

- o. **Random Sample Flock Test - how to select sheep for sampling:**
- i. Only sheep ≥ 365 days of age are eligible for testing.
 - ii. The number of sheep to be tested is determined by the table in Appendix 8.
 - (1) This number is determined to detect MV infection at a prevalence of $\geq 5\%$ of the flock with 95% confidence.
 - (a) I.e. if at least 5 of every 100 sheep in the flock are MV positive, then there is a 95% chance that at least one animal will be found on the random test.
 - (2) It will not reliably detect a prevalence of MV infection $\leq 5\%$.
 - (3) The animals selected for testing *must* be randomly selected to ensure an accurate flock test.
 - iii. **How to perform the random flock test:**
 - (1) Make a list of all sheep in the flock that are eligible for testing, i.e. ≥ 365 days of age. Number the sheep on the list 1, 2, 3,... etc to the last sheep on the list.
 - (2) Consult the table in Appendix 8 to determine how many of those sheep must be tested.
 - (a) e.g. if 200 adult sheep are eligible for testing, then 51 sheep must be tested.
 - (3) Use a random number generator to create a list of randomly selected numbers.
 - (4) The producer can pre-sort the selected animals and have them ready for testing on the day.
 - (5) A second way to use the random number list is to use this list to select animals as they run down the chute. E.g. again using the example in Appendix 8, the first sheep to be sampled would be the 3rd animal to run down the chute, then the 6th animal, then the 8th animal and so on. A drawback to this method is that it requires handling of all the eligible sheep in the flock.
- p. **Timing of Sampling With Respect to Lambing.** There is some evidence that positive sheep may not test positive within one month of lambing (before and after). This may be because the ewe moves large volumes of immunoglobulins into her colostrum, or may have another reason. Occasionally true positive animals then test negative. For this reason, it is recommended that flock tests be scheduled so that sheep are not within one month of lambing, but this is not a requirement.