

Table 2. Guide for nitrate levels in forages for mature cattle.

Percentage nitrate ion (NO ₃ ⁻) (dry matter basis)	Content of nitrate nitrogen (dry matter basis)		Comments ¹
	percentage	ppm ²	
less than 0.44	0.0 - 0.10	0 - 1,000	Safe to feed if adequate feed and water are available.
0.44 - 0.66	0.1 - 0.15	1,000 - 1,500	Safe for nonpregnant animals. Limit to 50 percent of total ration dry matter for pregnant animals; animals may go off feed, have a slow drop in production, some abortions possible.
0.66 - 0.88	0.15 - 0.20	1,500 - 2,000	Limit to 50 percent of total ration dry matter for all animals; may experience some symptoms, possibly death.
0.88 - 1.54	0.20 - 0.35	2,000 - 3,500	Limit to 35 to 40 percent total ration dry matter. Do not feed to pregnant animals.
1.54 - 1.76	0.35 - 0.40	3,500 - 4,000	Limit to 25 percent total ration dry matter. Do not feed to pregnant animals.
greater than 1.76	greater than 0.40	greater than 4,000	Toxic—do not feed.

¹ Total ration dry matter refers to total dry matter being consumed as forages and concentrates.

² ppm = parts per million

Causes and Prevention: Nitrate Poisoning of Livestock

by

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