



**House  
Legislative  
Analysis  
Section**

House Office Building, 9 South  
Lansing, Michigan 48909  
Phone: 517/373-6466

**EQUINE INFECTIOUS ANEMIA  
TESTING**

**Senate Bill 350 (Substitute H-2)  
First Analysis (5-17-01)**

**Sponsor: Sen. Leon Stille  
House Committee: Agriculture and  
Resource Management**

**Senate Committee: Farming,  
Agribusiness and Food Systems**

***THE APPARENT PROBLEM:***

Equine infectious anemia (EIA) is a viral disease that afflicts members of the family equidae, including horses, ponies, mules, donkeys, burros, and zebras. Since 1990, there have been 125 cases of EIA reported in Michigan, according to the Michigan Department of Agriculture. No cases were reported during 2000. To prevent the spread of this disease, new testing requirements for the in-state movement of horses and other equidae took effect on January 1, 2001. Previously, testing was required only for equidae that were brought into Michigan; mandatory testing of equidae already in the state was not required. Public Act 323 of 2000, which amended the Animal Industry Act, requires annual testing for any equidae that are moved, sold, shown competitively, or transported or used for transportation on any public road. Of the 50,000 horses that have been tested so far this year, ten have tested positive. Some people contend that the new testing requirements are onerous and should be modified.

***THE CONTENT OF THE BILL:***

Currently, the Animal Industry Act requires that equidae have been tested for equine infectious anemia with a negative result within the calendar year or the previous 30 days if they: are being moved into Michigan from another state; are entered in exhibitions, expositions, or fairs; undergo a change of ownership within the state; are offered for sale in licensed horse auctions or sales markets; or, are transported or provide transportation on public highways, roads, or streets. Any equine that tests positive for equine infectious anemia—referred to as an “equine infectious anemia test-positive equine”—and the equine’s herd of origin must be quarantined. With the permission of the director of the Department

of Agriculture, the equine test-positive equine may be quarantined at least ¼ of a mile away from the source herd and in an insect-free enclosure. The law provides further for: testing the source herd; conducting epidemiological investigations to determine whether equines outside of the source herd may have been exposed to the disease; restricting the movement of equines that have tested positive; and specifying procedures for destroying test-positive equines.

Senate Bill 350 would amend the act in several ways. Most significantly, all equidae would have to be tested for equine infectious anemia no later than April 30, 2002 and at least once every three years thereafter. Positive test results would have to be reported to the Department of Agriculture as soon as practicable, and negative results would have to be reported within ten days of the completion of the test results. Anyone who failed to comply with these requirements would be responsible for a civil violation and could be fined up to \$100. (All other violations of EIA testing requirements would continue to be punishable in accordance with the provisions of the current law.)

The bill would retain the requirement that equidae that are moved into Michigan from another state or are entered into exhibitions, expositions, or fairs have tested negative for the disease within the calendar year. (“Calendar year” would be redefined as a thirteen-month period from December 1 to December 31 of the following year.) The bill would, however, delete the provision that specifically requires any equine that is transported or provides transportation on public highways, roads, or streets to have had an official EIA test with a negative result within the calendar year. The bill would require a negative test within the calendar year of sale for all equidae that

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are entered in, *remain at, or on the premises of* horse auctions or sales markets—whether or not the auctions or markets are licensed—unless the equidae are kept at least ¼ mile from the premises. Further, equidae that undergo a change of ownership within the state would not be required to have had an equine infectious anemia test within the calendar year, as long as the change of ownership did not involve a change of the equine’s location. These testing requirements would not apply to equidae that were both six months or younger and nursing.

The bill specifies that the act’s testing requirements would not prohibit an owner of equidae or organization sponsoring an event involving equidae from requiring an official equine infectious anemia test for equidae involved in any equidae group activity or equidae that were commingling with or in proximity to other equidae. The bill would also eliminate all references to the agar gel immunodeficiency test, which is currently the official USDA-approved EIA test.

The Department of Agriculture would be instructed to test any equidae located within a ¼-mile radius of the perimeter of the area in which an equine infectious anemia equine that tested positive was or had been contained. The director of the department could expand the within which horses would have to be tested, if he or she found enough equidae that tested positive in the original area. All such testing would be performed at the Department of Agriculture’s expense.

The owner of an EIA test-positive equine would have to provide the Department of Agriculture with records, reflecting the period during which the equine had been both on the premises and a member of the equine herd, that included at least the name and address of the previous owner, if any, and the location of other equidae that were potentially exposed to the test-positive equine. The owner would have to give these records to the department within 30 days after the positive test results were reported to the owner unless the director agreed to a different time period.

The Department of Agriculture could establish a voluntary program regarding an equidae identification card system, funded by a reasonable fee charged to the participants, that included at least the following: a pocket-size card made of durable material; a photographic or graphic likeness of the equine and a description of at least the color, breed, sex, age, markings, name of owner, and location or address of the equine; and, an indication of a negative

test result for an official equine infectious anemia test, along with the date of the test. Any information that identified the owner of an equine that was gathered by the department, in the performance of its duties with respect to equine infectious anemia testing, would be exempt from disclosure under the Freedom of Information Act.

Further, the department would be required to report to the standing committees of the House and the Senate within 90 days after the completion date for the statewide testing program (required to be completed by April 30, 2002). The report would have to describe the number of animals tested, the number that tested positive, and the effects, if any, of the testing requirements imposed under the act.

Finally, the bill would add sunset provisions repealing these provisions January 1, 2011.

### **HOUSE COMMITTEE ACTION:**

The House Committee on Agriculture and Resource Management adopted a substitute, H-2, which differs from the Senate-passed version of the bill in the following ways:

- The House version of Senate Bill 350 eliminates all references to the agar gel immunodeficiency test, or “Coggins test,” which is the official, USDA-approved test for equine infectious anemia.
- Both versions include a change in the definition of “calendar year.” Under current law, “calendar year” is defined as the twelve-month period beginning on January 1 and ending on December 31. Both versions of the bill would redefine calendar year as the thirteen-month period beginning on December 1 and ending on December 31 of the following year. The Senate version would require EIA testing, in certain circumstances, to have been performed within the calendar year or the previous 30 days, which designates a 14-month period from November 1 to December 31 of the following year. The House version would change all requirements that an EIA test has been performed within the calendar year or previous 30 days to requirements that the test has been performed within the calendar year only.
- The Senate version of the bill would retain the current law’s requirement that all equidae entering *licensed* horse auctions or sales markets have had an official EIA test with a negative result within the calendar year of previous 30 days before sale. The House version would specify that all equidae entering, remaining at, or on the premises of horse

auctions or sales markets must have tested negative for EIA within the calendar year, whether or not the auctions or markets are licensed. The House version would also exempt from the requirement equidae that were kept at least ¼ mile from the premises.

- The Senate version of the bill would require that all equidae be tested at least once every three years between December 1 and March 1. Initial testing would have to be completed no later than December 31, 2001. The House version of the bill would no longer specify that testing must occur between December 1 and March 1, and it would extend the initial testing deadline to April 30, 2002.
- The Senate version of the bill makes no specific reference to penalties or punishments for violation of the requirements of the EIA testing provisions. The House version would specify that a person who violated specific provisions of the act, including testing at least once every three years, completing initial testing by April 30, 2002, and reporting test results to the Department of Agriculture within the specified time frame, would be responsible for a civil violation and could be fined not more than \$100.
- The Senate version of the bill would require the owner of an EIA test-positive horse to record with the Department of Agriculture the names and addresses of previous owners. The House version would specify that only the name and address of the previous owner, in case there is more than one previous owner, would have to be provided by the owner of the test-positive horse.

### **BACKGROUND INFORMATION:**

First diagnosed in the United States in 1888, equine infectious anemia is a viral disease. Although the disease may be fatal to an infected equine, infected equidae may also live their entire lives without showing any symptoms of the disease. EIA cannot be transmitted to other species and is not harmful to human beings. The disease is also known as “Swamp Fever” because insects that transmit the virus, e.g., horse flies and deer flies, thrive in hot, humid conditions. According to the Animal and Plant Health Inspection Service of the USDA, 92 percent of positive reports of the virus from 1978 to 1995 were reported from an area referred to as the “hot zone,” which includes both the southern United States, from Texas and Oklahoma east to the Atlantic Coast, and states bordering on the Mississippi River. Because Michigan lies outside of the hot zone, and the only state in the hot zone that borders Michigan is Wisconsin, Michigan’s equidae are at the highest risk

for becoming infected by the virus when they commingle with horses who come from states in the hot zone; this happens when Michigan horses travel out of state or when horses from hot zone states travel to Michigan. The highest rates of infection within Michigan are in the southern part of the state, where the density of the horse population is highest.

The virus is transmitted primarily by large, blood-sucking insects that can communicate infectious residue from one horse to another when feeding. (The virus can also be transmitted through the exchange of other bodily fluids, such as semen, milk, and saliva or through the use of non-sterile needles or surgical instruments.) The painful insect bites trigger a response in the horse that often interrupts the flow of blood to the insect. If this occurs, the insect may seek another source of blood, by biting a different part of the same horse or by attacking a different horse altogether. If the initial host was infected and the insect bites a second horse, the insect may transmit the virus by communicating any infectious material that remains in or around its mouth.

There is no cure for equine infectious anemia. The only vaccine contains the virus itself, which lead vaccinated equidae to test positive for the virus, making it difficult to distinguish between vaccinated and infected equidae. This vaccine was developed in China, where it played a significant role in bringing an EIA epidemic under control. The “Chinese vaccine,” as it is called, has not been approved by the USDA.

According to the Quarter Horse Journal, horses that are infected with the virus that causes EIA are categorized as acutely-infectious, chronically-infectious, or as inapparent carriers. An acutely-infectious horse can develop signs of the disease and die within two weeks of infection. One milliliter (approximately one-fifth of a teaspoon) of an acutely-infectious horse’s blood contains enough virus to infect one million horses. A chronically-infectious horse is a horse that has survived an initial acute bout of fever but has developed a recurring disease marked by symptoms such as fever, depression, weight loss, and anemia. One milliliter of blood from a chronically-infectious horse with a fever—which is the point at which such horses are most infectious—contains enough virus to infect ten thousand horses. An inapparent carrier is a horse that does not show symptoms of being infected with the virus, and it is estimated that only one out of six million horseflies is likely to transmit the virus from such a horse to an uninfected horse. Ninety-five percent of horses infected with the virus are inapparent carriers.

Another gauge of the threat of infectiousness is to consider that “a single horse fly has been shown to transmit the virus from a horse with acute signs of EIA, and a group of 25 medium-sized horseflies transmitted EIAV from a horse without clinical signs of disease.”

### ***FISCAL IMPLICATIONS:***

With regard to the Senate-passed version of the bill, the Senate Fiscal Agency reported that the bill would result in additional administrative costs to the Department of Agriculture, associated with the voluntary equidae identification card system. (5-3-01)

### ***ARGUMENTS:***

#### ***For:***

Owners of the 130,000 horses in Michigan apparently are of divided opinions over the testing of equidae. Much of the debate involves differences of opinion about whether the costs of testing outweigh its benefits. Some owners support the testing of equidae, including horses, as required under Public Act 323 of 2000. Others, noting that there were no EIA cases reported in the state in 2000 and only ten cases out of 50,000 horses tested so far in 2001, prefer that testing be required only for equidae brought into Michigan, as provided in the Animal Industry Act before Public Act 323 was enacted. In addition, they find it burdensome to comply with the requirement that equidae transported or providing transportation on public roadways have an official EIA test with a negative result within the calendar year or previous 30 days.

The bill represents a compromise in that equidae in Michigan would have to be tested by April 2002, and every three years thereafter, but the required testing of equidae transported or providing transportation on a public road would be eliminated. Thus, owners would be allowed to transport their horses to veterinary clinics or central testing sites, for example. In addition, the current and proposed testing requirements would be repealed on January 1, 2011, which would give interested parties and lawmakers an opportunity to review the law after it had been in effect for ten years.

#### ***Against:***

Officials in the MDA believe that horses that participate in events, such as shows and rodeos, that are held in Michigan, or that cross the state line to participate in these events, are being tested for EIA.

There is concern, however, that reservoirs of the disease exist among the state's population of horses that do not participate in public events but are ridden for personal pleasure, for example. In addition, there is concern that horses used by the state's Amish community may be at risk for EIA through fly bites or exposure to other EIA-infected equidae as they are used for transportation along the state's public roads and encounter other horses that may be infected with the disease. The current requirement that equidae transported or used for transportation on public roads be tested should be retained so that the level of exposure to EIA can be determined among these segments of the state's horse population.

#### ***Response:***

In some instances, an owner may have to cross a public road in order to move a horse from one parcel of property that he or she owns to another of his or her own parcels. In other cases, an owner may wish to lend a horse or horses to a neighbor for a period of time. Requiring that a horse be tested for EIA merely for crossing a public road is highly burdensome for horse owners whose property is intersected by a public road. The requirement presents a horse owner who would like to help his or her neighbor with a difficult choice of testing the animal, not lending the horse, or lending the horse in violation of the law. Such a choice may serve to create conflicts of interest and strained relations between neighbors.

#### ***Against:***

Some horse owners complain that supporters of both Public Act 323 of 2000 and the current legislation did not consult with significant portions of the horse industry. Some complain that they were not aware of the 1999 changes in the law despite their membership in horse industry associations and horse owners' organizations. Perhaps the bill should include a provision that would forgive fines for owners who were found guilty of a first-time offense and had the horse (or all of their horses) tested within a two-week (or one-month) period.

More importantly, the bill does not go far enough to correct the mistakes made in Public Act 323. The section of the Animal Industry Act dealing with equine infectious anemia testing should be restored to the way it was prior to the enactment of Public Act 323. Although it is important to mandate testing for horses that come into Michigan from other states, the risk of EIA transmission within the state is not very serious. Compliance with the bill would be too expensive—though admittedly less expensive than the current law—considering the relatively low level of risk that EIA presents.

**Response:**

The bill might not result in universal compliance, but it would be a significant step in the direction of reducing the risk of transmitting the disease. The bill's sunset provision would ensure that the legislature reviews the policy in ten years to examine the extent to which widespread testing was still desirable.

Moreover, the cost of owning a horse is already quite high, and testing only increases the average cost of owning a horse by an estimated one to two percent during the years that the test is administered. The cost may be reduced if the horse owner combines the farm call or veterinarian's visit for the purpose of EIA testing with other necessary procedures. Further, by helping to prevent transmission of the disease, testing could reduce costs to the horse industry and horse owners in the long run.

**Against:**

Proponents of universal testing advocate a strategy of eradication. However, eradication efforts will only be successful if there is a national effort to eradicate, given that the horses who run the highest risk of infection are those that travel to states where there are high rates of incidence. By quarantining or killing off all infected horses, whether or not they show symptoms of the disease, Michigan may eliminate a vital genetic base for resistance to the disease. (Inapparent carriers of EIA are the only horses whose ability to fight off the disease has been tested.) If Michigan tries to eradicate EIA while other states do not, Michigan horses may, over time, become increasingly susceptible to acute and chronic forms of the disease.

**Against:**

The Michigan Farm Bureau has expressed concern that horses who enter parades are not explicitly required to have had an EIA test with a negative result within the calendar year. If minimizing the risk of transmitting EIA is the primary concern of the legislation, then strict regulations should apply to any occasion that horses from different herds have for commingling with one another. Horses that are entered into parades should be subject to the same requirements as horses that are entered into other exhibitions, expositions, and fairs.

**Response:**

To require an EIA test within the calendar year for every horse that enters any parade, including parades where there are only one or two horses entered, would be "overkill." The legislation is attempting to

reach a compromise with those who believe that the current requirements are too onerous.

**POSITIONS:**

The Department of Agriculture supports the bill. (5-15-01)

Analyst: J. Caver

■ This analysis was prepared by nonpartisan House staff for use by House members in their deliberations, and does not constitute an official statement of legislative intent.