

# Modified Live Vaccine Mixing, Handling & Administration-Dairy

Health of the animals remain an important factor that determine the quality and quantity of the products during animal production.

As the success of modified live virus vaccine depends on animal's ability to respond to the vaccine, proper mixing, handling and administration, it is important to make consultations from the veterinarian to prevent cattle diseases.

## Vaccine management

First, protect vaccine from sunlight, heat, extreme cold or freezing temperatures and store according to labelled direction and while at shoot site put syringes in a cooler and avoid administration when cattle is wet or when temperatures are extreme.

Similarly, mix the 2 bottles found in the box together to activate the adjuvant and in the process, use sterile transfer needle to avoid contamination from a different type of vaccine. Place transfer needle into plastic bottle first entirely through rubber stopper, invert the plastic bottle and insert the end of transfer needle into the rubber stopper of glass bottle. The vacuum in glass bottle will pour liquid from plastic bottle.

After transfer, remove transfer needle from plastic bottle and gently shake bottle until cake is thoroughly dissolved in liquid. Dont shake aggressively as this damages the components of vaccine and to prevent this, refer to product box with dosage and administration details.

Additionally to start, use one hand to tip glass bottle towards an angle, hold syringe in the other hand to insert needle into centre of rubber stopper of mixed vaccine to draw a desired dosage and after drawing, remove needle from bottle and release some vaccine while the tip is up to eliminate air which is dangerous to animals and make inaccurate dosing. Restrain animal properly and for subcutaneous injection, locate the site which should be clean and clear of debris and use new sterile needle. Create tent in animal's neck, place needle at base of tent not to angle towards muscle, deliver vaccine, remove syringe , release skin and mark the vaccinated animal.

Finally after vaccination clean syringes using boiling water and dont use disinfectants. For effectiveness, all modified live virus vaccine should be used in an hour of mixing and after dispose off needles according to regulations.