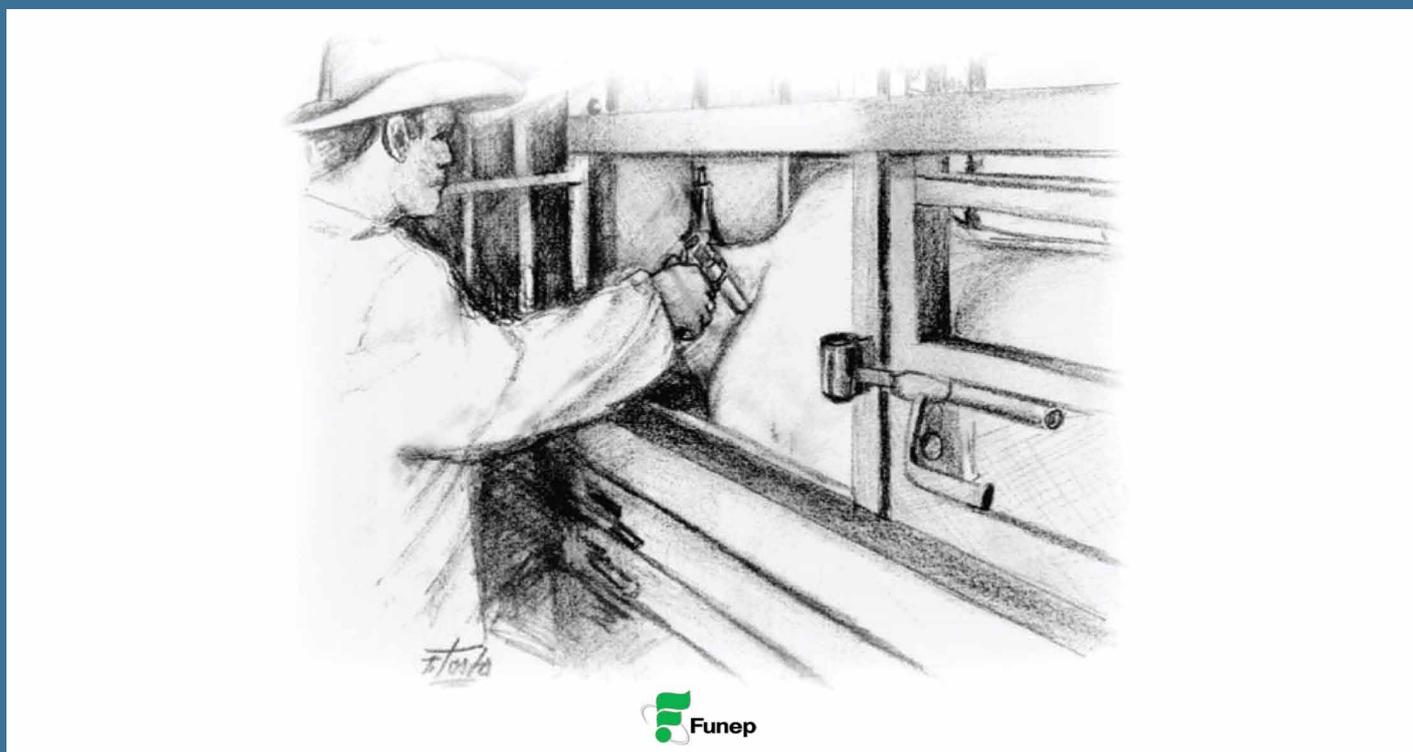


Best Practices of Handling VACCINATION



Mateus J. R. Paranhos da Costa - Luciandra Macedo de Toledo - Anita Schmidek

Vaccination is a necessary action in livestock farming, either by the mandatory laws which aim to prevent or eradicate certain diseases, or to ensure good animal health, reducing the risks of diseases and consequent economic losses. Nevertheless, the vaccination procedure is an aversive practice itself, since it invariably results in fear and pain. Therefore, the vaccination procedures must be carried out in a good way, trying to minimize the negative impact of this handling practice on cattle welfare. The adoption of best practices of beef cattle vaccination provides direct economic benefits, with a reduction animal stress, vaccine loss, problems with equipment (broken syringes and damaged needles) and risks of accidents at work, improving the welfare of the animals and the work efficiency in the farms.



Best practices of vaccination - step-by-step

1. Before starting the vaccination, get everything ready. Be sure that everything necessary for the vaccination (vaccines, syringes, needles, ice cooler box, and needles disinfection equipment) is available and in good conditions.
2. Some vaccines should be kept under low temperature. In these cases, keep the vaccine bottles always inside an ice cooler box, protecting them from direct solar radiation and ensuring a temperature between 2 and 8°C.
3. Carry everything needed for the vaccination to the corral, laying them all on a table positioned in a safe and shady place. When vaccination lasts all day, it could be necessary to change the table location, keeping it always protected from the direct solar radiation.
4. Fit the needles in the syringes and load them with the vaccine. All syringes (loaded or empty) should be maintained into the ice cooler box.
5. When everything is ready, drive the first animals into the forcing pen, and from there to the race chute and squeeze chute. Do not shout nor use an electric cattle prod when doing it.
6. Do not fill completely the corral pens and race chute with the animals, avoiding crowded situations.
7. When everything is ready, drive the first animal into the squeeze chute.
8. Use the head holder to restrain the animal only after closing the exit gate, do it without blows and preferably when the animal is standing.
9. After restraining the animal, open the lateral door (or window) to get access to the cattle neck. When injecting two or more vaccines (or any other injectables) use both sides of the animal's neck.
10. Work safely, never introduce your arms in between the squeeze chute's boards, pipes, or rails.
11. Inject the vaccine always in the neck. For subcutaneous application, place the syringe parallel to the animal's neck, pull the skin, insert the needle, and inject the vaccine. For intramuscular vaccine, hold the syringe perpendicular to the animal's neck, insert the needle, and inject the vaccine.
12. After injecting the vaccine, close the lateral door (or window) of the squeeze chute, and release the animal, letting it go.
13. The ideal situation is to allow that each vaccinated animal goes straight into a paddock near the corral, with access to forage, water, and shade. Always, when possible, provide concentrate as a food reward to the animals after vaccination.
14. After vaccinating one animal, replicate all the described procedures above with the next one.
15. When the syringe is empty, remove the needle, putting it into a bowl with boiling water. Never insert a dirty needle in the vaccine bottle! Pick up a clean needle (already dry and cold) and fit it in the syringe. Fill the syringe and place it into the ice cooler box. Keep the ice cooler box lid always closed, and be sure that the temperature inside the thermal box is between 2 to 8 °C.
16. Pay attention to the water used to disinfect the needles, always keeping the correct level, replacing it when necessary. When the water gets dirty, change it.
17. At the end of a working period, put the needles in a bowl with boiling water for at least 20 minutes. Remove the disinfected needles from the bowl and place them on clean and dry absorbent paper, covering them with another sheet of paper.
18. At the end of the work, consider driving the animals again through the handling facilities (forcing pen, race chute and squeeze chute), before driving them back to the pasture or feedlot pen.

