

Eczema Prevention for Calves

Start treatment with zinc before spores emerge to prevent eczema, as liver damage from eczema spores is cumulative, and even low spore numbers can start to sensitise animals, especially if they have had previous liver damage. Zinc protects livestock against the effects of sporidesmin by forming a complex with the toxin and removing it before it can cause damage to liver cells.

The options for zinc treatment of calves are as follows:

1. Water treatment via trough supply with zinc sulphate type products (not recommended as calves may not drink sufficient water to get the right dose).
2. Oral drenching with zinc oxide (remember that!)
3. Time capsule (zinc oxide) dosing that lasts 4 wks.
4. And now available for dairy stock under 250kg a product called **Face guard** that is a bullet that lasts 6wks & with re-treatment can be extended to 12wks.

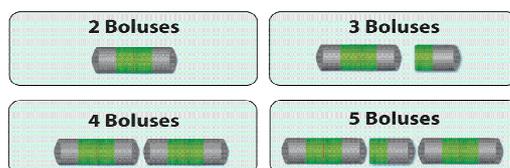
Face guard.

The Face guard bullet used for young stock up to the weight of 250kg is different to the Time capsule. For one, it is metallic zinc so it is not fragile like the Time Capsule. Face-Guard boluses will not easily break when dropped or regurgitated. Undamaged boluses can therefore be re-administered. It is less likely to cause toxicity compared to the Time Capsule (whose outer wax coat can be damaged by teeth or by being dropped which means it is digested quicker and can cause toxicity or even worse dissolve quicker and not provide protection for 4 wks).

Weight Range	Desired Protection (weeks)	(Number of boluses - See key below)		
		1st Treatment (Week 1)	2nd Treatment (Week 6)	3rd Treatment (Week 10)
90 - 130kg 	6	3	-	-
	10	3	2	-
	16	3	2	3
131 - 200kg 	6	4	-	-
	10	4	2	-
	16	4	2	4
201 - 250kg 	6	5	-	-
	10	5	3	-
	16	5	3	5

There is only one size of Face guard bullet so if the animal is bigger then you just use more bullets –only up to 250kg live weight. This product is NOT for rising 2 year old heifers – they should be well over 250kg in weight by now. *See chart for details.*

Only one special purpose gun is used and it is loaded with more bullets for heavier calves (rather than having to have several different heads for guns like the various sized Time Capsule boluses). A maximum of 5 bullets can be inserted into the gun.



If you want to check the effectiveness of your treatments it is possible to test the faecal zinc level. Zinc levels between 140 and 200mg/kg in dung have been found to be the level required to provide liver protection from facial eczema. This is the basis for the extended protection claim of faceguard. A single treatment provides adequate faecal zinc levels for 6 weeks and re-treatment can extend this out to either 10 weeks or 12 weeks.