

Poultry Vaccination Programmes for New Zealand:

Biosecurity and skilled poultry husbandry remain the best weapons to prevent diseases from entering the poultry shed. Vaccination is only recommended when the risk of disease is too high and other control measures do not provide sufficient insurance to protect chicken health and welfare.

New Zealand is the only country in the world that remains free of Infectious Bursal Disease (IBD). It is also free of Newcastle Disease and Highly Pathogenic Avian Influenza.

There are however some poultry diseases that do occur as either a sporadic or a constant problem within the region.

'Core' Vaccinations	'Non-core' Vaccinations
<p>In New Zealand, these diseases are the most common threat and are usually included in a vaccination programme:</p>	<p>There are often other infectious diseases that occur sporadically or are endemic in certain areas and require vaccination control, such as:</p>
<p>Marek's Disease : Required for all breeders and commercial layers</p>	<p>Infectious Laryngotracheitis (ILT): Endemic in the upper half of the North Island</p>
<p>Infectious Bronchitis (IB) : All breeders and layers, using live and killed vaccines for protection throughout production</p>	<p>Fowl cholera (<i>Pasteurella multocida</i>): Sporadic in all regions.</p>
<p>Avian Encephalomyelitis (AE) : All breeders and layers</p>	<p>Reovirus: Sporadic in all regions.</p>
<p>Coccidiosis : All breeders and floor reared or non-caged layers</p>	<p><i>Mycoplasma gallisepticum (MG)</i>: Common in commercial layers in the upper half of North Island.</p>
<p>Chicken Anaemia Virus (CAV) : All breeders</p>	<p><i>Mycoplasma synoviae (MS)</i>: May appear in broiler breeders</p>
<p><i>Salmonella Typhimurium</i> : All breeders, and compulsory for commercial layers</p>	<p>Fowl pox: Common in the Auckland region</p>

Should New Zealand broilers be vaccinated?

In general, broilers are not vaccinated in New Zealand, except for very rare occasions (Salmonella; coccidiosis in free range operations).

Sporadic cases of Marek's have not caused significant lesions, deterioration of performance or condemnations to justify vaccination in broilers.

Infectious Bronchitis in New Zealand broilers is an erratic problem generally associated with rapidly changing seasonal weather conditions usually experienced in the South Island and in Taranaki. It is seen as a morbidity problem resulting in poor performance over a 3-4 day period, with birds showing typical mild IB symptoms of 'snicking' and wet litter. Spray vaccination of broilers being reared primarily in winter periods from day-of-age to 1-2 weeks of age has been shown to alleviate IB challenges.

Fowl Pox and ILT have not been diagnosed in the southern half of the North Island and the entire South Island and are therefore not recommended unless replacement pullets are being moved to the upper North Island.



Table 1: Typical vaccination programmes for **New Zealand Commercial Egg Layers***

Age of Egg Layer	Type of Vaccine	Method of Administration	NZ Region where recommended
Day-of-age	Marek's	At Hatchery, subcutaneous (SQ)	All NZ
	Fowl Pox (Chick-N-Pox™ TC)	SQ, with Marek's vaccine	Auckland, Bay of Plenty, Northland & Waikato
	<i>Salmonella</i> Typhimurium (Megan® Vac 1)	At hatchery, by spray	All NZ
2 weeks	<i>Salmonella</i> Typhimurium (Megan® Vac 1)	By spray, or drinking water	All NZ
2-4 Weeks	Infectious Laryngotracheitis (Laryngo-Vac™)	Intraocular, or drinking water	Auckland, Bay of Plenty, Northland & Waikato
4 Weeks	Pacificvet Infectious Bronchitis NZ "A" Strain	Coarse spray, or drinking water	All NZ
8-10 Weeks	Avian Encephalomyelitis (AE- Vac™)	Drinking water	All NZ
	or AE + Fowl Pox (AE- Poxine®)	Wing web stab	Auckland, Bay of Plenty, Northland & Waikato
10 Weeks	Pacificvet Infectious Bronchitis NZ "A" Strain	Coarse spray, or drinking water	All NZ
16 Weeks	<i>Salmonella</i> Typhimurium (Megan® Vac 1)	By spray, or drinking water	All NZ
	Killed Infectious Bronchitis (Inacti/Vac® IB1) <i>Note: If killed IB vaccine is not used, then live Pacificvet Infectious Bronchitis NZ "A" Strain vaccine should be administered every 8 weeks during the lay period to maintain IB immune protection</i>	Subcutaneous	All NZ
16-18 Weeks	Infectious Laryngotracheitis (Laryngo-Vac™)	Intraocular, or drinking water	Auckland, Bay of Plenty, Northland & Waikato

Table 2: Typical vaccination programme for **New Zealand Broiler Breeders***

Age of Breeder	Type of Vaccine	Method of Administration	NZ Region where recommended
Day-of-age	Marek's	At Hatchery, subcutaneous (SQ)	All NZ
	Fowl Pox (Chick-N-Pox™ TC)	SQ, with Marek's vaccine	Auckland, Bay of Plenty, Northland & Waikato
	Coccidiosis (Immucox Breeders®)	Gel spray (hatchery or farm), gel puck	All NZ
	<i>Salmonella</i> Typhimurium (Megan® Vac 1)	At hatchery, by spray	All NZ
2-4 Weeks	Infectious Laryngotracheitis (Laryngo-Vac™)	Intraocular, or drinking water	Auckland, Bay of Plenty, Northland & Waikato
4 Weeks	Pacificvet Infectious Bronchitis NZ "A" Strain	Coarse spray, or drinking water	All NZ
7 Weeks	<i>Salmonella</i> Typhimurium (Megan® Vac 1)	By spray, or drinking water	All NZ
8-10 Weeks	Avian Encephalomyelitis (AE- Vac™)	Drinking water	All NZ
	or AE + Fowl Pox (AE- Poxine®)	Wing web stab	Auckland, Bay of Plenty, Northland & Waikato
10 Weeks	Pacificvet Infectious Bronchitis NZ "A" Strain	Coarse spray, or drinking water	All NZ
10-14 Weeks	Chicken Anaemia Virus (Lohmann CAV Vaccine)	Drinking water	All NZ
15 weeks	<i>Mycoplasma Synoviae</i> (MS-Bac)	Intramuscular or subcutaneous	Wherever history of MS infections
18 Weeks	Pacificvet Infectious Bronchitis NZ "A" Strain	Coarse spray, or drinking water	All NZ
	Killed Infectious Bronchitis (Inacti/Vac® IB1) <i>Note: If killed IB vaccine is not used, then live Pacificvet Infectious Bronchitis NZ "A" Strain vaccine should be administered every 8 weeks during the lay period to maintain IB immune protection</i>	Subcutaneous	All NZ

(*)These tables illustrate the most common 'core' and 'non-core' vaccinations used in New Zealand. The reader is advised to note the 'non-core' vaccinations are primarily added for the northern half of the North Island where other endemic diseases are a concern (PTO). These tables are complemented by the vaccination instructions in Chapter Six, of the Pacificvet Poultry Vaccination Manual, which also includes the precaution to only use **non-chlorinated**, potable drinking water for spray and drinking water vaccination methods.

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