## Killed Vaccine Handling; Dosing & Administration-Dairy

Being one of the factors that affect the animal rearing, health of the animal determines the quality and quantity of the products obtained from the animals.

Success of killed vaccine depends on animal's ability to respond to the vaccine, proper handling and administration of the vaccine as well. Killed vaccines are put in bottle basing on needed dose amount.

## Vaccine administration

First killed vaccine is a ready to use vaccine which require no mixing and in this protect it from heat, sunlight as well as extreme cold of freezing temperature when storing. Store in refrigerator between 35 and 40 degrees fahrenheit and during administration store field syringes in a cooler that block sunlight and protect from extreme temperatures.

Additionally avoid administration when cow is wet or dirty and before vaccine usage, gently shake or roll the bottle to evenly distribute the components in the vaccine. As you use one hand to put the bottle at an angle, hold syringe in the other hand and insert needle into centre of rubber stopper.

Use the free hand to draw desired amount of vaccine and once obtained, remove needle from bottle and remove air from syringe as is dangerous to animals and make inaccurate dosing. Using a multi dose syringe requires to set correct dosage for each animal to receive proper one.

Similarly properly restrain animal to minimise movement, needle break and protect animal well being. When selecting

injection site, stay below nuchal ligament in front shoulder and in front away from lymph node. Make sure the area is clean and free of debris.

For subcutaneous injection, select new sterile needle and pull the cow's neck out to create tent where the needle is place below it being sure not to go towards muscle. Deliver vaccine, remove needle and release the skin. After vaccination, clean the syringes using boiling water and dont use any disinfectant.

Finally for multi used syringe, use it on same product everytime and for best results killed vaccine should be used entirely when opened. Properly dispose off needles following regulations.