Chattanooga-Hamilton County Health Department
Department of Environmental Health

RABIES CONTROL PROGRAM

The goal of the Rabies Control Program is to protect the citizens of Hamilton County from rabies. This goal is achieved by fulfilling two basic strategies.

I. To protect the individual and the community from contracting rabies.
II. To protect the community from endemic rabies thereby preventing a rabies epidemic.

Protocol

Definition and Etiology

Rabies is an acute viral disease of the central nervous system. The rabies virus is a single-stranded RNA virus belonging to the rhabdovirus group. Worldwide, except in the United States, Canada and Western Europe, the most common source of rabies in man is through dog bites. In the United States, bats and wild animals are becoming a more important factor in human rabies transmission. In addition, in the last (10) years in the United States, there have been twice as many rabid cats as dogs. This occurs especially in areas where there is raccoon rabies.

Pathogenesis

The usual mode of transmission is through the virus-laden saliva of a rabid animal. The virus is introduced by a bite or into a fresh break in the skin. The rabies virus can be introduced through intact mucous membranes or a scratch but this is rare.

Recent data (MMWR, Vol. 46/No. 33, August ’97) suggests that seemingly insignificant physical contact with bats may result in viral transmission, even without a clear history of an animal bite.

Transmission from person to person is possible by infected saliva and via corneal and organ transplants taken from persons dying of undiagnosed central nervous system disease.

There have been two instances of airborne rabies acquired in laboratories and two probable airborne rabies cases acquired in a bat-infested cave in Texas.

Initial virus replication appears to occur within striated muscle cells at the site of inoculation. The virus then spreads up to the nerve to the central nervous system. Once the virus reaches the central nervous system, it replicates almost exclusively within the gray matter and then passes along autonomic nerves to reach other tissue.

The CDC Rabies Unit is evaluating the potential for rabies transmission via milk from lactating animals.

The incubation period for rabies can be exceedingly variable. It can range from five days up to more than one year, with the average being three to eight weeks. In humans the incubation period may depend upon the location of the initial inoculation.

The period of communicability varies from species to species. Most dogs and cats become ill within three days of virus shedding, and most are dead within ten days of virus shedding. However, most domestic dogs and cats will not shed the rabies virus any more than 24 hours before they develop symptoms, and most die within seven (7) days of developing symptoms.

Human Clinical Manifestations

The clinical manifestations occur in four stages.

1. Nonspecific prodome: This usually persists two to seven days. It is marked by fever, headache, malaise, myalgias, fatigue, sore throat and cough. Pain or paresthesia occurs at the bite site in fifty percent (50%) of the cases.
2. Acute encephalitis: This stage is marked by confusion, hallucinations, muscle spasms, seizures, and focal paralysis. Abnormalities of the autonomic nervous system occur. These can be dilated or irregular pupils, excessive salivation, perspiration, or postural hypotension. Paralysis and weakness are additional manifestations.
3. Coma Phase: Coma and possible apneic death are the end result.
4. Recovery: Recovery from a rabies incident is rare. Median survival after the onset of symptoms is four days, unless artificial support measures are instituted.
5. Possible late complications: Potential late complications are SIADH (Syndrome of Inappropriate ADH), diabetes insipidus, cardiac arrhythmias, thrombocytopenia, GI bleeding, ARDS (Adult Respiratory Distress Syndrome), and paralytic ileus.

Diagnosis

The infected animal can be identified by examination of three (3) sections of the animal's brain and demonstration of specific fluorescent antibodies to the rabies virus.

In humans, a specific diagnosis of rabies depends upon at least one of the following:

1. The isolation of virus from infected secretions such as saliva, brain, tissue, or rarely CSF.
2. The detection of antibody in serum and CSF, if unvaccinated.
3. The demonstration of viral antigen in infected tissue including corneal impression smears, skin biopsy, and brain tissue.

If a human bite victim has not received anti-rabies immunization, any rise in neutralizing antibody to rabies virus in serial serum samples is diagnostic.

Human Pre-Exposure Prophylaxis

High risk groups should consider pre-exposure prophylaxis. These include veterinarians, spelunkers, laboratory workers, animal handlers, children living in areas where rabies is a constant threat, and persons traveling outside the United States to areas of Latin America, Africa and Asia where dog rabies is common, and immediate access to appropriate care, including biologics, might be limited.

The vaccine used in the primary series is three doses given on days 0, 7, and 21 or 28. One milliliter (1 ml) intramuscularly of HDCV (Human Diploid Cell Vaccine) or RabAvert one milliliter (1 ml) intramuscularly is used for each dose. Special note should be made of any associated allergic reaction.

Some factors may interfere with rabies pre-exposure vaccination. These include the concurrent administration of antimalarials, such as chloroquine, immunosuppression due to drugs, such as corticosteroids, or to illness, and residence in a developing country where immune status may be lowered or immediate access to appropriate medical care might be limited.

A person in good health without contraindications to vaccine, such as allergy to vaccine components, can receive rabies HDCV vaccine intramuscularly (lM). RabAvert vaccine can only be given intramuscularly. Immunocompromised persons who are at risk for rabies should receive the vaccine only by the IM route, and their post-vaccine antibody titers should be checked.

A booster dose may be given every two (2) years, based on continued exposure.

The Chattanooga-Hamilton County Health Department offers IM pre-exposure prophylaxis and booster doses.

Determination of Human Exposure

An exposure to rabies occurs when saliva, cerebrospinal fluid (CSF) or neural tissue (brain, spinal cord) from a confirmed, suspected, or potentially rabid animal, contacts a fresh cut, break, wound, scratch, or abrasion to the skin or contacts intact mucous membrane lining (eyes, nose, mouth, genitalia).

Exposures can occur as the result of bites and non-bites.

A bite is any penetration of the skin by teeth. The usual mode of transmission of rabies is by introduction of saliva containing rabies virus into a bite wound.

Non-bites occur when saliva, CSF, or neural material from an animal contact a fresh scratch, a fresh abrasion or intact mucous membrane. Non bite exposures from terrestrial animals rarely cause rabies.

Secondary exposures or "contact-transfer" exposures are non-bite exposures that might occur when infectious material is transferred from a rabid animal to an object or another animal and eventually contaminates a wound or mucous membrane. These types of incidents are very unlikely to transmit rabies or require rabies post exposure treatment unless there is clear indication that neural tissue or copious amounts of saliva from a rabid animal were transferred to eventually contaminate a fresh wound or mucous membrane.

Rabies virus is very fragile outside of the nervous tissue of a rabid animal and does not survive for appreciable amounts of time on environmental surfaces. Post exposure prophylaxis is generally not indicated under these secondary exposure incidents.

Other contact by itself, such as petting a rabid animal and contact with blood, urine or feces (e.g. guano) of a rabid animal, does not constitute an exposure and is not an indication for prophylaxis, although direct physical contact with a bat is considered an exposure.

Rabies post exposure prophylaxis is recommended for all persons with a bite, scratch or mucous membrane exposure to a bat unless the bat is available for testing, and is negative for rabies. Recent data (MMWR, Vol. 46/No. 33, August '97) suggests that seemingly insignificant physical contact with bats may result in viral transmission, even without a clear history of an animal bite. Possible exposure is presumed when a bat has been observed near a previously unattended child or a previously unattended mentally impaired person. Possible exposure is presumed for any previously unattended person sleeping indoors when a bat has been found in the living quarters (not just the sleeping quarters) and had reasonable access to the sleeping person. Rabies post exposure prophylaxis is appropriate even in the absence of a demonstrable bite or scratch, in situations where there is reasonable probability that potential bat contact occurred.

Post Exposure Initial Treatment of Exposed Humans

The initial treatment should be provided by the attending or private physician. The Health Department intercedes only if no other health care is available. The attending physician or appropriate agency should report the animal bite to the Health Department. Referrals may come from individuals, emergency rooms, outpatient clinics, private physicians, veterinarians, or anyone involved in the animal bite.

Local wound care should start with a generous scrubbing with soap and water and irrigation of the wound with a virucidal agent. Avoid sutures if possible unless necessary for cosmetic reasons. A tetanus toxoid should be given if current vaccination is out of date, and antibiotics should be given if necessary for infections. Close attention should be given to the wound for possible complications. No quarantine of the exposed person is required. All animal bites must be reported to the Health Department. If a local animal control agency is contacted they should contact the Health Department.

Post-Exposure Prophylaxis of Exposed Humans

When a documented or likely exposure has occurred, post-exposure prophylaxis is indicated regardless of the length of the delay in reporting the exposure, provided that clinical signs of rabies are not present.

If an exposure occurs by a bat, raccoon, skunk or fox that cannot be located or tested, then rabies post-exposure prophylaxis should be started immediately. If an exposure occurs by a bat, raccoon, skunk or fox that can be tested, then post-exposure prophylaxis can be deferred until the test results are known, unless there is a high risk exposure to the head in which case rabies post-exposure prophylaxis should begin within 48 hours.

Passive immunization is obtained with a total of 20 I.U. per kilogram of body weight (0.06 cc per lb) of the Human Rabies Immune Globulin (HRIG). As much as possible of the full dose of HRIG should be thoroughly infiltrated into and around the wound after irrigation and before suturing. Any remaining volume should be given intramuscularly (at a different site from the HDCV or RabAvert injection). HRIG provides a rapid, passive immunity that persists for only a short time (half-life of approximately 21 days). No significant allergic reactions have been noted.

Active immunization is obtained with the Human Diploid Cell Vaccine (HDCV) or RabAvert. Rabies vaccines induce an active immune response that includes the production of neutralizing antibodies. This antibody response requires approximately 7 - 10 days to develop and usually persists $\geq$ 2 years. Five-one milliliter (1ml) doses are given intramuscularly in the deltoid region. The initial dose of rabies vaccine is given at the same time as the single dose of HRIG (day 0) and the other doses are given at days 3, 7, 14 and 28 days after the initial dose.

Side effects of HDCV include local reactions (pain at the site of injection, erythema, swelling and itching). Mild systemic reactions include nausea, muscle aches, abdominal pain, and dizziness. Once initiated, rabies prophylaxis should not be interrupted or discontinued because of local or mild systemic adverse reactions to rabies vaccine.

If a person has had a previous full course of pre-exposure or post-exposure inoculations with HDCV or developed neutralizing antibody, only two doses of HDCV need to be given. One immediately and the second dose three days later. No HRIG is given with this regimen.

The Chattanooga-Hamilton County Health Department does not provide rabies post-exposure prophylaxis. HRIG and HDCV may be obtained by calling Aventis Pasteur, Inc. (1-800-822-2463) or Cutter (1-800-288-8370) Pharmaceuticals. RabAvert rabies vaccine is available directly through Chiron Corporation (1-800-244-7668) or through prime vendors such as AmeriSource Bergen, Cardinal Health and McKesson HBOC. In addition, some local hospital emergency departments have HRIG and rabies vaccine.

Rabies Post-Exposure Prophylaxis Guide

I. Domestic Dog, Cat, Ferret, or Hybrid Animal

A. Considerations

1. Major Considerations

a. Animal behaved normally

b. Animal appeared healthy and without neurological symptoms or symptoms of illness

c. The risk for rabies is extremely low if the animal behaved normally and appeared healthy prior to the bite

2. Other Considerations

a. Animal's rabies vaccination status

b. Circumstances of bite – was it provoked? Was the animal injured?

c. Was the animal exposed to a wild animal that was capable of carrying rabies?

B. Animal Appeared Normal and Healthy Prior to the Bite

1. Capture or order the animal confined for 10 days after the bite. *(Hybrid animals must be confined at the appropriate city or county animal control agencyor at a veterinarian's office, not at home).

a. Observe the animal during its confinement

- If the animal has abnormal behavior or appears ill or dies, sacrifice it and send the head for rabies testing.
- If the animal appears normal and healthy, revaccinate it as indicated.

2. If the animal is not located or captured for confinement, consult Environmental Health. The risk for rabies is extremely low if the animal behaved normally and appeared healthy prior to the bite.

C. Animal Appeared to Have Abnormal Behavior or Appeared Ill Prior to the Bite

1. Capture, sacrifice animal and send head for rabies testing.

2. If the animal is not located or captured or is not available for testing, consult Environmental Health. Recommend rabies post-exposure prophylaxis (HRIG and rabies vaccine) for person exposed.

II. Wild Animals Capable of Carrying Rabies

A. Bats, Foxes, Coyotes, Skunks and Raccoons

1. Capture, sacrifice animal and send head for rabies test

2. Begin HRIG and rabies vaccine in patient if animal tests positive for rabies

3. If animal cannot be located or tested, begin HRIG and rabies vaccine in patient

III. Ferrets, Opossums

1. Capture, sacrifice animal and send head for rabies test

2. Begin HRIG and rabies vaccine in patient if rabies test is positive

3. Consult Environmental Health if animal cannot be located or captured

IV. Other Animals to Consider

A. Squirrels, groundhogs, beavers, hamsters, guinea pigs, gerbils, chipmunks, rats, mice, rabbits, and other rodents:

1. Consult local Health Department and the appropriate local animal control agency.
2. Capture, sacrifice and send head for rabies test especially if the animal appears ill or has unusual behavior.
3. Rabies prophylaxis not commonly needed with these animals if they appear healthy and exhibit normal behavior.

B. Maintained in Exhibits and in Zoological Parks.

1. Consult private physician, the local Health Department and the appropriate local animal control agency
2. Consult veterinarian regarding testing of animal
3. Usually, begin HRIG and rabies vaccine in patient if animal tests positive for rabies

C. Livestock

1. Quarantine - consult veterinarian

* With the exception of hybrids, confinement may be at a kennel, boarding home, veterinarian's office, a local animal control agency or at the owner's home if approved by the Health Department.

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Follow-up

All follow-up on rabies investigations should include the indicated information:

1. the clinical condition of the bite victim
2. tracking to ensure that rabies post-exposure prophylaxis, if indicated, is initiated and completed by the Communicable Disease Control Staff
3. the condition of the animal after confinement or quarantine
4. any pertinent laboratory analysis

Animal Control

The Health Department will:

a. Provide rabies education to the Public.
b. Promote widespread rabies vaccination of domestic animals.
c. Maintain rabies vaccination records.
d. Investigate reported animal bites.
e. Determine human exposure status and the need for rabies post exposure prophylaxis.
f. Consult with veterinarians and physicians concerning rabies control and post exposure prophylaxis.
g. Determine the need for animal confinement, euthanasia, or testing after exposure.
h. Perform follow-up observations or when animals are confined at their facilities, consult with veterinarian offices and local animal control agencies regarding the health and behavior of the animals during animal confinement.
i. Deliver specimens for testing to the state lab if necessary.
j. Retain an on-call environmentalist at all times to perform rabies control activities.
k. Any activity deemed necessary by the Health Officer to protect the public from rabies.

City and County animal control agencies will:

a. Upon the request of the Chattanooga Hamilton County Health Department, immediately capture and transport:

    i. Animals that have bitten or otherwise exposed a person to rabies or suspected rabies.

    ii. Animals observed to be ill, aggressive or behaving in any manner suggestive of rabies (after some determination by the Chattanooga Hamilton County Health Department of the incident) whether or not an exposure had occurred.

b. Perform any activity deemed necessary by the Public Health Officer to protect the public from rabies.

Animal heads and dead bats submitted to the Health Department for rabies testing by local animal control agencies or veterinarians should be double bagged as required by the state laboratory. Bats should be submitted intact and the head not removed. Specimens should be refrigerated.

Epidemiology

Rabies occurs worldwide and can be endemic to areas or animal populations. There has been no rabies in the domestic animal population of Hamilton County since 1973, although rabies appears to be endemic to the bat population of Hamilton County.

Rabies has two epidemiologic forms, sylvatic and urban, (from unimmunized dogs and cats). Some areas of the world are believed to be completely free of the rabies virus.

The rabies virus is transmitted to man by infected mammals. Carnivorous wild animals (especially skunks, raccoons, foxes, coyotes, and bobcats) and bats are the animals most commonly infected with rabies and have caused most of the indigenous cases of human rabies since 1960. In 2004, Hamilton County had its first raccoon, fox and opossum that tested positive for rabies. The raccoon, fox and opossum had the raccoon variant rabies. Since then, several raccoons and one skunk tested positive for raccoon variant rabies. Rabies virus variants appear to be specifically adapted to their reservoir host. When a particular variant is inoculated into a different species, it may simply cause profound encephalitis with only limited viral shedding and sometimes death occurs before the virus has had a chance to get out into the saliva.

Raccoon rabies presents a unique and dangerous problem: raccoon populations are thickest in suburban areas where there is a higher population density; raccoons are extremely aggressive when rabid and thus bite more humans, dogs, cats and a greater variety of other species.

Opossums are extremely resistant to the rabies virus even when they are bitten by a rabid animal. Rodents (such as squirrels, hamsters, guinea pigs, gerbils, chipmunks, rats and mice) are uncommonly found to be infected with rabies. Although an uncommon occurrence, rodents, especially large rodents like woodchucks (groundhogs), beavers, as well as rabbits and hares are diagnosed with the raccoon variant of the rabies virus in areas of the country where raccoon rabies predominates. In 2003, a rat and a guinea pig were diagnosed as rabid in Virginia and New York respectively.

Since raccoon rabies has occurred in Hamilton County, all species of animals showing unusual aggression or behavior must be suspected of being rabid.

Hybrid Animals – Wild animals and hybrids should not be kept as pets. "Hybrid animal" means the offspring of wild animals crossbred to domestic dogs or cats or any of their progeny for which the owner has records substantiating that their genetic heritage consists of twenty-five (25%) or more from wild animals. Crossbred dogs or cats with less than twenty-five percent (25%) documented genetic heritage from wild animals will be considered as domestic dogs or cats. If a dog or cat is declared to be a hybrid animal but there are no records to substantiate the declaration then the animal will be treated as a domestic dog or cat, not a hybrid. There is no USDA-approved rabies vaccine for any hybrid. Vaccination of a hybrid is an off label use, and therefore should be administered at the discretion of each veterinarian.

If a hybrid (vaccinated or unvaccinated) is exposed to a rabid animal it should be considered as unvaccinated and sacrificed. Hybrids that bite humans will be treated as domestic dogs or cats for post-exposure management regardless of the percentage of their wild animal genetic heritage. However, hybrids must be confined and observed at the appropriate city or county animal control agency or at a veterinarian's office, not at home.

Prevention

The best prevention of rabies is education of the public and widespread vaccination of domestic animals. Education should stress the importance of vaccination and proper licensure of all dogs and cats. **Vaccinated dogs and cats provide a buffer zone of safety between wildlife rabies and humans.** Proper restrictions for dogs and cats are necessary. Education should also stress avoidance of strange acting or sick animals of any species, and not keeping wild animals as pets. Bats should never be handled by the public or kept as pets. Bats should be physically excluded from houses and surrounding structures by sealing potential entrances. The Health Department works cooperatively with the Humane Educational Society and the Veterinarian Association to organize the annual Rabies Clinics. The Health Department arranges the clinic sites and the necessary reports. The Veterinarian Association staffs the clinics and orders the necessary supplies. The Humane Educational Society and the Veterinarian Association provide the primary public education effort. The Health Department is responsible for the maintenance of records providing information on all dogs and cats vaccinated according to the Tennessee Code Annotated section 68-8-104. The record is in the form of a vaccination certificate which should include:

1. owner's name and address
2. number of the vaccination tags issued
3. date of vaccination
4. date the dog or cat should be revaccinated
5. description and sex of the dog or cat vaccinated
6. type and lot number of vaccine administered and
7. the signature of the person administering the vaccine

A copy of the vaccination certificate must be supplied to the animal's owner, the local Health Department and, the veterinarian who administered the vaccine. The Health Department shall report to the Tennessee Department of Health and Environment information on the number of animals vaccinated at the clinics and veterinarian offices. The Tennessee Department of Health and Environment shall notify the Health Department on the status of rabies statewide and if Hamilton County is threatened by the spread of rabies in the wild animal population. The threat posed by endemic rabies in the bat population of Hamilton County is always a potential problem without proper management. Exotic animals must be in compliance with national laws and regulations concerning quarantine and vaccination.

Within 28 days after primary vaccination, a peak rabies antibody titer is reached and the animal is considered immunized. Because a rapid anamnestic response is expected, an animal is considered currently vaccinated immediately after a booster vaccination.

Animal to Human Exposure:

Healthy domestic dogs, cats, ferrets and hybrid animals that bite humans must be isolated and confined and observed for ten (10) days whether or not they are currently vaccinated. Confinement may be at a kennel, boarding home, veterinarian's office, city or county animal control agency, (or if not a hybrid, at the owner's home if permitted by the Health Department). It is recommended that rabies vaccine not be given during the observation period to avoid confusing possible signs related to the administration of vaccine (e.g. transient lameness, lethargy, lack of appetite) with early nonspecific signs of rabies. Such animals should be evaluated by a veterinarian at the first sign of illness during confinement. Any illness in the animal should be reported immediately to the Health Department. If signs suggestive of rabies develop in the animal, it should be euthanized and its head tested for rabies. If the animal is still healthy and has no abnormal behavior at three (3) days after the bite, then the risk for rabies is almost non-existent.

Any obvious stray or unwanted dog, cat, or ferret that bites a person may be euthanized immediately and the head submitted for rabies examination. Bats and/or wild animals that potentially expose a person to rabies should be captured, sacrificed and tested. If no exposure has occurred but an animal's behavior or health is suggestive of rabies, then the animal should be sacrificed and tested. Any bat that has been inside of the living area of a house or an occupied public building should be captured, sacrificed and tested. Animals should be captured by the appropriate city or couny animal control agency or in some instances involving wildlife, a state licensed company with expertise in wildlife capture. Animal heads and dead bats submitted to the Health Department for rabies testing by local animal control agencies or veterinarians should be double bagged as required by the state laboratory. Specimens should be refrigerated. Bats should be submitted intact and the head not removed.

The Health Department will deliver the specimens to the Knoxville Branch Laboratory for fluorescent antibody staining for rabies viral antigen. The usual method of transport is public bus service.

When a lactating animal is suspected of rabies, its milk and mammary tissue should be collected by the appropriate agency and stored. If the animal tests positive, the milk and mammary tissue should be shipped on dry ice to the Rabies Laboratory at CDC (1-404-639-1050).

Suspected Rabies but no Human or Domestic Animal Exposure

USDA's Wildlife Services (1-866-487-3297) will arrange CDC testing of certain wild animals such as raccoons, skunks, red or gray foxes, coyotes, and mongooses if no potential rabies exposure has occurred but the animal's behavior is suggestive of rabies. These animals should be captured, euthanized and placed with heads intact in USDA collection freezers located at the local city and county animal control agencies.

The USDA WS will pick up these wild animals if they are dead in someone's yard, road killed, etc. if there is no exposure involved and if they have someone available. USDA WS in Knoxville can be called at 865-588-0299.

Non-Exposure Nuisance Situations

Those reporting normal healthy nuisance wild animals to the Health Department should be advised to contact Tennessee Wildlife Resource Agency (TWRA) at either 800-262-6704 or 931-484-9571 and the United States Department of Agriculture Wildlife Services (USDA WS) at either 866-487-3297 or 865-588-0299. Both agencies can provide helpful information. TWRA can provide contact information for permitted nuisance wildlife control/removal companies in this area.

Animal to Animal Exposure:

Any animal bitten or scratched by a wild, carnivorous mammal or a bat that is not available for testing should be regarded as having been exposed to rabies. Dogs, cats and ferrets that are currently vaccinated should be re-vaccinated immediately, kept under the owner's control, and observed for 45 days. Animals with expired vaccinations need to be evaluated on a case by case basis. Hybrid animals (greater than or equal to 25% genetic heritage from a wild animal), unvaccinated dogs, cats and ferrets exposed to a rabid animal should be euthanized immediately. If the owner is unwilling to have this done, the animal should be placed in strict isolation (no contact with the public or other animals) for six (6) months and vaccinated on entry into the six (6) month isolation period or one (1) month before being released.

Rabies is rare in vaccinated animals. If such an event is suspected, it should be reported to the health department, the vaccine manufacturer, and to the U.S.D.A., Animal and Plant Health Inspection Service, Center for Veterinary Biologics (1-800-752-6255).

Oral Rabies Vaccination Project

The raccoon strain of the rabies virus has been moving north and west from Florida since the 1950's, and recently has been expanding across Georgia and Alabama and into Tennessee. In an effort to stop the westward spread of the disease, the USDA, Wildlife Services (WS) in cooperation with the Centers for Disease Control (CDC) and the Tennessee Department of Health (TDH), distributed over 67,000 oral rabies vaccine baits in southeast Tennessee in November 2003. The baits are intended to vaccinate wild raccoons in a 30-mile wide barrier zone extending from northeast Alabama through Chattanooga. The vaccine baits do not contain the rabies virus and cannot cause rabies. Baiting occurred again in the Chattanooga/Hamilton county area in April 2004 and will be continued in the future dependent upon funding availability.

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