The New York State Cattle Health Assurance Program (NYSCHAP) is an integrated, management based program designed to address the important issues confronting the food animal producer today. The major issues addressed by the program elements can be categorized into four major areas:

1. Animal health including livestock diseases, animal welfare, and management determinants of health and production.
2. Environmental stewardship including the control of pathogen amplification within the farm environment that may contribute to environmental contamination and runoff.
3. Public health addressing both those livestock diseases that may directly affect human health as well as the control of those agents that may cause food contamination and foodborne illness.
4. Validation of health status by third party verification confers official health status that establishes access to world markets in accordance with GATT and NAFTA agreements.

The New York State Cattle Health Assurance Program grew steadily during the year 2000 annual reporting period. The total number of producers now stands at 394 active participants. Growth occurred at the same rate as the previous annual reporting period (See Fig 1). The program continues to evolve to meet the needs of the producer participants.

New York State subsidizes testing performed as a program component. Current subsidies include a $1 discount for each Johne’s KELISA test and a $3 discount for each Johne’s fecal culture test. Compensation is also provided for professional time devoted to the initial herd risk assessment and herd plan development. Program support for professional herd assessment and plan development includes a payment of up to $250 for the initial visit.

Modules developed, tested and fielded include the core risk assessment, core evaluation and best management practices, the Salmonella module, the Bovine Viral Diarrhea module and the Johne’s module. The Johne’s module is a first iteration product and is now undergoing substantial changes to improve its utility and consistency with the National Johne’s status program.

A summary of the modules that have been fielded is represented to the right.

As part of the implementation, assessment and adjustment cycle inherent in the NYSCHAP program, annual reviews are conducted to review the status of the current herd plan. In the year 2000, 76 annual reviews were completed resulting in an updated herd plan. These annual reviews serve to evaluate the effectiveness of the current plan and to make appropriate adjustments to address weak or emerging areas of concern.
Throughout 2000, module development was one of the most important activities within the NYSCHAP program. Collaborators from several areas worked together to develop and compile a great number of resources for each module. A completed module consists of a short, general brochure (400 – 600 words); a long brochure with more detailed information (2400 – 2600 words); producer fact sheets; veterinarian resource materials; a PowerPoint teaching slide set and a PowerPoint case study. A great deal of work was put into completing the Core, Salmonellosis and Bovine Diarrhea Virus modules. A significant amount of work was put into other modules that are still in development, some nearly completed, including Johne’s Disease, Mastitis, Environmental Pathogens and Market Cow Quality.

**Core Module**
- Diagnostic Laboratory – Dr. Sue Stehman
- Pro-Dairy – Dr. Charles Elrod, Dr. Bill Stone
- Division of Animal Industry – Dr. Pepi Leids, Dr. John Huntley
- Quality Milk Promotion Services – Dr. Ynte Schukken

**BVD Module**
- Diagnostic Laboratory – Dr. Ed Dubovi, Dr. Michael Brunner, Dr. Sue Stehman
- Pro-Dairy – Dr. Charles Elrod, Dr. Bill Stone
- Division of Animal Industry – Dr. Pepi Leids
- Veterinary colleagues – Dr. Tom Nytch, Dr. Pepi Leids
- Dr. Robert Whitlock, University of Pennsylvania

**Salmonellosis Module**
- Diagnostic Laboratory – Dr. Sue Stehman, Dr. Patrick McDonough, Dr. Michael Brunner
- Pro-Dairy – Dr. Charles Elrod
- Division of Animal Industry – Dr. Tom Nytch, Dr. Roger Ellis

**Johne’s Disease Module**
- Diagnostic Laboratory – Dr. Chris Rossiter
- Pro-Dairy – Dr. Charles Elrod
- Division of Animal Industry – Dr. Pepi Leids
- Veterinary colleagues – Dr. Don Hansen, Oregon State University

**Mastitis Module**
- Quality Milk Promotion Services – Dr. Ynte Schukken, Dr. Frank Welcome
- Pro-Dairy – Dr. Bill Stone
- Division of Animal Industry – Dr. Mark McConnon
- Environmental Pathogens Module
- Diagnostic Laboratory – Bonnie Bargstedt
- Diagnostic Laboratory – Dr. Sue Stehman, Dr. Susan Wade, Dr. Patrick McDonough
- Division of Animal Industry – Dr. Robert Scrafford, Dr. Dwight Bruno, Dr. John Huntley, Dr. Pepi Leids

**Market Cow Quality Module**
- Pro-Dairy – Dr. Charles Elrod
- Division of Animal Industry – Dr. Tom Nytch
- Cornell Cooperative Extension – Kathy Finnerty
- Diagnostic Laboratory – Bonnie Bargstedt

The second issue is a set of interviews with key players in the dairy food chain. The Management Team has identified a number of industry leaders among milk buyers, milk processors and retailers. Members of the Management Team will interview these industry leaders to evaluate the industry readiness for quality improvement programs. An interview script was completed, and the first interviews will take place in early 2001.
During 2000, the Diagnostic Laboratory assumed responsibility for maintaining the NYSCHAP Farm Enrollment Database. Farms are enrolled using data submitted by the NYS Field Veterinarians. Use of the Herd Premise Code as part of the farm name and generation of a customized herd submission form was instituted to capture individual NYSCHAP Johne’s herd testing data. Access and SQL databases were created for the NYSCHAP data. In a pilot study, the NYS Field Veterinarians are testing Internet access to NYSCHAP herd data. Security software has been implemented at the webpage level to maintain confidentiality of NYSCHAP testing. Pilot pages are also being developed for each farm’s attending veterinarian and for producer access to their own test results. The herd premise code was implemented in June 2000 and Johne’s serology data were initially only included from that date onward. Test data collected prior to that date have been added to the NYSCHAP herd database retrospectively and additional test results for bovine leukemia, bovine viral diarrhea and Johne’s fecal culture have been added to the database for webpage access.

### Farm Success Stories

**Lawnhurst Farm**  
Dr. Pepi Leids, NYS Field Veterinarian

In January, 1998 Lawnhurst Farms in Stanley, NY was the first farm to enroll in NYSCHAP. Lawnhurst had gone through several expansions and were experiencing concerns about the large number of clinical Johne’s disease cases. Dr. Tom Smithling, the herd veterinarian felt the problem was more than his expertise would allow him to handle adequately. Dr. Smithling suggested to Don Jensen, the herd owner, that he call in the State Field Veterinarian to discuss the problems associated with Johne’s disease. Ideally, Don would have liked to get a vaccine for this disease, but agreed to have Dr. Leids (State Field Veterinarian) visit the farm as part of the NYSCHAP program. Dr. Smithling had heard Dr. Leids present information about this new program and combining it with a Johne’s plan. This lead to his suggestion to Don Jensen.

Mr. Jensen and Dr. Smithling embraced the program from the very start. Under the direction of Dr. Leids a history of the herd’s problems was recorded and the team worked through the risk assessment form for Johne’s disease. The team worked together to determine herd goals and a written management plan specifically addressing Johne’s disease. Several weeks later Dr. Leids presented an educational session to the key farm employees about Johne’s disease and the details of the management plan. Don Jensen agreed that the maternity area had been the critical weak link in the subsequent spread of Johne’s disease during and after the expansions. He is quick to state that if anyone expands their herd, they should look at their maternity pen management first and then proceed with expansion! All the employees took their jobs seriously and everyone made a concerted effort to implement the best management practices to control Johne’s disease. According to Mr. Jensen, they have seen an increase in calf health since implementing the BMP’s. He credits this with the close attention that is directed to the calving process and the handling of the calf just after birth.

After three years on the program, the incidence of Johne’s disease has decreased, the amount of milk production has increased and the calf mortality has decreased. All of the employees have a keen awareness of biosecurity and are constantly looking for ways to improve the way they manage the areas of the farm for which they are responsible. Both Don Jensen and Dr. Smithling cite their high regard for the NYSCHAP program. Mr. Jensen feels that even if Johne’s disease was not a problem on his farm, he would still be on the program, because it gives structure to best management practices that need to be implemented. Dr. Smithling speaks highly of the program also. He feels that it has helped give structure and specific management practices and goals pertaining to the overall health of his client’s farm. Furthermore, Dr. Smithling cites specifically that the NYSCHAP herd plan has addressed Johne’s disease through management practices such as testing protocols and culling strategies.

**Lake Effect Holsteins**  
Dr. Lyda Denney, NYS Field Veterinarian

 Appropriately named, Lake Effect Holsteins, sits in the heart of the NYS snowbelt in Pulaski NY. Jeff and Gayle Benedict have been farming at this site for five years and have owned the farm for two years. Lake Effect Holsteins is a registered herd of 80 milking cows boasting an average daily production of 80 lbs per cow per day. The Benedict’s resisted any type of testing program for Johne’s disease, even when encouraged by others, due to cost and the excellent husbandry practices on the farm. However, the summer of 2000 proved a challenge to the Benedict’s when they discovered two clinical Johne’s disease cows.
When buying cattle to fill the barn the Benedicts were careful. They purchased cattle private treaty rather than from sale barns and always questioned the herd owners about Johne’s status. As the dam of one of the clinical cows was Johne’s test negative, management practices became incredibly important to the Benedicts. One month after identification of the clinical Johne’s cases, they enrolled in NYSCHAP. At the initial farm visit, Dr. Lyda Denney worked with Jeff and Gayle to identify management practices that would reduce the spread of Johne’s. To say the Benedict’s take controlling Johne’s seriously is an understatement. The following measures have been taken on the farm:

1) Began testing all cows and bred heifers for Johne’s (Elisa and fecal tests)
2) Culled as many high ELISA, positive fecal Johne’s cows as can be afforded
3) Began feeding all calves Johne’s negative and Leukosis negative colostrum
4) Continued feeding milk replacer after the first two feedings.
5) Remove the calf from the dam right after she has licked it off. Calf is put it in an isolated hot box.
6) Bought calf hutches and moved baby calves from main barn to an isolated area on the farm (approx. 100 yards from main barn)
7) For the 3-6 month old heifers in the main cow barn, elevated mangers with vinyl lattice front were installed to keep all grain and hay in the manger and keep out any manure tracked in by boots or feed carts.
8) Older milking parlor was removed to decrease the movement of cows and manure around the barn. Pipeline was installed in the tie-stall barn. This has done wonders to control the manure and reduce labor load.
9) Bought new cattle trailer to haul all farm animals, particularly for moving newborn calves to hutches.

The goal of Lake Effect Holsteins is to develop and breed a productive and profitable herd of registered Holsteins, in order to provide a good living for the family, through the sale of milk and genetics. To that end Gayle is quick to point out that they are excited to be taking the measures they have implemented to decrease the effect of Johne’s in their herd. Gayle also notes that both she and Jeff would like to see more producers involved.

With all that the Benedicts have accomplished in such a short time, Dr. Denney is excited to see what additional measures will have been put in place at the time of the annual review.

Promotion and Outreach
Kathy Kaufman, NYSCHAP Coordinator

An incredible amount of promotion of the NYSCHAP program occurred during the year 2000. Most promotion occurred through the NYS Field Vets. However, the development teams, NYS Ag and Markets personnel, the management team and the coordinator were all involved in spreading the word about NYSCHAP and biosecurity. Below is a summary of the types of promotion throughout the year. This list is by no means inclusive of all the promotional activities.

- Feed mill producer meetings – 2
- Organic Farmer Producer Meeting
- Genex Producer Meetings – 8
- Veterinarian Client Meetings – 13
- Cornell Cooperative Extension – 6
- General Agriculture events – 7
- County Fairs - 5
- Higher education – 5
- Independent producer groups – 5
- 4-H – 2
- Milk Inspector Meetings
- Out-of-state – 5
- National Association of State Department of Agriculture
- Agencies, etc. – NYS Soil and Water Conservation, NYS Natural Resource Conservation Services, Northeast Region Agriculture Education Services, Dairy Practices Council

Contact NYSCHAP at nyschap@cornell.edu