Theme 9: Animal Health

USE AND STORAGE OF VETERINARY MEDICINES ON DAIRY FARMS (Level 3)

Topic	Training & information Content
9.1	Introduction to Animal health (Prevention vs curative health care)
9.2	Health signals
9.3	Biosecurity of dairy farms
9.4	Tick born diseases (Prevention and treatment)
9.5	Worm infections (Prevention and treatment)
9.6	Vaccination schedule and planning
9.7	Mastitis prevention and treatment
9.8	California Mastitis Test
9.9	Usage and storage of veterinary medicines on dairy farms
9.10	Administering of medicines to dairy cows
9.11	Instruction use of injectors into teat canal
9.12	Key performance indicators (KPIs) for monitoring health status of dairy herd



1. You will learn about (learning objectives):

- ☐ How to handle and store veterinary medicines properly on the farm.
- ☐ How to record drug use.
- ☐ Expiry of the products.
- ☐ To deal with withdrawal periods.



2. Introduction

- Veterinary medicines helps you to keep your cattle healthy.
- They do this often by killing pathogenic organisms or by interfering in metabolic processes.
- This means that most medicines are poisons and have to be handled as such.
- Also, medicines can deteriorate during time and proper storage is required to prevent this.
- There are several rules to observe when handling medicines.



3. Rule 1: Cupboard

Store medicines in a place that can be locked.

- A cupboard will do.
- Locking with a key is not essential, but recommended, if many people (especially children) have access to the place.
- Do store medicines separately, not with other goods, especially not with food or feed.











4. Rule 2: Light

Keep medicines away from (sun)light.

- Some medicines will deteriorate when coming in contact with direct (sun)light.
- Pharmacists already try to prevent this by putting medicines in dark glass bottles.





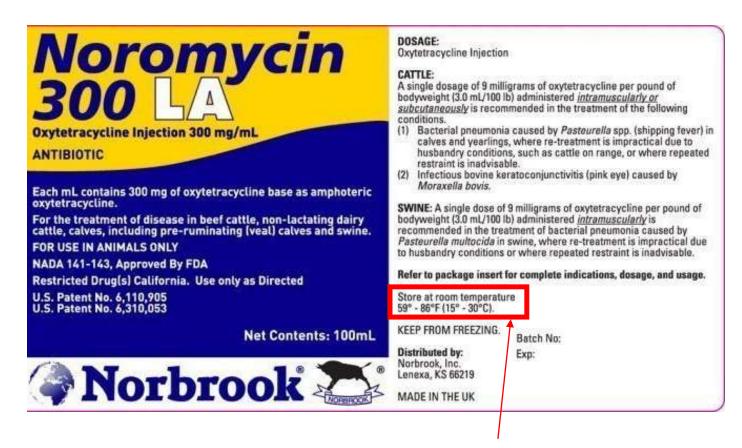




5. Rule 3: Light

Keep medicines on room temperature, on a place which stays relatively cool.

- Majority of medicines can be kept at room temperature.
- When medicines have to be stored cool or refrigerated, it will be mentioned on the label.
- Hence, do not place the cupboard under a hot tin roof or open to direct sunlight.

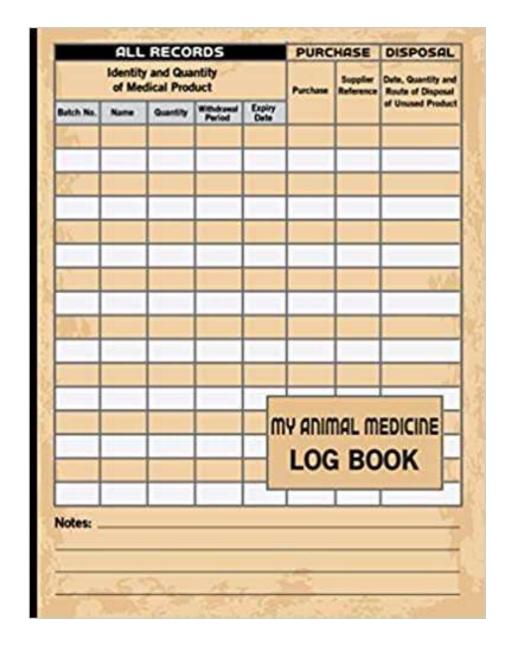


Storage conditions are always mentioned on the labels

6. Rule 4: Record

Keep records (a log book).

- Write down which medicines you bought.
- Write down when you bought it.
- Write down when you start using the medicine.
- The more elaborate you do this, the more supportive it will be.
- So you can add: expiry dates, withdrawal times, purchase price, etc.





6.1 Rule 4: Record Cont'd...

Example of a medicine usage record

 In many European countries this obligatory for dairy farmers. Government control systems are present.

Medicine Usage Record

Batch No.*	Date administered*	By Whom	Identity of Animal / Group Treated*	Number Treated	¹ Date Treatment Finished (if multiple treatments)	² End date of withdrawal period*		Total quantity	Reason for treatment
						³ Milk	Meat	used*	2000-00000
			,			i i			
					Si .				
		2	0						
			į.		1/	Ti .			2
	Batch No.*	Batch No.* Date administered*	Batch No.* Date administered* By Whom	Batch No.* Date administered* By Whom Identity of Animal / Group Treated*	Batch No.* Date administered* By Whom Identity of Animal / Group Treated* Treated	No.* administered* / Group Treated* Treated Finished (if multiple	No.* administered* / Group Treated* Treated Treatment Finished (if multiple Shift)	No.* administered* / Group Treated* Treated Treatment Finished (if multiple Shift)	No.* administered* / Group Treated* Treated Treatment withdrawal period* quantity Finished (if multiple 3 Milk Meat used*

If a course of treatment requires more than one administration over a period this column will record the final treatment and allow all treatments to be recorded in a single line of the record. The end of the withdrawal period will be calculated from the date of the final treatment.

Dairy enterprises only

This will be the withdrawal period added to the date treatment was finished.

7. Rule 5: Stock

Keep your medicine stock low.

- Medicines have expiry dates. To buy medicines to expire on your shelves is expensive.
- Also to keeping a lot of medicines will decrease your cash at hand.
- Of course you need a working stock in case of animals getting sick.

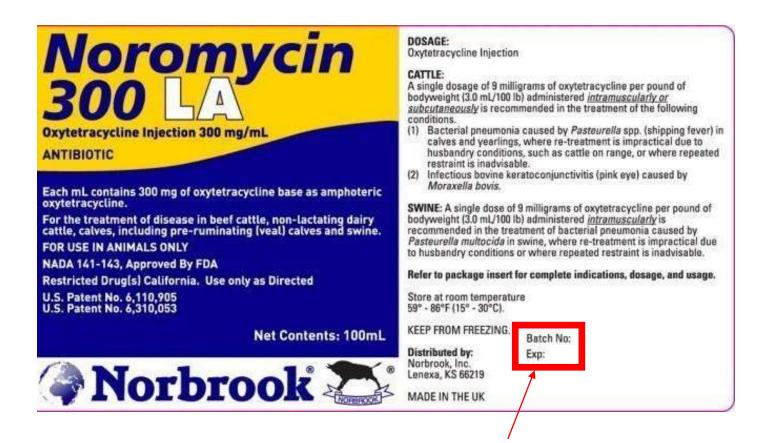




8. Rule 6: Expiry date

First In First Out.

- Beware that all medicines have an expiry date.
- Make sure that you use first the medicines you also bought first.
- Put newly bought medicines at the back of your cupboard and those bought recently in the front.



On the bottle the batch number and expiry date will be stamped on it.

9. Rule 7: Withdrawal Period

Beware of Withdrawal periods.

- Withdrawal periods are always mentioned on the bottle.
- Registered medicines for cattle will mention a withdrawal period for beef and milk.
- In this case the medicine may not even be used for lactating cattle.

Noromycin 300 LA is a sterile preconstituted solution of the broad-spectrum antibiotic oxytetracycline. Each ml. contains 300 mg of oxytetracycline base as amphoteric oxytetracycline; 2.7% w/v magnesium oxide; 40% v/v glycerol formal; 10% v/v polyethylene glycol; and 0.4% w/v sodium formaldehyde sulphoxylate (as a preservative), monoethanolamine and/or hydrochloric acid as required to adjust pH.

WARNINGS: Discontinue treatment at least 28 days prior to slaughter of cattle and swine. Not for use in lactating dairy animals. Rapid intravenous administration may result in animal collapse. Oxytetracycline should be administered intravenously slowly over a period of at least 5 minutes.

Exceeding the highest recommended level of drug per pound of bodyweight per day, administering more than the recommended number of treatments, and/or exceeding 10 ml/intramuscularly or subcutaneously per injection site in adult beef cattle and non-lactating dairy cattle, and 5 mL intramuscularly per injection site in adult swine, may result in antibiotic residues beyond the withdrawal period. Use extreme care when administering this product by intravenous injection. Perivascular injection, or leakage from an intravenous injection, may cause severe swelling at the injection site.

CAUTION:

Intramuscular or subcutaneous injection may result in local tissue reaction which persists beyond the slaughter withdrawal period. This may result in trim loss of edible tissue at slaughter.



Noromycin

Oxytetracycline Injection 300 mg/mL

ANTIBIOTIC

Each mL contains 300 mg of oxytetracycline base as amphoteric oxytetracycline.

For the treatment of disease in beef cattle, non-lactating dairy cattle, calves, including pre-ruminating (yeal) calves and swine.

FOR USE IN ANIMALS ONLY

NADA 141-143, Approved By FDA

Restricted Drug(s) California. Use only as Directed

U.S. Patent No. 6,110,905 U.S. Patent No. 6,310,053

Net Contents: 100mL





The withdrawal period will always be mentioned on the label.

10. Rule 8: Disposal

Dispose and use medicines in a proper way.

- As mentioned earlier on, medicines are poisons.
- Medicines should not pollute the environment.
- Dispose them (and their remains) in a proper way. If there are no possibilities, burn them.
- Return expired and unused product to the supplier.
- Take empty containers to landfills.
- Speak to your veterinarian about disposal options.



11. Rule 9: Protect

Protect yourself from coming into contact with medicines.

- Acaracides in particular, are highly poisonous substances.
- Wear gloves, cover your skin and wear safety glasses.







12. Rule 10: Keep your cattle healthy

Protect yourself from coming into contact with medicines.

The ultimate aim is to keep your cattle healthy.
 The healthier the cattle, the less medicines you need.





