Bovine Virus Diarrhoea Virus (BVDV)
Control guidelines for farmers

Even though the economic benefit from controlling BVDV is generally small over the long term, occasional outbreaks of BVDV in susceptible herds can result in business-threatening losses depending on the number and class of stock affected.

Investment in controls to prevent BVDV outbreaks should be considered, depending on your attitude to risk and specific farm circumstances. The following BVDV control measures are offered as cost effective strategies suitable for most dairy farms.

Ensure all your bulls are tested free of BVDV before use
› Bulls are the most commonly introduced animal to dairy herds.
› Ask your bull supplier to test sale bulls before purchase well before they are required for use on your farm; only buy bulls confirmed free of BVDV by testing.
› If you have purchased bulls that are not tested, talk to your vet about testing these bulls and ensure they have no contact with other cattle until test results show them not to be persistently infected (PI's).
› Only one test in a bull’s life is necessary as cattle do not become persistently infected if infected after birth. Initially test all bulls on the farm, then routinely ensure each bull you intend to purchase is tested on the farm of origin.
› Expect most bulls to test negative. Persistently infected bulls are uncommon but can have devastating effects when introduced to naïve herds so remain vigilant and test all bulls to ensure no PI bulls enter your herd.
› Cull any PI bulls immediately. Never allow contact between PI bulls and the milking herd or yearlings.

Manage BVDV in introduced heifers and cows
› Discuss risks of introducing BVDV, or causing an outbreak of BVDV in introduced cattle, with your veterinarian before you introduce any cattle to your herd.
› Test all introduced heifers and cows at their farm of origin to prevent PIs from entering your herd regardless of the BVDV immune status of your herd.
› If routine herd monitoring shows that your herd is infected with BVDV, test or vaccinate introduced heifers and cows to ensure they are immune before mixing with your cattle.

To find out more information visit dairyaustralia.com.au/BVDV
Routinely monitor the immunity of cows and yearlings

› Discuss how to do this with your veterinarian.
› This will involve taking a bulk vat milk sample and possibly milk or blood samples from 20-30 milking cows for the milking herd. Do this at least 10 weeks before mating start date in seasonal - and split-calving herds. Discuss with your veterinarian how often this should be repeated.
› Blood sample 5-6 yearlings to assess your yearling herd status. Do this 2–3 months before each group’s mating start date.
› Discuss strategies with your veterinarian to prevent an outbreak of BVDV if you find few animals are immune.
› An alternative to the testing strategies is to vaccinate all cattle including yearlings. Annual boosters are essential to protect the herd as it becomes increasingly naïve.
› If you choose to eradicate BVDV from your herd you will need to routinely monitor immunity in yearlings or commence vaccination. Discuss these options with your veterinarian before embarking on an eradication program.

Additional BVDV control measures

› If your herd calves year-round, discuss additional individual cow-level test-and-control options for BVDV with your veterinarian. Long-term BVDV control can yield modest improvements in herd profitability for most year-round calving herds.
› In typical seasonal and split calving herds, BVDV control typically comes at a small net cost over the long term. Discuss with your veterinarian if BVDV may be contributing to any ongoing unexplained health problems in cows or yearlings. Remember, finding antibodies to BVDV does not prove that BVDV is the cause of any problems that you may be seeing.
› If you choose to undertake additional individual cow-level BVDV control options, use simpler and cheaper options before considering more complex and expensive options. Discuss options carefully with your veterinarian. Even in year-round calving herds, only the simpler and cheaper BVDV control options provided reliable, but modest, increases in herd profitability. Over the long term, more complex and expensive options tend to cost more than they return.

These BVDV control guidelines were developed by Dairy Australia to provide dairy farmers and their advisors with independent, economically sound advice on BVDV control measures suitable for Australian dairy herds. They were developed in consultation with BVDV specialists, dairy farmers, industry representatives and veterinarians. A whole farm economic simulation model was used to model the impact on farm profitability of BVDV infection cycles and a range of BVDV management strategies. The BVDV technical working group reviewed the outputs from this model and incorporated their expert knowledge of BVDV control measures, herd dynamics and farm management to develop practical guidelines that can be applied to a range of dairy farming systems.

For more detailed information about BVDV read the Dairy Australia Fact Sheet ‘BVDV in Australian dairy herds’.