

Voluntary OPP/CAE Test & Control Pilot Program for SFCP Flocks/Herds*

Background:

The OPP Concerned Sheep Breeders Society — producers, veterinarians, researchers and breed associations providing education and support nationwide since 1990 — has requested a uniform government administered program to validate Ovine Progressive Pneumonia (OPP) and Caprine Arthritis Encephalitis (CAE) flock/herd status. In response, the United States Animal Health Association (USAHA) Committee on Sheep and Goats has recommended that the OPP Society develop a pilot project to evaluate the interest in and success of a voluntary, producer paid, OPP/CAE test and control program and that the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Veterinary Services (VS), National Animal Health Monitoring System (NAHMS), Agricultural Research Service (ARS), and state animal health authorities support the piloting of this program (Appendix 1).

The Committee also recommended that a working group (Appendix 9) be formed to set protocols for testing. The majority of the working group members are sheep producers, several of whom have had experience eradicating OPP from their flocks. The group, which began work in early December, 2005, also includes USDA-ARS, APHIS, and university researchers and veterinarians as well as representatives from the Minnesota Board of Animal Health.

How will the pilot study work?

Participation in the voluntary OPP/CAE pilot program will be available to any producer having reached Certified status in the voluntary Scrapie Flock Certification Program (SFCP), or SFCP enrolled and working toward Certified status. Blood serum samples from pilot study animals will be tested annually for OPP/CAE at a designated American Association of Veterinary Laboratory Diagnosticians (AAVLD) laboratory (Appendix 2) using the USDA-licensed agar gel immunodiffusion (AGID) test kit for sheep; the USDA-licensed CAE/cELISA test is recommended for goats. Where flocks/herds are found to be infected with the OPP/CAE virus (OPPV/CAEV), producers will work with their accredited local veterinarian for development and monitoring of an eradication and/or control program. Test results will be sent to the veterinarian to be reviewed with owner, and the eradication/control program will be reviewed with both parties annually.

All laboratory fees for initial testing, as well as any costs for routine sample collection and/or processing done by the local veterinarian, will be the responsibility of the enrolled producer. In the case of indeterminate or questionable test results, serum remaining from the initial test will be sent to the USDA Animal Disease Research Unit (ADRU) in Pullman, WA, for further testing with real-time polymerase chain reaction (PCR), caprine arthritis encephalitis/competitive enzyme-linked immunosorbency assay (CAE/cELISA), and/or western blot and AGID, all at no charge to the producer and with a turnaround time of less than four weeks. Collection fees and shipping of additional samples, if requested by the USDA laboratory in Pullman, will also be free of charge.

Enrolled producers will submit all laboratory test reports to their SFCP Administrator, who will in turn issue an annual notice of flock/herd status which will become an official part of the SFCP record. The OPP Concerned Sheep Breeders Society (www.OPPsociety.org) will serve as an educational resource, with information packets mailed to all enrolled producers and their local flock veterinarians. Requirements for participation, testing protocol and status levels follow.

Goals of the Study:

- To increase awareness of the seroprevalence and effects of OPPV/CAEV infection.
- To provide education regarding schemes to control and/or eradicate OPPV/CAEV infection.
- To develop a program of value to flocks/herds of all sizes under various management systems.
- To publicly acknowledge the efforts of those who elect to control and/or eradicate OPPV and/or CAEV.
- To demonstrate the need for the National Veterinary Services Laboratories (NVSL) to develop a lab proficiency panel for the AGID test.
- To assist in the further validation of the CAE/cELISA test for use in sheep.
- To demonstrate that animals can travel safely to shows without contracting OPPV/CAEV.
- To determine whether the level of producer interest justifies a nationwide program.

It is important to note that, while adherence to the following testing protocol and recommended management practices may in fact facilitate the eradication of OPPV/CAEV from infected flocks/herds, this pilot study does not profess to be a guaranteed eradication scheme.

REQUIREMENTS FOR VOLUNTARY PARTICIPATION:

(Reading from this point forward, the word “flock” refers to both sheep and goats.)

The flock owner or manager who wishes to participate in the OPP Pilot Study will agree to:

- Fulfill all requirements of the Complete Monitored category of the voluntary Scrapie Flock Certification Program (SFCP) and actively work toward/maintain SFCP Certified status (i.e. flock closed on the female side except for animals of equal or higher status).
- Maintain flock inventory in an electronic format as instructed by his/her SFCP inspector and, prior to each annual SFCP inspection, submit an inventory update to the SFCP inspector including all acquisitions, departures, births and deaths having occurred since the previous annual inspection.
- Arrange for annual blood sampling for OPP/CAE testing. Samples will be collected by or under the supervision of the local accredited flock veterinarian or, where feasible and in cooperation with the local veterinarian, sampling may be done by or under the supervision of the state or federal animal health official at the time of the annual SFCP inspection and blood samples delivered by the producer to the local veterinarian for processing and shipment to the designated AAVLD accredited laboratory.
- Mail all OPP/CAE test results to the SFCP Administrator within 30 days following receipt.
- Adhere to the OPP./CAE Pilot Study Testing Protocol as outlined below.
- If the flock is found to be infected with OPP/CAE virus, follow a flock-specific management protocol (see Appendix 4) including separation of test-negative from any retained test-positive animals, as well as from those of unknown status. ***Any retained***

test-positive animals must be managed as a separate flock. An eradication and/or control program will be developed in partnership with, and monitored by, the local veterinarian. Test results will be sent to the veterinarian to be reviewed with owner, and the eradication/control program will be reviewed with both parties annually.

PARTICIPATION / STATUS LEVELS:

- **Enrolled** — All animals 12 months of age or older which are believed to be negative are tested annually (11-13 months) and laboratory results are submitted to the SFCP Administrator. Flocks undergoing eradication may also elect to do additional testing.
- **Test-Negative** — After 3 consecutive annual whole-flock 100% negative tests have been completed, or a 5-year test and monitoring program has been completed as described below with no positives detected, the flock will be assigned “Test-Negative” status. From that point forward, assuming no animals test positive, a percentage of the flock will be tested annually and laboratory results submitted to the SFCP Administrator.

TESTING PROTOCOL:

YEAR ONE: Initial Screening Test (may be either whole flock or percentage)

- *Whole-flock:* Test all sheep/goats in the flock 12 months of age or older.
 - If 100% negative, select either the 3 or 5-year program for subsequent annual tests.
 - If any animals test positive, they should be culled or separated from the negatives. The flock may enter the 3-year program outlined below as soon as all animals test negative at least 6 months, but no more than 13 months, following removal of all test-positives.
- *Partial-flock:* Test a statistical subset of the flock as defined in Appendix 3.
 - If there are no positives, it is recommended though not required that the remainder of the flock be tested as soon as possible so that any positives can be culled or separated from the negatives. If the owner elects to test the remainder of the flock within 60 days of the initial test, and all animals are determined to be negative, this two-stage test will be considered a whole-flock 100% negative test for the purposes of this pilot program and the owner may select either the 3 or 5-year program for subsequent annual tests.
 - If there are no positives, and the owner *does not test* the remainder of the flock within 60 days, all animals 12 months of age or older should be tested the following year. If that whole-flock test is negative, the owner may select either the 3 or 5-year program for subsequent annual tests. If any animals are positive on that first whole-flock test, they should be culled or separated from the negatives. ***The flock may enter the 3-year program outlined below as soon as all animals test negative at least 6 months, but no more than 13 months, following removal of all test-positives.***
 - If any animals are positive on the initial partial-flock test, the producer should consider all options for control and/or eradication (see Appendix 4) prior to further testing.

Subsequent Annual Tests (complete either program to attain “Test-Negative” status)

- **Three-Year Program:**

YEAR TWO:

—Test all sheep/goats 12 months of age or older which are believed to be negative.

—If all test negative, the flock will proceed to Year Three for the next annual test.

—If any animals test positive, the flock should be tested again 6-13 months following removal of all test positive animals. ***“Test Negative” status will not be awarded until three consecutive annual whole-flock negative tests have been achieved.***

YEAR THREE:

—Test all sheep/goats 12 months of age or older which are believed to be negative.

—If all test negative, the flock will be assigned “Test Negative” status.

—If any animals test positive, the flock should be tested again 6-13 months following removal of all test positive animals. ***“Test Negative” status will not be awarded until three consecutive annual whole-flock negative tests have been achieved.***

- **Five-Year Program:**

YEAR TWO:

—Test only those sheep/goats that were between 12 and 24 months of age at the time of the initial whole-flock 100% negative screening test.

—If those animals all test negative, the flock may continue in the Five-Year Program.

—If any animals test positive, the flock will no longer be eligible to participate in the Five-Year Program. The flock should be tested again 6-13 months following removal of all test positive animals. As soon as one whole-flock 100% negative test has been achieved, the flock may enter the Three-Year Program.

YEAR THREE:

—Test only those same animals that were tested in year two.

—If those animals all test negative, the flock may continue in the Five-Year Program.

—If any animals test positive, the flock will no longer be eligible to continue in the Five-Year Program. The flock should be tested again 6-13 months following removal of all test positive animals. As soon as one whole-flock 100% negative test has been achieved, the flock may enter the Three-Year Program.

YEAR FOUR:

—Test 10% of the flock (or a minimum of 5 animals if the flock consists of fewer than 50 animals) preferably consisting of ewes/does at least 5 years of age.

—If those animals all test negative, the flock may continue in the Five-Year Program.

—If any animals test positive, the flock will no longer be eligible to continue in the Five-Year Program. The flock should be tested again 6-13 months following removal of all test positive animals. As soon as one whole-flock 100% negative test has been achieved, the flock may enter the Three-Year Program.

YEAR FIVE:

—Test all animals in the flock 12 months of age or older.

—If all animals test negative, the flock will be assigned “Test Negative” status.

—If any animals test positive, the flock will no longer be eligible to continue in the Five-Year Program. The flock should be tested again 6-13 months following removal of all test positive animals. As soon as one whole-flock 100% negative test has been achieved, the flock may enter the Three Year Program.

Acquisitions

- All acquisitions, unless from an OPP Pilot Study enrolled flock of equal or higher status, must be tested within the 30 days immediately before or after arrival on the premises, and annually for as long as they remain in the flock.

Maintaining “Test-Negative” Status

- Once “Test-Negative” status has been achieved, only 10% of the flock (a minimum of 5 animals if the flock consists of fewer than 50 animals) needs to be tested annually, preferably consisting of ewes/does that have been in the flock for at least 2 years. In addition, acquisitions must be tested as noted above. The local veterinarian, or the state or federal animal official conducting the annual SFCP inspection, may, at his/her discretion, specify which animals are to be tested.

Blood samples collected at SFCP inspection

- When blood samples for OPP testing are to be collected during the SFCP inspection, the following protocol must be followed:
 - 1) Producer will provide all required collection supplies (tubes, needles, etc.).
 - 2) Tubes will be pre-labeled and organized for easy access while checking ID.
 - 3) Laboratory submission form will be completed and ready for signature.
 - 4) Producer will deliver samples to local vet, who will submit sera to laboratory.

Additional testing for eradication purposes

- While this Pilot Study requires testing only once each year, plus retests if needed at the individual animal level, those working to eliminate OPPV/CAEV may elect to do additional testing in order to accelerate the eradication process. To encourage more frequent testing, the flock owner or manager, in cooperation with the local veterinarian, may collect samples for tests done *in addition to the annual flock requirement*. Samples will be delivered to the veterinarian for processing/shipment, and results forwarded to the SFCP Administrator.

Local veterinarian submits to laboratory

- The accredited local veterinarian is responsible for processing and submission of all samples to the designated AAVLD accredited laboratory for testing with the USDA-licensed OPP/AGID (sheep), or CAE/cELISA (goats). Only serum should be submitted.

IF ANIMALS ARE FOUND TO BE TEST-POSITIVE, SUSPECT, OR INCONCLUSIVE:

- Any animal from an “Enrolled” status flock with a positive, suspect, or inconclusive test result, if not removed from the flock, will be placed in isolation and retested at the same AAVLD accredited laboratory in 30-60 days, with all costs the responsibility of the owner. If the retest is negative, the animal may return to the flock. If the retest is positive, suspect, or inconclusive, the flock owner or manager may request that serum remaining from the AGID (sheep) or CAE/cELISA (goats) retest be shipped to the USDA-ADRU in Pullman,

WA, for further testing at no charge to the owner, and with a turnaround time of less than 4 weeks. Collection fees and shipping of additional samples, if requested by the USDA laboratory, will also be at no charge to the owner. The final status of the animal in question will be as determined by USDA-ADRU. If negative, the animal may return to the flock.

- Any animal from a “Test-Negative” status flock with a positive, suspect, or inconclusive test result, if not removed from the flock, will be placed in isolation and serum remaining from the test will be shipped immediately to the USDA-ADRU in Pullman, WA, for further testing at no charge to the owner, and with a turnaround time of less than 4 weeks. Collection fees and shipping of additional samples, if requested by the USDA laboratory, will also be at no charge to the owner. The final status of the animal will be as determined by USDA-ADRU. If negative, the animal may return to the flock but must be included in the next round of testing, as an addition to the required 10% of the flock.

FLOCKS WITH PRIOR TEST-NEGATIVE HISTORY:

Flock owners or managers having completed year 4 of the 5-year testing program with no positive animals detected, who can provide copies of OPP/CAE test results from an AAVDL accredited laboratory documenting OPPV/CAEV eradication — or absence of OPPV/CAEV — *prior to having enrolled in this Pilot Study*, may petition the State Scrapie Board for exemption of the 5th year whole-flock test requirement. Typically, this would require documentation of a minimum of 2 consecutive years of 100% negative whole-flock tests followed by routine monitoring of a percentage of the flock, with the most recent whole or partial flock test having occurred within the 24 months immediately preceding enrollment in the OPP Pilot Study. Granting of said exemption will be at the sole discretion of the State Scrapie Board.

Updated draft submitted August 2009

by Judy Lewman and Holly Neaton on behalf of the OPP Concerned Sheep Breeders Society

ATTACHMENTS:

APPENDIX 1: Excerpt from 2005 Meeting of the USAHA Committee on Sheep and Goats

APPENDIX 2: Veterinary Diagnostic Laboratories

APPENDIX 3: Random Testing Table

APPENDIX 4: Management Recommendations and Considerations

APPENDIX 5: Producer’s Check List (Minnesota)

APPENDIX 6: Program Application Form (Minnesota)

APPENDIX 7: Program Test Submission Form (Minnesota)

APPENDIX 8: Program 2006 Progress Report (Minnesota)

APPENDIX 9: Pilot Study Working Group

APPENDIX 1

VOLUNTARY OPP/CAE TEST AND CONTROL PILOT PROGRAM

On November 7, 2005, the following recommendation was passed regarding a voluntary project addressing Ovine Progressive Pneumonia (OPP) control.

Excerpted from 2005 Annual Minutes:

United States Animal Health Association (USAHA) Committee on Sheep and Goats

Background:

The National Animal Health Monitoring System 2001 Sheep Study determined that 36.4% of the nation's sheep operations had one or more animals test positive for Ovine Progressive Pneumonia. Producers aware of the effects of this disease would like to see a uniform program to validate Ovine Progressive Pneumonia flock status. Many are already paying for annual whole-flock testing, and several have expressed a willingness to pay a reasonable administrative fee for an Ovine Progressive Pneumonia control program. The Ovine Progressive Pneumonia Concerned Sheep Breeders Society, a group composed of producers, veterinarians, researchers, and breed associations, has been providing education and support nationwide for this disease since 1990, is interested in piloting an Ovine Progressive Pneumonia control program that, if successful, could be used to lay the groundwork for a national Ovine Progressive Pneumonia control program.

Recommendation:

The United States Animal Health Association Committee on Sheep and Goats recommends that the Ovine Progressive Pneumonia Concerned Sheep Breeders Society develop a pilot project that would evaluate the interest and success of a voluntary, producer-paid, Ovine Progressive Pneumonia test and control program and that the United States Department of Agriculture, Animal and Plant Health Inspection Service, Veterinary Services, NAHMS, ARS and state animal health authorities support the piloting of this program. It is recommended that this program be initially limited in size but include diverse management systems.

Furthermore, the committee recommends that a working-group be formed and that this group set protocols for testing. They will also develop an appeal process for potentially erroneous results. Members volunteered to serve on this working group. The committee expects to have a one year report regarding this project at the next annual USAHA meeting.

The working group will work cooperatively to develop testing protocols and procedures.

UPDATE:

On January 11, 2006, the proposed OPP Pilot Program was presented to the Minnesota Board of Animal Health where it was unanimously approved for a period of 4 years with annual review.

Minnesota's USDA Veterinary Services has also offered their full support of the OPP Pilot as an add-on to the voluntary Scrapie Flock Certification Program.

- All routine serology for the Minnesota OPP Test & Control Pilot Study will be done at the University of Minnesota Veterinary Diagnostic Laboratory.
- The OPP Concerned Sheep Breeders Society (www.OPPsociety.org) will serve as a resource for producers and their veterinarians.
- Other states are reviewing the program draft and may join the OPP Pilot Study at a later date.

APPENDIX 2**VETERINARY DIAGNOSTIC LABORATORIES**

OPP/CAE Program flocks must be tested at a lab that is fully accredited by the American Association of Veterinary Laboratory Diagnosticians (AAVLD). Since this pilot project originated in Minnesota, the University of Minnesota has been the designated lab for the start-up phase. As other states implement the program, it is understood that each will specify which AAVLD lab is to be used.

Since many states do not have an AAVLD laboratory, and some labs routinely ship biological samples out of state for various tests, a list of suggested regional laboratories is provided below. A directory of all AAVLD laboratories can be found at www.aavld.org (click on 'Accreditation').

Veterinary Diagnostic Laboratory
University of Minnesota
1333 Gortner Avenue
St. Paul, MN 55108-1098

Phone: 612-625-8787
Fax: 612-624-8707
Director: James E. Collins
www.vdl.umn.edu

Animal Health Diagnostic Center
College of Veterinary Medicine
Cornell University
Shipping Address:
Upper Tower Road
Ithaca, NY 14853
Mailing Address:
P.O. Box 5786
Ithaca, NY 14852

Phone: 607-253-3900
Fax: 607-253-3943
Executive Director: Bruce Akey
www.diaglab.vet.cornell.edu

Colorado State University
Veterinary Diagnostic Lab
Shipping Address:
Fort Collins, CO 80523
Mailing Address:
CSU DLab
Fort Collins, CO 80523

Phone: 970-297-1281
Fax: 970-297-0320
Director: Barbara Powers
www.dlab.colostate.edu

Washington Animal Disease Diagnostic Laboratory
Washington State University
Shipping Address:
155N Bustad Hall
Pullman, WA 99164-7034
Mailing Address:
P.O. Box 647034
Pullman, WA 99164-7034

Phone: 509-335-9696
Fax: 509-335-7424
Executive Director: Terry McElwain
Director of Lab Operations: Tim Baszler
www.vetmed.wsu.edu/depts.waddl

APPENDIX 3

RANDOM TESTING TABLE

When a flock of unknown OPPV/CAEV status is tested for the first time, the owner or flock manager may elect to sample only a portion of the animals for the initial screening. The following table shows the number of animals 12 months of age and older that needs to be randomly sampled and tested in order to be 95% confident of detecting at least one positive animal if 5% or more of the flock is infected.

- If there are no positive animals on this first round of testing, it is recommended though not required that the remainder of the flock be tested as soon as possible so that any positives can be culled or separated from the negatives.
- If any animals test positive on this first round of testing, the producer should consider all options for control and/or eradication (see Appendix 4) prior to further testing.

<u>Flock Size</u>	<u>Sample Size</u>	<u>Flock Size</u>	<u>Sample Size</u>
10	10	180	50
20	19	200	51
30	26	250	53
40	31	300	54
50	35	350	54
60	38	400	55
70	40	450	55
80	42	500	56
90	43	600	56
100	43	700	57
120	47	800	57
140	48	1000	57
160	49	2000	58

NOTE: Since sampling a truly random subset can present difficulties at the management level, the flock owner or manager may wish to select for testing ewes/does that have been in the flock for at least 2 years. Doing so may increase the odds of detecting OPPV/CAEV infection at the flock level.

APPENDIX 4

MANAGEMENT RECOMMENDATIONS AND CONSIDERATIONS

Any program to eliminate or control OPP/CAE must first include separation of test-negative from test-positive animals, as well as from sheep and/or goats of unknown status. Once initial test status of the flock is known, a management and testing protocol that fits the annual flock calendar should be developed by the producer working in partnership with his/her veterinarian. While this pilot project does not mandate any one plan, the following general information may be helpful.

- Once initial test status is known, all test-positive animals should immediately be removed from the flock. If positive animals are retained they should be managed as a separate group:
 - No commingling of test-positive and test-negative animals.
 - No nose-to-nose contact between positives and negatives at any time.
 - No shared fence lines, feeders, or waterers.
 - No transport of positives (or animals of unknown test status) and negatives in the same truck or trailer unless separated by a solid barrier.
- Due to the unstable nature of OPPV/CAEV in the environment, equipment such as syringes, ear taggers, tattoo pliers and water buckets may be used for both infected and test-negative groups if cleaned and disinfected first. Likewise, positive and negative groups may rotate through buildings and pastures. However, it is recommended that test-negative groups should always be handled (chores, etc.) before dealing with any test-positives.
- There is a significant correlation between needle re-use and OPP/CAE seroprevalence as flock size increases. Therefore, to decrease the risk of OPPV/CAEV and other infectious disease transmission when giving injections, a fresh needle should be used for each animal.
- It has been observed that some test-positive animals will become temporarily seronegative following lambing/kidding, probably because of the large quantity of antibodies lost in the colostrum. Therefore, for highest degree of test accuracy, it is often recommended that blood samples not be collected from ewes/does during the first few weeks of lactation.
- Though not yet published, recent data indicates that if lambs are weaned at 8 months of age from OPPV infected ewes, some lambs will still have colostral/milk anti-OPPV antibodies (by CAE/cELISA) remaining in their serum at 52 weeks of age. Therefore, it is recommended that lambs/kids be separated from dams for at least 4 months before being tested.
- If an animal tests positive and later tests negative, it is likely that human error at the producer or veterinarian level is responsible, rather than a seroconverted animal suddenly becoming test-negative. In such a case, it may be wise to retest the animals whose blood was collected just prior to, and after, that of the newly test-negative animal.
- While OPPV/CAEV transmission via semen has not been documented, owners, managers and veterinarians utilizing artificial insemination (A.I.) should be aware that *the OPP virus has been detected in semen*. It is recommended that male animals being collected for A.I. be tested well in advance of the collection date, and again prior to use of the semen.
- Further information, including detailed instructions for artificially raising lambs/kids orphaned for eradication, is available from the OPP Society at: <http://www.OPPsociety.org>

APPENDIX 5

PRODUCERS CHECK LIST (MINNESOTA)

The OPP/CAE Pilot Program is designed to be producer driven, meaning that the flock owner or manager is responsible for:

- *Scheduling his/her annual SFCP flock inspection, and . . .*
- *Scheduling and facilitating the collection of blood samples for OPP/CAE testing, and . . .*
- *Delivery of blood samples (if collected by SFCP staff) to the local flock veterinarian.*
- *Where needed, develop an eradication plan in consultation with the flock veterinarian.*

The following Check List has been prepared with input from the USDA Scrapie Field Team as well as the U of MN Veterinary Diagnostic Laboratory. To keep the Program running smoothly, it is imperative that producers make every effort to comply with these guidelines:

- Agree to maintain flock inventory in an electronic format as instructed by your SFCP inspector, and submit annual updates to same.
- Arrange to have animals tested for OPP/CAE. Blood samples may be collected by or under the supervision of the accredited flock veterinarian or the SFCP field staff at the time of your annual SFCP inspection. Alternatively, the flock vet may do the sampling at a later date, preferably within 60 days immediately following the SFCP inspection.
- If blood is to be collected at the time of the annual SFCP inspection:
 - Arrange to have adequate help on hand to ensure speedy processing of animals.
 - Have extra SFCP-approved ear tags and applicator ready to replace any missing tags.
 - Obtain sampling supplies from your local flock veterinarian well ahead of time:
 - (3 ml syringes, 18-gauge 1” needles, 10 ml “red-top” glass tubes)
 - Remove all packaging/plastic cases and see that needles are firmly attached to syringes.
 - Label the blood tubes and organize them for speedy access during SFCP inspection.
 - Complete and print out the OPP/CAE Pilot test submission form from the lab’s website.
 - Affix a brightly colored “OPP/CAE Pilot Flock” flagging label to the submission form.
 - Be sure to have the flock vet or SFCP inspector sign your test submission form.
 - Before you sign the SFCP inspection report, check that blood sampling has been noted.
 - If sampling will be done by the SFCP inspector, alert your veterinarian ahead of time that you will be delivering blood samples.
- Beginning 4-5 days after your samples have been shipped, check the lab’s website for preliminary test results so that any positive animals can be removed as soon as possible and retests scheduled if needed.
- Your flock veterinarian will provide you with a copy of the final test results. If testing has detected OPPV/CAEV positive animals, you will be required to develop and implement a flock-specific eradication plan in consultation with your veterinarian.
- Final results will be reviewed and an annual letter confirming your flock’s status will be mailed from the Board of Animal Health within 60 days following the date of testing.

APPENDIX 6

Minnesota Board of Animal Health
 625 North Robert Street
 St. Paul, MN 55155
 Tel: 651-296-2942 Fax: 651-296-7417

VOLUNTARY OPP TEST AND CONTROL PILOT PROGRAM Flock Enrollment Application

Please complete all parts of this form, sign, and return to:
 OPP Pilot Program, c/o Minnesota Board of Animal Health at the address shown above

It is important to note that, while adherence to the Voluntary OPP Test and Control Pilot Program protocol and recommended management practices may in fact facilitate the eradication of OPPV from infected flocks, this pilot study does not profess to be a guaranteed eradication scheme.

Routine Annual Testing

Blood serum samples from OPP Pilot Program enrolled flocks will be tested with the USDA-licensed agar gel immunodiffusion (AGID) test kit at the Minnesota Veterinary Diagnostic Laboratory on the St. Paul campus of the University of Minnesota. Questionable or indeterminate samples will be forwarded to the USDA Animal Disease Research Unit (ADRU) in Pullman, WA, for further testing as described in the program standards. All costs of routine annual testing, including veterinary and laboratory fees, will be the responsibility of the participating producer.

Testing Protocol

As described in the program standards, flock owners or managers with all animals testing negative on a whole-flock initial screening test will select either a 3-year or 5-year testing scheme. Those flocks with test-positive animals detected on the initial screening test will work toward eradication following a program developed in consultation with the flock veterinarian. Based on your flock's previous test history, if known, please indicate which testing protocol you would like to use.

Never tested / don't know Working toward eradication Three-Year Test Protocol Five-Year Test Protocol

Research Project Participation

A limited number of flocks may also be selected for concurrent participation in various OPP research projects conducted by USDA. All costs, including veterinarian fees to collect and ship additional blood samples if requested by the research team, would be free of charge to the producer. Test results would be made available to the flock owner or manager.

Yes, I would like to be considered No thank you.

RFID Project Participation

Also, a limited number of flocks may be selected for concurrent participation in a project evaluating the use of radio frequency identification (RFID) ear tags. There would be no charge to the producer for participation in this study.

Yes, I would like to be considered No thank you.

NAME _____ FARM NAME _____

STREET _____ CITY _____ ZIP _____

PHONE _____ EMAIL _____ COUNTY _____

PRIMARY BREED(S) _____ TOTAL NUMBER OF EWES _____ SFCP# _____

VETERINARIAN _____ CLINIC _____

STREET _____ CITY _____ ZIP _____

PHONE _____ EMAIL _____ COUNTY _____

My signature below indicates that I have read, understand and agree to follow all OPP Pilot Program requirements and guidelines. I also understand that my flock's OPP test results will be made available for review by the Minnesota Board of Animal Health and a representative of the State Scrapie Board overseeing the OPP Pilot Program.

Owner signature:	Date:
------------------	-------

Veterinary Diagnostic Laboratory
 UNIVERSITY OF MINNESOTA
 1333 Gortner Avenue, St. Paul, Minnesota 55108

Phone: (612) 625-8787 E-mail: vdل@umn.edu
 Fax: (612) 624-8707 Web site access/results:
 Toll Free: 1-800-605-8787 www.vdl.umn.edu

OPP Pilot Program Test Chart

Contact Information - Owner/Producer

Owner Name _____
 Company _____
 Address _____
 City _____ State _____ Zip _____
 Phone _____ Fax _____
 Email _____

Attending Veterinarian

Veterinarian _____
 Clinic _____
 Address _____
 City _____ State _____ Zip _____
 Phone _____ Fax _____
 Email _____

Animal/Location

Site/Farm _____
 Scrapie Flock # _____
 Country _____ Minnesota Premises ID _____
 State _____ Zip _____ County _____

Result Reporting and Billing

Affiliate (list codes) _____
 Phone _____ Fax _____
 Email _____
 Bill: Vet/Clinic Owner _____

For Lab Use Only

Sample /Specimen Arrived:
 Live Rm Temp Frozen Cold Pk
 Fixed Other _____

Sample Date _____ No of Samples _____
 Comment _____

Reason for Testing

Year 1 (initial test)	3-Year Program	5-Year Program	
<input type="checkbox"/> Whole flock	<input type="checkbox"/> Year 2	<input type="checkbox"/> Year 2	<input type="checkbox"/> Year 4
<input type="checkbox"/> Partial flock	<input type="checkbox"/> Year 3	<input type="checkbox"/> Year 3	<input type="checkbox"/> Year 5
<input type="checkbox"/> Eradicating - annual test		<input type="checkbox"/> New Animal	
<input type="checkbox"/> Eradicating - additional (mid-year) test		<input type="checkbox"/> Maintain Test-Negative Status	
<input type="checkbox"/> Retest - refer to case # _____		<input type="checkbox"/> Other _____	

Serology

Test Samples:

Ovine Progressive Pneumonia (AGID).....
 Other.....

Sample #	Animal ID	Age	Gender	Breed
1	_____	_____	_____	_____
2	_____	_____	_____	_____
3	_____	_____	_____	_____
4	_____	_____	_____	_____
5	_____	_____	_____	_____
6	_____	_____	_____	_____
7	_____	_____	_____	_____
8	_____	_____	_____	_____
9	_____	_____	_____	_____
10	_____	_____	_____	_____
11	_____	_____	_____	_____
12	_____	_____	_____	_____
13	_____	_____	_____	_____
14	_____	_____	_____	_____
15	_____	_____	_____	_____

Sample #	Animal ID	Age	Gender	Breed
16	_____	_____	_____	_____
17	_____	_____	_____	_____
18	_____	_____	_____	_____
19	_____	_____	_____	_____
20	_____	_____	_____	_____
21	_____	_____	_____	_____
22	_____	_____	_____	_____
23	_____	_____	_____	_____
24	_____	_____	_____	_____
25	_____	_____	_____	_____
26	_____	_____	_____	_____
27	_____	_____	_____	_____
28	_____	_____	_____	_____
29	_____	_____	_____	_____
30	_____	_____	_____	_____

Place OPP Pilot Flock Label Here

Signature _____

APPENDIX 8***OPP Program Report to the Minnesota Board of Animal Health — December 2006***

ACTION TAKEN PER NOVEMBER 7, 2005 RECOMMENDATION OF USAHA COMMITTEE FOR SHEEP & GOATS:

2005**NOVEMBER**

- Letter mailed to 200+ targeted producers; 56 post cards returned indicating interest

DECEMBER

- Working Group assembled; development of program standards begins
- USDA-ARS-ADRU, Pullman, WA, offers assistance with confirmatory testing

2006**JANUARY**

- MN Board of Animal (BAH) unanimously approves an OPP Pilot Program for 4 years

MARCH

- Due to heavy response, decision made to limit OPP Pilot to flocks enrolled in SFCP
- MN State Veterinarian, DSE, USDA Veterinary Services, and Scrapie Certification Board approve combining the voluntary OPP Pilot Program with the voluntary SFCP

- USDA-VS offers full support, including assistance with sample collection where feasible

MAY

- SFCP producers who returned post card notified of their eligibility for OPP Pilot Program
- Veterinarians of eligible producers are called to introduce program, answer questions
- Ineligible producers notified that they remain in database should program expand in future
- U of MN VDL offers specialized OPP Pilot submission form; monthly electronic reports
- Program standards continue to evolve with input from Working Group

JUNE

- Eligible producers invited to comment on program draft
- Scrapie Board approves inclusion of '06 testing done prior to receipt of application forms
- Specialized VDL submission form drafted

AUGUST

- Program standards finalized; standards and general info sent to eligible/enrolled producers

SEPTEMBER

- As producers' applications received, complete packets are mailed to their veterinarians

OCTOBER

- Total 7 flocks participating to date; 5 have completed testing for '06
- Annual OPP Pilot Program Status Reports mailed to producers with completed '06 tests
- Specialized VDL submission form finalized and posted on their website; monthly reporting system up and running
- OPP Pilot Program progress report presented to USAHA Committee for Sheep & Goats; expressed need to expand study in order to include more OPPV infected flocks

NOVEMBER

- MN BAH staff approves expansion of OPP Pilot to 20 flocks maximum for year 2007; to be offered to newly enrolled SFCP flocks as well as initial respondents who agree to enroll in the SFCP as well as the OPP Pilot; priority given to flocks not previously tested

DECEMBER

- Expansion notice mailed with application packets to 50 producers per above

GOING FORWARD:

- Will continue to move enrolled flocks through the annual testing routine
- Will gather feedback from pilot study participants, their veterinarians, scrapie field staff, and the working group; update program standards as needed
- Need to consider how best to include large Selectively Monitored SFCP flocks

APPENDIX 9**OPP/CAE PILOT STUDY WORKING GROUP:**

Randall C. Cutlip*, Research Leader (retired), USDA-ARS-National Animal Disease Center (IA)
515-233-1698 — RandallCutlip@aol.com

Bill Duffield*, purebred producer (ON, Canada)
519-899-2663 — duffield@xcelco.on.ca

Mary K. Gloster*, purebred producer (NY)
607-898-3777 — sheepish@rockytopfarm.com

Lynn M. Herrmann, Research Microbiologist, USDA-ARS-Animal Disease Research Unit (WA)
509-335-6068 — lherrman@vetmed.wsu.edu

Cleon V. Kimberling, Extension Veterinarian (retired), Colorado State University (CO)
970-214-2142 — cleonvk@msn.com

Donald P. Knowles, Research Leader, USDA-ARS-Animal Disease Research Unit (WA)
509-335-6022 — dknowles@vetmed.wsu.edu

Robert Leder*, Veterinarian, commercial producer (WI)
715-752-3459 — leder@dotnet.com

Mark Lelli*, Veterinarian, commercial & purebred producer (MI)
616-837-1872 — Muleflock@aol.com

Judy Lewman*, purebred producer (MN)
952-472-4524 — JL6250@visi.com

Katherine L. Marshall, Epidemiologist, USDA-APHIS-Nat'l Animal Health Monitoring System (CO)
970-494-7259 — katherine.l.marshall@aphis.usda.gov

Holly Neaton*, Veterinarian, MN Board of Animal Health, commercial & purebred producer (MN)
952-955-2596 — hollyneat@juno.com

Kristine Petrini, Veterinarian and Assistant Director, MN Board of Animal Health (MN)
651-201-6805 — Kris.petrini@bah.state.mn.us

Gene Schriefer*, commercial producer (WI)
608-987-4337 — sheepfarm@charter.net

James Schultz*, commercial producer (WI)
715-823-2055 — jrschul@dotnet.com

William P. Shulaw*, Extension Veterinarian (Cattle/Sheep), The Ohio State University (OH)
614-292-9453 — shulaw.1@osu.edu

Susan M. Stehman, Extension Veterinarian, Animal Health Diagnostic Center, Cornell University (NY)
607-253-3892 — sms14@cornell.edu

Jean T. Walsh*, purebred producer (NY)
315-858-6042 — jtw_42@hotmail.com

(* designates OPP Society member)