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Letter to the Editor
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A pet owner's perspective of the vaccination controversy

In response to Aine Seavers' article '*Three-year vaccination intervals: a different view from the parvo trenches of practice-land*' (*The Veterinarian*, April 2010), vaccine manufacturer representative, Peter Bracken says: "As a manufacturer of both annual and triennial vaccines we encourage veterinarians to use evidence based medicine and the latest science to guide vaccination decisions." (*The Veterinarian*, May 2010).

Ten years ago, in September 2000, *The Veterinarian* published a special feature titled "*The needle and the damage done?*" which discussed the side-effects of companion animal vaccination. What action have vaccine manufacturers taken over the intervening years of the vaccination controversy to correct non-evidenced based 'annual' and 'triennial' prescriptive revaccination 'recommendations' on modified live virus (MLV) vaccine product labels? Little or none as far as I am aware...

In Australia, it has taken persistent lobbying by 'concerned pet owners' to push the government regulator, the Australian Pesticides and Veterinary Medicines Authority, to issue a Position Statement on Vaccination Protocols for Dogs and Cats to address this problem. The APVMA's Position Statement was finally published in January 2010 and states that "***the APVMA does not support the retention of label statements that direct or imply a universal need for life-long annual revaccination with core vaccines***".

The APVMA's past failure to ensure that manufacturers' MLV revaccination recommendations are evidence based is at the heart of the continuing problem of unnecessary vaccination of pets, coupled with the reluctance of many members of the veterinary profession to keep abreast of and acknowledge the latest science on duration of immunity and vaccination 'best practice'. No wonder the World Small Animal Veterinary Association warns "***there is an urgent requirement for education of practicing veterinarians in this area***".

The World Small Animal Veterinary Association's Guidelines for the Vaccination of Dogs and Cats have recently been updated by the WSAVA Vaccination Guidelines Group (VGG) and, at the time of writing, have been published online in the June 2010 edition of the *Journal of Small Animal Practice*, and should soon be available on the WSAVA website.

The updated 2010 WSAVA guidelines stress the importance of herd immunity, saying "*herd immunity with the core vaccines that provide a long (many years) DOI is highly dependent on the percentage of animals in the population vaccinated and not the number of vaccinations that occur annually. Therefore, every effort should be made to vaccinate a higher percentage of cats and dogs with the core vaccines*". (My emphasis.) The 2010 WSAVA guidelines note that "*even in developed countries it is estimated that only 30–50% of the pet animal population is vaccinated*".

The 2010 WSAVA guidelines warn that: "*Vaccines should not be given needlessly. Core vaccines should not be given any more frequently than every three years after the 12 month booster injection following the puppy/kitten series, because the duration of immunity (DOI) is many years and may be up to the lifetime of the pet.*" (My emphasis.)

The 2010 WSAVA guidelines also acknowledge that "*the principles of 'evidence-based veterinary medicine' would dictate that testing for antibody status (for either pups or adult dogs) is better practice than simply administering a vaccine booster on the basis that this should be 'safe and*

cost less” (My emphasis.) This advice is at odds with the 2010 WSAVA guidelines’ blanket recommendation for a ‘12 month booster’, and it is disappointing that this apparent contradiction has not been clarified in the revised guidelines. I suggest it would have been appropriate to include this in the discussion about maternally derived antibodies (MDA), and the conflict between the 2010 WSAVA guidelines recommendation for a 14-16 week vaccination finish and the earlier finish recommended on vaccine product labels.

Similarly, the reference to the veterinary industry’s revaccination compromise of ‘every three years’ has not been explained in the guidelines. Despite this ongoing ambiguity, it is important to note that the 2010 WSAVA guidelines do not actually recommend revaccination ‘every three years’. This would be illogical given that the 2010 WSAVA guidelines’ Fact Sheets note that duration of immunity after vaccination with MLV vaccines for parvovirus, adenovirus and distemper virus has been demonstrated to be **at least nine years**, based on challenge and serological studies. Therefore, recommendations for ‘triennial’ core revaccination are just as arbitrary as recommendations for ‘annual’ core revaccination. There is no scientific evidence of a proven need for either ‘annual’ **or** ‘triennial’ MLV core revaccination of adult dogs.

A recent paper, (published in the Journal of Comparative Pathology in January 2010), co-authored by Ronald Schultz, Professor and Chair of the Department of Pathobiological Sciences University of Wisconsin-Madison, and a member of the WSAVA VGG and AAHA Canine Vaccine Task Force, reiterates what has been well-known within the veterinary industry for years, i.e.: *“In general, adaptive immunity following vaccination with modified live virus (MLV) vaccines develops earliest and most effectively in that it is often complete (e.g. sterile immunity is induced) and duration of immunity (DOI) is often lifelong.”* (My emphasis.)

In an article titled *“Fur flies over small animal vaccination”* (published in *The Veterinarian* in September 2009), Richard Squires, Associate Professor in Companion Animal Medicine at James Cook University, and a member of the World Small Animal Veterinary Association’s Scientific Advisory Committee, acknowledges that **“there is strong and mounting evidence that most vaccinations administered to adult dogs and cats serve no beneficial ‘immunological’ purpose whatsoever.”** (My emphasis.)

It appears that MLV vaccines (regardless of arbitrary manufacturers’ ‘annual’ or ‘triennial’ revaccination recommendations) are likely to provide lifelong duration of immunity. So why do veterinarians continue to badger pet owners to have their adult dogs unnecessarily revaccinated with these vaccines? Could it be that annual vaccination is **“a convenient income generator”**, (a term used by Alan Radford in the Journal of Small Animal Practice’s editorial discussing the updated 2010 WSAVA guidelines)?

I suggest that veterinarians will have to be very careful in future about urging pet owners to have their pets revaccinated ‘annually’ **or** ‘triennially’ with these so-called ‘preventive’ and possibly harmful vaccine products, as there is no evidence to support repeated revaccination of adult dogs with MLV vaccines.

While Peter Bracken tries to play down *“misconceptions about safety”* of vaccine products in his letter to *The Veterinarian*, the 2010 WSAVA guidelines admit that **“...there is gross under-reporting of vaccine-associated adverse events which impedes knowledge of the ongoing safety of these products.”** The 2010 WSAVA guidelines warn *“...we should aim to reduce the ‘vaccine load’ on individual animals in order to minimize the potential for adverse reactions to vaccine products”*. This includes reducing **non-core** vaccination, as encapsulated in the 2010 WSAVA guidelines’ key message: **“We should aim to vaccinate every animal with core vaccines, and to vaccinate each individual less frequently by only giving non-core vaccines that are necessary for that animal.”** (My emphasis.)

On the topic of core vaccination, the Australian Pesticides and Veterinary Medicines Authority’s Position Statement on Vaccination Protocols for Dogs and Cats states that: *“...the aim should be*

to ensure that all susceptible animals are vaccinated, rather than that already well-immunised animals are re-vaccinated." (My emphasis.)

The APVMA's Position Statement confirms that: *"State and Territory legislation that controls use of veterinary medicines allows registered veterinarians to use veterinary medicines "off-label" in dogs and cats. Veterinarians may therefore use vaccines at whatever interval they (and the client) determine is best for each particular animal. Veterinarians and pet owners are under no obligation to follow revaccination intervals recommended on vaccine labels.*" (My emphasis.)

I suggest the term 'off-label' is inappropriate for vaccines which are so-called 'preventive' products rather than therapeutic medicines. Swift action must be taken by the APVMA **to remove unproven prescriptive revaccination recommendations on vaccine product labels**, and replace them with evidence based information on the **minimum** duration of immunity demonstrated to be provided by these products.

The APVMA's Position Statement also states that *"...veterinarians should provide pet owners with pertinent, up-to-date information on vaccination best practice to assist in a joint decision as to whether and when to re-vaccinate their pet"*.

For too many years, members of the veterinary profession have continued to dictate that pets be revaccinated with MLV vaccines without evidence to support this practice, and have failed to communicate crucial information about duration of immunity and vaccination 'best practice' to their clients. **I suggest if this ethical failure to properly inform pet owners continues in future, it could have serious consequences for the standing of the veterinary profession.**

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