

SCRAPIE

PROGRAM PROFILE

Goal	To control and ultimately eradicate scrapie from the United States.
Enabling Legislation	21 USC 114; Animal Industry Act of 1884.
Economic Significance	Scrapie is a transmissible and fatal disease of sheep that causes significant financial losses to the \$500 million sheep industry. Historically, it has resulted in annual losses of approximately \$2.5 million. This estimate is based on only the number of reported cases and not ancillary losses. The sheep industry estimates that annual losses could be as high as \$20 million if unreported cases are included as well as lost markets for breeding stock and embryos, lost value of byproducts and increased costs of byproduct processing and disposal of carcasses. As many as three times the number of reported cases go unreported or misdiagnosed. Therefore, the complete impact of scrapie is difficult to determine
Principal Approach And Methods Used to Achieve Goals	This program is composed of a voluntary certification program and a regulatory control program. Both are cooperative State-Federal programs. The voluntary program provides for the development of sheep and goat flocks that are certified to be scrapie-free after they have been in continuous compliance with the program standards for 5 years. Methods include surveillance, laboratory diagnostics, and permanent identification of animals in participating flocks. The control program restricts the interstate movement of animals from source and infected flocks and sets criteria for the removal of flocks from these statuses.
History	Since 1952, numerous programs have been implemented to eradicate scrapie, but none have succeeded. In FY 1990, APHIS established the Scrapie Negotiated Rulemaking Advisory Committee to develop a regulatory program to reduce the incidence and control the spread of scrapie. On October 1, 1992,

APHIS implemented the Voluntary Scrapie Flock Certification Program (VSFCP). This program was developed through the negotiated rulemaking process involving the sheep industry, allied industries, State animal health officials, accredited veterinarians, APHIS, and other interested parties. The intent of the program is to monitor participating flocks for 5 years or more and to identify flocks free of scrapie.

The regulatory program contains provisions to identify and restrict animals from infected and source flocks in interstate commerce to control the interstate spread of the disease and to prevent the disease's introduction into scrapie-free flocks.

State and Local Cooperation

State animal health agencies and local cooperative extension service.

Involvement of Other Agencies

ARS, NIH, universities, private institutions, and National Sheep Organizations.

Oversight Committee

The Agency in consultation with the National Scrapie Oversight Committee (a national committee composed of Industry, State, Federal representatives, and others), reviewed and revised the VSFCP Standards. The revised standards became effective July 1, 1999.

RESOURCE DATA

-----Obligations-----

	<u>Direct</u>	<u>Reimbursement</u>	<u>User Fees</u>	<u>Staff-Years</u>
FY 1996	2,384,348	--	--	21
FY 1997	2,935,202	--	--	26
FY 1998	2,776,625	--	--	22
FY 1999	2,849,830	--	--	23
FY 2000 (est.)	2,989,000	--	--	23
FY 2001 (est.)	8,026,000	--	--	33

	<u>APHIS</u>	<u>Coop</u>	<u>Total</u>	<u>CCC</u>	<u>Contingency Fund</u>
Cum.	\$30,547,065	\$2,884,333	\$33,431,398	--	--

RECENT ACCOMPLISHMENTS

Flock Status

On September 25, 1999, there were 459 flocks participating in the VSFCP of which 32 were certified, 449 were completely monitored, and 10 were selective monitored flocks. As of the same date, there were 5 Scrapie Source Flocks and 53 Scrapie Infected Flocks. The number of scrapie cases confirmed by the National Veterinary Services Laboratory (NVSL) during FY 1999 was 38 and from October 1 to January 2000 of FY 2000 there were 10 confirmed cases.

Studies

The Agency evaluated the data collected during a pilot scrapie surveillance study in New Jersey slaughter plants. The project collected samples from 500 cull ewes and rams. APHIS will use information on collection technique, sample size, and sites to design and implement a National Slaughter Surveillance Study that will determine the prevalence rate of scrapie in the United States. The study is schedule to start in September 2000.

The Agency funded efforts with Utah State University that address the time and route of vertical transmission of scrapie in sheep and goats. This project specifically addressed embryo transfer. To date, none of the embryo derived offspring or recipient ewes in this study have developed clinical scrapie. This tends to suggest that embryo transfer is low risk for the transmission of scrapie. The Agency also funded efforts with the New York Institute for Brain Research to develop and provide diagnostic reagents for scrapie.

APHIS assisted ARS in the development and validation of the live animal tests by collecting tissues from field flocks and by testing samples at the NVSL.

Accelerated Eradication Program

APHIS is proposing to initiate an accelerated scrapie eradication program in FY 2000 to eliminate scrapie from the sheep population of the United States over a 7-year period once the new test technologies have been validated and field tested. The total cost for eradication

has been estimated at \$100 million, with \$10 million being requested for the first year to allow for validation and field testing of the new technologies.

Regulations

On November 30, 1999, APHIS published the proposed rule that provides the regulatory framework needed to administer an effective scrapie eradication program in response to the comments received from an Advanced Notice of Proposed Rulemaking that was published January 26, 1998. The comment period closed on January 14, 2000. APHIS received 171 comments. The proposed rule would: (1) restrict the interstate movement of sheep and goats from States that do not quarantine scrapie source and infected flocks and from States in which scrapie is not a reportable disease, (2) provide indemnity funds for high-risk and test-positive animals, and (3) require the identification of sheep and goats in interstate movement.

On December 17, 1999, APHIS published a second proposed rule (Scrapie Pilot Projects) to amend the regulations concerning the VSFCP. The regulation change would exempt sheep and goat flocks from certain regulatory requirements when the flocks are participating in scrapie control pilot projects authorized by APHIS. Current flock plans require that certain animals identified as high-risk animals must be removed from flocks, but under the proposed rule some pilot project protocols would allow those animals that test negative on a live animal test or that are genetically less susceptible to scrapie to remain with their flocks so that alternative flock cleanup strategies can be studied. The comment period closed on January 18, 2000. APHIS received 13 comments.