* **Procaine penicillin G**

Injectable penicillin is one of the most commonly used drugs in livestock production and is also one of the common causes of residues in meat and milk.

* Meat withdrawal times:

Cattle - 14 days, Sheep - 9 days, Swine - 7 days

* Milk withdrawal - 48 hours

The FDA approved label dose is 1ml\100lbs of body weight, given once a day, intramuscularly (no more than 10ml per injection site). The treatment duration tends to vary between brands, ranging from 4-7 consecutive days.

Since the labeled dose is not often an effective treatment level, dosing practices tend to be higher than those found on the label. Doses of 3-5ml\100 lbs body weight once or twice a day may be recommended by veterinarians. However, even though these doses are likely to be more effective, it leads to prolonged withdrawal times for meat and milk- withdrawal times can exceed 5 days in milk and 21 days in meat.

* **Meloxicam**

Meloxicam has 27 hours half-life with 21 days withdrawal time

* **Flunixin meglumine**

Meat: Animals must not be slaughtered for human consumption during treatment. Horses and cattle intended for human consumption may be slaughtered 7 days following treatment. Pigs intended for human consumption may be slaughtered 24 days following treatment.

Milk for human consumption must not be taken during treatment.

Milk: 36 hours. Milk intended for human consumption may only be taken from treated cows after 36 hours from the last treatment.

Not for use in dry dairy cows. Do not use in calves to be processed for veal. Do not use in bulls intended for breeding. NSAIDS are known to have potential effects on both parturition and estrus cycle. Intramuscular administration has resulted in illegal residues.

Before administering doses of drugs to animals, producers must consult with veterinarians so that the appropriate dose can be administered, and the appropriate withdrawal times can be observed to prevent introduction of the produce into the food chain and subsequent development of antibiotic resistance in humans upon consumption.