

Mycotoxins* - predetermined dangerous levels

Aflatoxin - 20 ppb (upper limit)

Common molds which can produce Aflatoxin: *Aspergillus flavus*, *Aspergillus parasiticus*

	<u>Cattle</u>	<u>Dairy Cattle</u>	<u>Swine (sm grain) ≥120 lb bodyweight</u>	<u>Equine</u>
Low level	<20.0 ppb	<5.0 ppb	<20 ppb	<50 ppb
Moderate - High level	20.0 ppb - 100.00 ppb	5.0 ppb - 20.0 ppb	20 - 50 ppb	
High level/Concern	>100.0 ppb	>20.0 ppb	>100 ppb	

Zearalenone - 6000 ppb (upper limit)

Common mold which can produce Zearalenone: *Fusarium graminearum*

	<u>Cattle</u>	<u>Dairy Cattle</u>	<u>Swine (sm grain)</u>	<u>Equine</u>
Low level	<1000 ppb (<250)	<300 ppb	<200 ppb	<100 ppb
Moderate - High level	1100 ppb - 5500 ppb	-----	210 ppb - 450 ppb	
High level/Concern	>6000 ppb	>300 ppb	>500 ppb	

Vomitoxin (Deoxynivalenol - DON) - 6.0 ppm (upper limit)

Common mold which can produce Vomitoxin: *Fusarium species*

	<u>Cattle</u>	<u>Dairy Cattle</u>	<u>Swine (sm grain)</u>	<u>Equine</u>
Low level	<1.0 ppm	<2.0 ppm	<1.0 ppm	<2 ppm
Moderate - High level	1.1 ppm - 5.9 ppm	-----	approx. 1.0 ppm	
High level/Concern	>6.0 ppm	>2.0 ppm	>1.0 ppm	

Fumonisin - 6 ppm (upper limit)

Common mold which can produce Fumonisin: *Fusarium species*

	<u>Cattle</u>	<u>Dairy Cattle</u>	<u>Swine (sm grain)</u>	<u>Equine</u>
Low level	1.9 ppm	-----	-----	<1.0 ppm
Moderate - High level	-----	-----	-----	-----
High level/Concern	>5.0 ppm	-----	>10.0 ppm	>5.0 ppm

T-2 Toxin - 500 ppb (upper limit)

Common mold which can produce T-2 toxin: *Fusarium species*

	Cattle	Dairy Cattle	Swine (sm grain)	Equine
Low level	<150 ppb (<100)	<100 ppb	<100 ppb	<500 ppb
Moderate - High level	150 ppb - 450 ppb	-----	-----	
High level/Concern	>500 ppb	>100 ppb	>300 ppb	

**These are only guidelines.*

Problems may occur at lower levels depending on sampling, concentration of toxins, or unknown molds/toxins.

To convert ppb to ppm, divide by 1,000. To convert ppm to ppb, multiply by 1,000.