

**MSD Advice to Nobivac customers:
Pet vaccination during the current COVID-19 pandemic**

Technical document developed in response to a volume of requests from customers

1. Risk assessment considerations

Many of the risks of infectious disease are highest where animals freely mix and we would expect reduced contact with other individuals will reduce the risk of disease to an extent. However, despite a possible lockdown, the risks of some diseases in unvaccinated pets could remain significant whether or not direct contact with other animals occur because some infectious diseases are acquired through environmental contact

Pets that have never received a primary vaccination and in higher risk groups are most likely to be at risk, but there are a number of mitigation measures that might also be considered as below:

- a) Boosting a pet earlier than 12 months might be possible where it is considered there may still be time to do so before further movement restrictions are imposed.
- b) Measures related to distancing from other pets or higher-risk environments may help mitigate certain pet disease risks and especially those that are spread by close contact.

In assessing the pet's needs and developing a balanced approach it is important to consider the current status of the various pet diseases we vaccinate against, the likely risks to which the individual pet is likely to be exposed, the duration of immunity expectations from the vaccines administered as well as possible mitigation measures which could reduce the risk of disease exposure.

The decision as to when or whether to boost a pet when facing a potential "lockdown" situation is therefore a finely balanced risk assessment that must be taken in consultation between the attending vet and pet owner taking all risks within the context of current official UK government and local medical advice.

2. Duration of immunity and lapsed vaccine courses

New BVA advice⁽⁵⁾ is that a delay to booster vaccinations to minimise contact with clients should be considered as part of a package of measures to minimise the risk of transmission of coronavirus.

MSD are unable to guarantee vaccine coverage for companion animal vaccines beyond the minimum duration of immunity, but in the case of a number of the diseases evidence⁽¹⁻⁴⁾ suggests many animals will derive some durable benefit beyond this timing, whilst for others such as leptospirosis or kennel cough immunity may decline more quickly. (Please see professional guidelines and further references below).

Key opinion⁽¹⁻⁴⁾ suggests a different approach for restarting boosters in lapsed animals depending on which guidance one reads.

Viral dog vaccines (DHP, DHPPi) and rabbit vaccination requires a single dose of vaccine to restart the course in an animal that has lapsed.

For inactivated Leptospirosis vaccines in dogs (Nobivac Lepto2 and L4) there seems to be some consensus ^(1,3) at least for animals up to 6 months overdue -where two vaccine doses would normally be needed for priming immunity a single dose of vaccine could be considered for a restart.

Professional guideline advice for cats differs - WSAVA guidance ⁽⁴⁾ proposes that a single dose is sufficient to boost core vaccine (e.g. Tricat Trio) immunity in a cat that has lapsed whatever the interval, however ABCD guidance ⁽¹⁾ advises if a cat has lapsed more than three years then a two dose course of vaccine may be preferable to optimise immunity. This advice is based on immunological principles rather than definitive studies and so there is a discrepancy in the advice offers.

In the absence of consensus and definitive studies, for lapsed cat vaccines single dose boosters up to 3-6 months overdue is a pragmatic approach which falls inside all the above guidance. This approach is widely used in practice as a potential cut-off beyond which two doses are given.

On a similar basis, in the case of an incomplete primary course where two doses are required a restart rather than a single dose would be recommended by key opinion guidance if the inter-vaccine interval exceeds 6 weeks.

None of these approaches listed above should be taken to indicate ideal booster intervals or longer than indicated duration of immunity than stated on-label but these do at least provide a framework to aid a veterinary risk assessment for individual patients presented late for revaccination.

3. Appropriate decision making around kennel cough vaccination

All vaccination decisions for non-core vaccines are made based on a risk-benefit analysis. The risk of a dog contracting CIRDC may be lessened in the current climate if the owner of the dog is in self-isolation and not being socialised around other dogs, in which case vaccination against CIRDC might reasonably be delayed until such time that the risk level changes. At the same time where there is a high risk of respiratory disease related to CIRDC in a population of dogs, it is likely that vaccination will reduce the risk of disease and its circulation and would generally be a useful preventative health measure

Whilst there is the precautionary statement on the product's SPC and Datasheet regarding avoiding the use of the product in households with immune compromised individuals, what is regarded as a population who are at increased risk from a COVID-19 point of view (eg. Adults over 70, people with asthma, hypertension, heart disease etc) does not correspond to the rare population of typically severely immune compromised people that have been identified with field strain *Bordetella bronchiseptica* - typically such individuals identified with *Bordetella* have profound immune deficiency, and there is no evidence that owning a pet or indeed previous vaccination history of the pet has any bearing on this. *Bordetella bronchiseptica* is a ubiquitous organism found in a range of species and the label warning is a precautionary statement.

Given the benefits of vaccination against *Bordetella bronchiseptica* in an at-risk population, and an absence of any evidence of a causal association between intranasal *Bordetella* vaccination it is not appropriate to have a blanket policy on this matter.

The veterinary duty of care is to make a risk assessment taking all the above factors into account including the full context of current government and local medical advice. Other than in a situation

where there is clear immune compromise in the household or the act of vaccination in a locked down household will compromise essential biosecurity for COVID-19, the usual considerations determining the need for kennel cough cover should apply.

Summary

Ultimately all vaccine decisions are a careful balance between risks and benefits, with certain pathogens likely to be picked up from mixing with other animals and others that could present a risk from the environment. All such decisions will necessarily be contingent on a reasonable current assessment of Government advice on the current pandemic, so that veterinary staff and public are not put at unnecessary risk.

For further support on any of the above questions please contact our Technical Product Support Team on 01908685685 Option 1 should further advice be needed.

Further reading

1. AAHA Vaccination Guidelines 2017 (<https://www.aaha.org/aaha-guidelines/vaccination-canine-configuration/vaccination-canine/>)
2. ABCD Matrix Vaccine Guidance 2017 (<http://www.abcdcatsvets.org/matrix-2/>)
3. ISCAID European Consensus Statement on Leptospirosis in Cats and Dogs: Journal of Small Animal Practice (2015) 56, 159–179
4. WSAVA Vaccination Guidelines 2015 (<https://wsava.org/wp-content/uploads/2020/01/WSAVA-Vaccination-Guidelines-2015.pdf>)
5. BVA Webinar Sunday 22/3/2010: <https://www.thewebinarvet.com/webinar/covid-19-and-the-veterinary-profession>

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