

Background: Because calves are born without any antibodies, their only source is colostrum. When ‘snatch calving’ is practiced, and colostrum feeding taken over, harvesting colostrum correctly is the first step in ensuring good passive transfer of immunity.

STEP	HOW	WHY
Harvest as soon as possible after calving	Take the cow to the parlour or have a mobile milking unit in the calving pen.	Antibody transfer to the udder stops around calving and after calving the antibody concentration in the udder declines. The rate of decline is about 3.7% for each hour after calving ¹ , so delaying harvesting of colostrum reduces the quality of available colostrum.
Teat prep to the standard of a normal milking	Teat prep to the standard of a normal milking.	Bacteria interfere with antibody absorption in the calf’s gut as well as causing disease in their own right. Harvesting is a critical control point for colostrum cleanliness; prepping teats to the same standard as in a normal milking reduces bacterial contamination of colostrum and transfer of pathogens to the calf ² .
Equipment Hygiene	Watch for perishing of rubber parts; replace regularly. Hot water and detergent, scrub to remove colostrum scum, then disinfect.	Equipment hygiene is also a critical control point for colostrum cleanliness.
Pooling	Avoid pooling colostrum.	Low antibody, high volume colostrum will be over represented in pooled colostrum, reducing colostrum quality. Risk of disease transfer.

References: 1. Morin, D.E., Nelson, S. V, and Reid, E.D., 2010. Effect of colostrum volume, interval between calving and first milking, and photoperiod on colostrum IgG concentrations in dairy cows. *Journal of the American Veterinary Medical Association*, 237 (4).
2. Stewart, S., Godden, S., Bey, R., Rapnicki, P., Fetrow, J., Farnsworth, R., Scanlon, M., Arnold, Y., Clow, L., Mueller, K., and Ferrouillet, C., 2005. Preventing bacterial contamination and proliferation during the harvest, storage, and feeding of fresh bovine colostrum. *Journal of Dairy Science*, 88 (7), 2571–2578.

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