National Veterinary Services Laboratories
Pseudorabies –Virus Neutralization (PRV-VN)
Proficiency Test Summary

1. Composition of proficiency test panel: The panel consists of twenty 650-µl samples of sera. The panel contains blind duplicates, positive, and negative sera. The samples are labeled with numbers 1-20.

2. Cost of proficiency test: $361.00 plus shipping ($10-US, $50 Canada, $150 other).

3. Storage conditions: Short term (up to 7 days) store at 4° ± 2° C. Long term (over 7 days) store at <-20° C in a non-frost free freezer.

4. Sample preparation/selection criteria: Samples with positive and negative results are chosen for incorporation into the panel. Antibody levels arise from naturally and experimentally acquired infections. Each panel member is tested at least ten (10) times by a minimum of two technicians in the Diagnostic Virology Laboratory (DVL), at NVSL.

5. Panel quality control: Samples are monitored for stability and reproducibility. Sera are filtered prior to bottling.

6. Timing of the proficiency test distribution and data collection: The PRV-VN panel is administered once a year generally in January for United States approved laboratories. The panel is administered internationally upon request.

7. Test method: Performance and interpretation of the Pseudorabies – Virus Neutralization should be conducted as outlined in BPSOP2112 for BP personnel. Approved laboratories are not required to follow BPSOP2112 at this time.

8. Submitting test results: Participants are required to have data submitted for scoring no more than four (4) weeks after panel distribution. Results are reported to the Head of the Bovine/Porcine Section in the DVL, at NVSL, or designee, by fax, e-mail, or mail.

9. Scoring of individual panel samples: Scoring is based on two criteria: proper identification of positive and negative samples and accuracy of reported titers. Identity scores are determined by assigning one point per sample correctly identified as negative (less then 1:4) or positive (any titer).

Accuracy scoring is determined by assigning one point per sample for the expected titer. Reported titers within one two-fold dilution of the expected titer are also assigned one point. For a four-fold difference in titer from the expected result, 0.33 point is subtracted; for an eight-fold difference, 0.67 point is subtracted. Reported titers that differ more than eight-fold from the expected titer received zero points for accuracy.

10. Laboratory pass/fail criteria: Identification scores and accuracy scores must be at least 15/20 to pass. Laboratories with one or both scores $\geq$ 15and <18 are provided a copy of BPSOP2112.

11. Reporting laboratory test scores (U.S. laboratories only): Results for each laboratory are reported to the individual laboratory director and the AVIC. Pass letters are sent to laboratory directors within 60-90 days of the deadline for receipt of participants' results.

12. Remedial actions required for failing laboratories (U.S. laboratories only): Laboratories are given a second chance to pass a proficiency panel. If they fail a second time, PRV testing at the laboratory is stopped, personnel must travel to NVSL for training, and the laboratory must pass a panel before testing can begin again.

13. Special requirements (U.S. laboratories only): Laboratories must meet requirements stated in the Code of Federal Regulations (CFR) title 9, part 85.