

1. **Maternal serology**- detection of antibodies.

 **NB** **antibodies in blood** are likely to be **higher in cows that are having an immune response to Neospora at that time**, and are therefore at **greater risk of abortion if pregnant**. As the infection of the foetus commonly occurs in the **second half of pregnancy** then **drying off** is a good time to sample cows.

* Control is based on;
	+ - Disposal of foetal membranes and foetuses.
		- Preventing **dog access** to cattle areas. Difficult.
		- **Culling cows which are positive for antibodies and which repeatedly abort.**
		- Controlling concurrent immunosuppressive factors such as **BVD**, mycotoxins and mouldy feeds which may increase the risk of neospora causing abortion.