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Equine Disposal Guide for Maryland Horse Owners

Owning an equine means you, as the owner accepts responsibility for the animal's health and wellbeing. However, the time may come when your equine will suffer injury, sickness, old age, lameness, or dangerous behaviors that will result in the trying task of deciding what is best for your equine. In some cases, the kindest and most humane decision is to have the animal euthanized. Your veterinarian can guide you in deciding if euthanasia is appropriate.

Having to euthanize an equine is a topic not often discussed so deciding when, where, and how is not easy. Making such a decision also may be emotionally taxing for an equine owner.

Management and disposal of deceased animals is a normal part of raising livestock. Proper equine disposal is important whether the cause of the death was expected or unexpected. This publication is designed to assist equine owners and managers in disposing of a deceased equine properly.

Having a plan and the necessary information regarding on- and off-farm disposal options will help make the circumstances of disposing of an equine less stressful. In general, be sure you know the acceptable disposal options available in your county. Always check with local ordinances and county agencies to ensure that you use proper

disposal methods. If an equine carcass must be removed from the farm, it should be covered completely with a tarp during transport.

Proper Disposal of Equine Carcasses is Important for Three Main Reasons

- 1.) <u>Health</u> the timely removal of a dead animal limits the spread of disease and prevents other animals from becoming sick;
- 2.) <u>Environmental Protection</u> timely disposal protects waterways and groundwater from contamination by limiting potential toxins that may be released from a decomposing animal; and
- 3.) <u>Appearance</u> neighbors and the general public may find the sight of a deceased equine unappealing or even distressful, leaving a negative opinion of the equine owner's operation and management skills (Cronquist, 2007).

Check with State and Local Authorities Before Selecting a Disposal Method

Permitted disposal methods vary throughout the state. State and local agencies that may be concerned include but are not limited to:

- Maryland Department of Agriculture (MDA)
- Maryland Department of Health (MDH)

- Maryland Department of the Environment (MDE)
- County Animal Control

The Maryland Health Department (MDH) will become involved if an equine has not been disposed of quickly and properly.

It is strongly encouraged to check with county zoning prior to carcass disposal within a county or town limits.

Once an equine has died, a disposal method should be chosen that:

- 1. Is most acceptable to the equine owner;
- 2. Does not spread disease;
- 3. Does not endanger public health; and
- 4. Does not negatively impact the environment.

Remember laws and regulations can change. This publication can help guide you in deciding where and how to dispose of a deceased equine within Maryland. Check local and state regulations before disposing of an equine carcass for any changes that may have occurred since this publication was printed.

Maryland Law Requires Disposal of Deceased Equine with 48 Hours

There are several options for disposing of an equine carcass:

- 1. Composting
- 2. Burial
- 3. Cremation
- 4. Rendering
- 5. Incineration

Allowing the carcass to decay in a pasture or an open area **is not** encouraged in Maryland.

Generally, there is not enough land available away from neighbors or the public to make this a viable

option for equine owners. A naturally decomposing carcass may contaminate surface and groundwater. Chemical euthanasia also poses a risk of poisoning scavenging wildlife, livestock, and pets.

Regardless of the method chosen by the equine owner or manager, the carcass must be disposed of within 48 hours according to the Maryland Department of Agriculture (MDA) (2014).

The MDA (2014) also specifies that any animal that died of an infectious or reportable disease must be disposed of according to MDA guidelines.

Reportable Equine Diseases in Maryland

Anthrax

African Horse Sickness

Brucellosis

Contagious Equine Metritis (CEM)

Dourine (equine trypanosomiasis)

***Equine Neurologic Syndrome

(EHV, WNV, EPM, Rabies)

Equine Viral Arteritis

Equine Encephalomyelitis

Equine Infectious Anemia

Glanders

Piroplasmosis

Potomac Horse Fever

Rabies*

Salmonellosis

Screw Worms

Suspected Foreign Animal Disease

Tuberculosis

Vesicular Lesions

Vesicular Stomatitis

West Nile Virus

^{*}Reportable to State Animal Health officials only.

^{**} Equine Neurologic Syndrome: horses with central neurologic signs in the absence of noninfectious cause or where infectious cause is suspected or cannot be ruled out. Collect nasal swab, red top and purple top tubes. All others should be reported to State and Federal Animal Health Officials.

ON-SITE DISPOSAL OPTIONS

On-site disposal options include composting and burial.

Composting

Composting is considered the disposal method of choice in most areas of Maryland, providing the composting process is done correctly. Composting is cost efficient, kills pathogens, biosecure, environmentally sound, and easily accomplished. It is a way of recycling the carcass that can be used as a soil amendment (Cronquist, 2007). The composting process is carried out using specific moisture and temperature levels during set periods of time. The time required varies depending on the size of the equine. Larger animals require more time.

Composting requires carbon sources, such as woodchips or shavings. The composting site should be located in a well-drained area away from wells and other water sources. The carbon source will completely breakdown the equine carcass in addition to providing organic material that can be used as a soil amendment. Owners may use this material in planting a "memorial tree" for the deceased equine.

Composting can be done any time of the year, regardless of the size of equine.

How Composting Works: Correct composting mainly involves combining materials with different properties in the correct proportions. In mortality composting:

• Carcasses are the primary ingredient and have a high nitrogen content.



Horse being covered in woodchips.

Photo Credit: Cornell Waste Management Institute

- The nitrogen in the carcasses must be balanced by adding high-carbon material (such as spent silage, sawdust, straw, or old bedding material). Manure alone is not appropriate.
- Using a bulky material with large, firm particles (such as wood chips) helps air reach the carcass.

Selecting a Composting Site: The site used for composting on the farm should be:

- High and dry (avoid wet areas or flood plains; divert water away from pile);
- At least 200 ft. from streams, ponds, lakes, wells, sink holes, or seasonal seeps;
- Hard enough to tolerate equipment maneuvering (a pad constructed from geotextile fabric, rock, and sand is ideal);
- Out of direct view of neighbors and motorists (also consider prevailing wind direction); and
- Easily accessible.

Material and Equipment Requirements: Most materials and equipment needed for constructing and maintaining a compost pile are found readily on dairy operations and other neighboring farms. However, it may be necessary to bring additional cover/base material on the farm.

Plan ahead to identify sources of the following materials. You will need:

- Cover/base material: About 12 cubic yards of cover material per 1,000 lb. animal composted. This translates to approximately 1 ton of ground hay or straw, 1.4 tons of ground cornstalks, or 3.2 tons of spent corn silage (per 1,000 lb. animal);
- Thermometer: A probe-type thermometer with a long-stem to monitor the pile temperature. It is also a good idea to record the measured temperatures in a dedicated log book;
- Front-end loader; and
- Manure spreader.

Building the Pile: In mortality composting, compost piles are built in layers in the following steps:

- Put down a 1-2 ft. base layer of bulky material (wood chips or mulch are ideal).
 Make the base layer large enough so there is at least 2 ft. clearance around the carcass.
 Typical piles are 14 to 16 ft. wide. Carcasses too close to the edge will not adequately heat.
- 2. Place the animal on top of the base layer using a front-end or skid loader. If adding animals next to, or on top of, carcasses in an existing pile, maintain 2 ft. of cover material between carcasses (1 ft. for smaller animals). If possible, do not allow

- carcasses to freeze in the winter. This will slow the composting process significantly.
- 3. Cover carcasses with at least 2 ft. of silage, bedding, shavings or another high-carbon, dry, coarse material. Sawdust is a good choice because it is absorbent and the small particles come into close contact with the animal tissue. Mound and shape the cover layer so there are 3 to 4 ft. at the center line. This will help shed water from the pile. Make sure no animal parts are exposed in the pile. Uncovered carcasses will create odors, attract scavengers, and create a biosecurity risk.

Maintaining the Pile: The compost pile requires being turned after lengthy time intervals. Monitoring the temperature with a long-stem thermometer is the best method for ensuring proper composting.

- The temperature of the pile should be monitored (at least weekly) to ensure that it is heating up rapidly (indicating good pile construction) and temperatures are high enough to destroy disease-causing organisms (at least 131°F).
- After allowing the carcass to compost for 6 months and reaching 131°F during that period of time, turn and lift the pile using a loader. Material must be thoroughly mixed. No flesh should be present, but large bones and some animal hide may be visible.
- Form a new pile with the turned compost and add another 1 ft. of cover (wood chips/mulch) to control odors. Allow the pile to age 6 more months. Reheating should occur, although it may take longer and temperatures will be lower than in the first pile.

Uses for Finished Compost: After it has aged for a year, the compost pile should be 1/3 the original size and free of offensive odors. Large bones will be present but should be fairly brittle. The finished material can be used to compost carcasses or apply it on farmland, according to the following guidelines:

- Use finished mortality compost to create the base layer of additional mortality compost piles to reduce the amount of bulky material that has to be brought on to the farm. Finished compost can also be mixed with fresh high-carbon material at a 50:50 ratio (by volume) and used as a cover material during new pile construction.
- Finished mortality compost not recycled in the composting operation can be applied to land.

In Maryland, mortality compost can be land-applied only on the farm where it was generated.

Do not apply mortality compost to crops that are consumed by people (such as vegetables). Application on hay, corn, winter wheat, tree plantations, and forestland is acceptable.

Large quantities of land-applied compost (in the case of several equines) must be included in the farm's nutrient management plan.

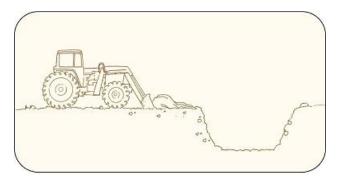
Remove (or break up) skulls and other large bones before applying compost to land, particularly if the fields are visible or accessible to neighbors, motorists, children, and/or pets. Large bone fragments can also puncture equipment tires. If the farm operation does not include fields where compost can be applied to the land, it can be taken to a certified composting operation (Becker et al, 2014).

Burial

Burial regulations differ throughout the state due to varying soil types. An equine cannot be buried in a wetland, floodplain, shoreline, high water table area or near a well. Check with local ordinances that may restrict or limit burial.

If it is allowed, bury the equine at a minimum depth of 6 feet, liming over the carcass (for pathogen reduction) before backfilling with 3 feet of soil. An equine must be buried so that it will not contaminate or allow leachable discharge into waterways. It is important that domestic animals and wildlife not be able to access the carcass.

It may be necessary to hire a service or rent equipment to dig a hole large and deep enough for equine burial. The cost of burial will depend on the location and availability of equipment and operators. Costs across the state can range from \$80 to over \$150 per hour.



A tractor with a loader is commonly used to move and bury an equine.

Image credit: Ontario Ministry of Agriculture

Important Note: If the equine was euthanized via a drug (such as sodium pentobarbital), the carcass should be disposed of as quickly as possible. The drugs contain residues harmful to wildlife and domestic animals (Bonhotal, 2012).

Another option is to have the equine buried in a pet cemetery. Several options exist, including headstones and graveside funerals varying in costs. Check out the International Association of Pet Cemeteries and Crematories (www.iaopc.com) to find a pet cemetery in Maryland.

Sanitary Landfills

In some areas of the state, dead animals can be placed in sanitary landfills. Before taking a dead horse to a landfill, an equine owner must check to see if the landfill will accept dead animals. Even if a landfill is permitted to accept dead animals, the landfill operator may have a policy in place to not accept dead animals.

OFF-SITE DISPOSAL OPTIONS

Incineration

Incineration is the thermal destruction of a carcass by fuel such as propane or natural gas (Rahman, 2009), also known as burning. The availability of large-scale incinerators in Maryland is very limited. Those available are not constructed to handle larger carcasses such as equines. Installing an incinerator on the farm for large animals is often too expensive due to the cost of natural gas and the significant amount of labor needed, especially for equine operations. This disposal method is more appropriate for small animals.

Open-air burning of deceased animals is not recommended because of the odor and potential air pollutants. Maryland has a ban on open-air burning from June 1 to September 1 of each year for most counties.

Cremation

Cremation is the same as incineration; however, the ashes of the animal are returned to the equine owner. Even though this disposal option allows for the owner to retain a physical part of their animal, it can be expensive.

Maryland Department of Agriculture, Frederick Regional Animal Health Lab

Address:

1840 Rosemont Ave Frederick, MD 21702

Phone:

301-600-1548 or 410-841-5971 (after hours)

Website:

http://mda.maryland.gov/animalHealth/ Pages/laboratory.aspx

If a necropsy has been performed at a Maryland Animal Health Lab, cremation is usually available. Only the Frederick, Maryland Animal Health Lab cremates large animals.

PRIVATE COMPANIES PROVIDING CREAMATORY SERVICES IN MARYLAND

AGAPE PET SERVICES

Address: 19712 Shepardstown Pike

Boonsboro, MD 21713

Phone: 301-432-0431

Website: http://agapepetservices.com/

HEAVENLY DAYS ANIMAL CREMATORY

Address: 051-B Thurston Road

Urbana, MD 21704

Phone: 240-699-0034

Website: http://www.heavenlydays.com/

Some laboratories will cremate a deceased equine for a fee levied on a per-weight basis. Private crematory companies may offer pick- up services. Fees will vary depending on location within the state and services requested. The companies listed in the following graphic offer a legal option of disposal for Maryland equine owners. Providing the

companies' information, however, does not constitute or imply an endorsement by Maryland Extension or the University of Maryland of the product, process or service, or its producer or provider.

Rendering

Rendering is the "recycling" process of taking the carcass and turning it into a finished product such as fat or protein meal for feed additives, pet foods, and other industrial applications (Alberta Horse Welfare, 2008). It typically the disposal method of choice for large animals such as dairy cattle.

The availability of renderers is limited within Maryland. Biosecurity is the biggest concern regarding transporting the equine to a renderer. The truck that collects the animal could potentially transport disease from one farm to the next. If the equine owner opts to transport the diseased equine directly to the plant instead, there is still potential for disease transfer via direct contact on the owner's vehicle and at the rendering plant.

Necropsy and Disposal Available in Maryland and Pennsylvania

Equine owners in Maryland can send equine carcasses to a rendering plant for private cremation or to a Maryland Department of Agriculture Animal Health Lab where a necropsy can be conducted (See Table 1).

The lab will arrange for the disposal of the body. As of December 2014, the price for disposal of equines owned by Maryland residents at any Maryland Animal Health Lab is:

- \$275 plus 50 cents per pound for cremation or.
- \$625 for a necropsy with rendering.

Animal carcasses cannot be returned following a necropsy. For an additional charge however, an equine can be cremated and the ashes returned to the owner from the Frederick Animal Health Lab. Additional testing and disposal fees for Maryland Department of Agriculture Animal Health Labs are listed in Table 1.

Table 1. Maryland and Pennsylvania Necropsy and Disposal Fees

	MD Lab Necropsy (In State)	MD Lab Necropsy (Out of State)	MD Disposal Fee	New Bolton (PA)
Adult Equine Necropsies > 300 lbs.	\$275.00	\$375.00	\$0.50/lb. in state \$0.75/lb. out of state	\$88.00*
Foal Necropsies < 300 lbs.	\$125.00	\$150.00	** No charge in state \$0.75/lb. out of state	\$44.00*
With Spinal Cord Examination	\$500.00	\$600.00	\$0.50/lb. in state \$0.75/lb. out of state	
Insurance Case	\$375.00	\$525.00	\$0.50/lb. in state \$0.75/lb. out of state	
Cremations	\$0.50 per lb. (with some exceptions)	\$0.75 per lb.		\$200.00 - \$1000.00 plus

Counties Generally Follow State Regulations Pertaining to Animal Carcass Disposal

According to the Code of Regulations (COMAR) for Maryland, disposal regulations for the state are as follows:

3-108 Maryland Code

When any animal is slaughtered under the provisions of the subtitle, the owner may dispose of the carcass or any part of it, the hides, and offal, pursuant to the departmental rules and regulations, and in a manner that does not tend to spread disease or endanger the public health.

3-109 Maryland Code

The owner of any domestic animal that has died of a contagious or infectious disease shall bury it to a depth of at least three feet or burn it within three hours before sunset of the day following the discovery of the animal.

For current information, visit the Maryland Department of Agriculture's website www.mda.maryland.gov or contact them directly at 410-841-5700.

COUNTY RESOURCE CONTACT INFORMATION

ALLEGANY COUNTY

50 Harry S. Truman Parkway Annapolis, Maryland 21401	410-841-5700 www.mda.maryland.gov
1840 Rosemount Avenue Frederick, Maryland 21702	301-600-1548
11602 Bedford Road, NE Cumberland, MD 21502	301-777-1747 ext. 3
1 Commerce Drive Cumberland, MD 21502	301-724-3320 www.extension.umd.edu/allegany- county
P.O. Box 1745 12501 Willowbrook Road SE Cumberland, Maryland 21501	301-759-5000 http://www.alleganyhealthdept.com
	Annapolis, Maryland 21401 1840 Rosemount Avenue Frederick, Maryland 21702 11602 Bedford Road, NE Cumberland, MD 21502 1 Commerce Drive Cumberland, MD 21502 P.O. Box 1745 12501 Willowbrook Road SE

ANNE ARUNDEL COUNTY

Maryland Department of Agriculture	50 Harry S. Truman Parkway Annapolis, Maryland 21401	410-841-5700 www.mda.maryland.gov
Regional Animal Health Lab Frederick Office	1840 Rosemount Avenue Frederick, Maryland 21702	301-600-1548
Soil Conservation District Office	Heritage Office Complex 2662 Riva Road, Suite 150 Annapolis, MD 21401	410-571-6757

University of Maryland Extension Office	97 Dairy Lane	410-222-3900
	Gambrills, MD 21054	www.extension.umd.edu/anne-arundel-
		county
Anne Arundel County Health Department	3 Harry S. Truman Parkway	410-222-7095
	Annapolis, Maryland 21401	http://www.aahealth.org/
Additional Notes:		

BALTIMORE COUNTY

Maryland Department of Agriculture	50 Harry S. Truman Parkway Annapolis, Maryland 21401	410-841-5700 www.mda.maryland.gov
Regional Animal Health Lab Frederick Office	1840 Rosemount Avenue Frederick, Maryland 21702	301-600-1548
Soil Conservation District Office	1114 Shawan Road, Suite 4 Cockeysville, Maryland 21030	410-527-5920
University of Maryland Extension Office	1114 Shawan Road Cockeysville, MD 21030	410-771-1761 www.extension.umd.edu/baltimore- county
Baltimore County Health Department	6401 York Road, Third Floor Baltimore, Maryland 21212	410-887-2243 http://www.baltimorecountymd.gov/Agen cies/health/index.html

Additional Notes: Under Baltimore County Code § 12-3-107. DISPOSAL OF DEAD ANIMALS: It is required that the owner of a dead animal shall dispose of the animal at the owner's expense. A person may not place, leave, or cause another person to place or leave the carcass of a dead animal in a street, alley, or on public property. Also, you cannot allow the carcass of a dead animal to remain on the person's property. (This code applies to all animals including horses).

Under Baltimore County Code 1908, ch. 587, sec. 128. B. Co. C. (1916), sec. 258. 1928. sec. 304. No person shall haul, cart, carry, drag or deposit any dead carcass or other carrion in Baltimore County, within one mile of the City of Baltimore, unless he shall bury or cause the same to be buried at least two feet underground, and so as effectually to prevent any offensive smell therefrom under the penalty of twenty dollars for each offense, together with the expenses of burying or removing the same, and any other person who shall bury or remove any dead carcass or offensive carrion, thrown out and deposited contrary to the provisions of this section, shall recover, before any justice of the peace, against the person guilty of such offense, all expenses incurred in burying and removing the same.

Under Baltimore County Code (1988 Code, § 6-207) (Bill No. 3-00, § 4, 7-1-2004; Bill No. 72-03, § 27, 7-1-2004). This pertains to Public property. Except as authorized by state law, a person may not throw, cast, or deposit any dead carcass or parts of a dead carcass into or on any highway, byway, alley, lot or tract of land in the county, or any groundwater's or surface waters of the county.

CALVERT COUNTY

Maryland Department of Agriculture	50 Harry S. Truman Parkway Annapolis, Maryland 21401	410-841-5700 www.mda.maryland.gov
Regional Animal Health Lab Frederick Office	1840 Rosemount Avenue Frederick, Maryland 21702	301-600-1548

Soil Conservation District Office	65 Duke St, Prince Frederick, MD 20678	410-535-1552
University of Maryland Extension Office	P. O. Box 486, 30 Duke Street, Room 103 Prince Frederick, MD 20678	410-535-3662 www.extension.umd.edu/calvert-county
Calvert County Health Department	P.O. Box 980, 975 Solomons Island Road North, Prince Frederick, MD 20678	410-535-5400 http://www.calverthealth.org/

Additional Notes: In accordance with the County's approved Department of the Environment Refuse Disposal Permit for the St. Andrews Municipal Landfill, animal carcasses are specifically prohibited from being accepted at the site for disposal.

CAROLINE COUNTY

Maryland Department of Agriculture	50 Harry S. Truman Parkway Annapolis, Maryland 21401	410-841-5700 www.mda.maryland.gov
Regional Animal Health Lab Salisbury Office	27722 Nanticoke Road Salisbury, Maryland 21801	410-543-6610
Soil Conservation District Office	9194 Legion Road, Suite 3 Denton, Maryland 21629	410-479-1202 ext.3
University of Maryland Extension Office	9194 Legion Road, Suite 4 Denton, Maryland 21629	410-479-4030 www.extension.umd.edu/caroline-county
Caroline County Health Department	403 South 7th Street Denton, MD 21629	410-479-8045 http://carolinehd.com
Additional Notes:		

CARROLL COUNTY

50 Harry S. Truman Parkway Annapolis, Maryland 21401	410-841-5700 www.mda.maryland.gov
1840 Rosemount Avenue Frederick, Maryland 21702	301-600-1548
Carroll County Commerce Building 698 Corporate Center Court Westminster, Maryland 21157	410-848-8200 ext. 3
700 Agriculture Center Westminster, MD 21157	410-386-2760 www.extension.umd.edu/carroll-county
290 South Center Street Westminster, Maryland 21157	410-876-1884 http://www.carrollhealthdepartment.dh mh. md.gov/envirohealth.html
	Annapolis, Maryland 21401 1840 Rosemount Avenue Frederick, Maryland 21702 Carroll County Commerce Building 698 Corporate Center Court Westminster, Maryland 21157 700 Agriculture Center Westminster, MD 21157 290 South Center Street

CECIL COUNTY

Maryland Department of Agriculture	50 Harry S. Truman Parkway Annapolis, Maryland 21401	410-841-5700 www.mda.maryland.gov
Regional Animal Health Lab Frederick Office	1840 Rosemount Avenue Frederick, Maryland 21702	301-600-1548
Soil Conservation District Office	Upper Chesapeake Corporate Center 105 Chesapeake Boulevard, Suite B-3 Elkton, Maryland 21921	410-398-4411 ext. 3
University of Maryland Extension Office	200 Chesapeake Boulevard, Suite 1500 Elkton, MD 21921	410-996-5280 www.extension.umd.edu/cecil-county
Cecil County Health Department	John M. Byers Health Center 401 Bow Street Elkton, MD 21921	410-996-5550 http://www.cecilcountyhealth.org
Additional Notes:		

CHARLES COUNTY

Maryland Department of Agriculture	50 Harry S. Truman Parkway Annapolis, Maryland 21401	410-841-5700 www.mda.maryland.gov
Regional Animal Health Lab Frederick Office	1840 Rosemount Avenue Frederick, Maryland 21702	301-600-1548
Soil Conservation District Office	Southern MD Trade Center 101 Catalpa Drive, Suite 106-C La Plata, Maryland 20646	301-934-9588 ext.3
University of Maryland Extension Office	9375 Chesapeake Street, Suite 119 La Plata, Maryland 20646	301-934-5403 www.extension.umd.edu/charles-county
Charles County Health Department	P.O. Box 1050, 4545 Crain Highway White Plains, Maryland 20695	301-609-6900 http://www.charlescountyhealth.org/
Additional Notes:		

DORCHESTER COUNTY

Maryland Department of Agriculture	50 Harry S. Truman Parkway Annapolis, Maryland 21401	410-841-5700 www.mda.maryland.gov
Regional Animal Health Lab Salisbury Office	27722 Nanticoke Road Salisbury, Maryland 21801	410-543-6610
Soil Conservation District Office	204 Cedar Street, Suite 200 Cambridge, Maryland 21613	410-228-5640 ext.3

University of Maryland Extension	501 Court Lane, Room 213	410-228-8800
Office	Cambridge, Maryland 21613	www.extension.umd.edu/dorchester-
		county
Dorchester County Health Department	3 Cedar Street	410-228-1167
	Cambridge, Maryland 21613	http://www.dorchesterhealth.org/
Additional Notes:		

FREDERICK COUNTY

Maryland Department of Agriculture	50 Harry S. Truman Parkway Annapolis, Maryland 21401	410-841-5700 www.mda.maryland.gov
Regional Animal Health Lab Frederick Office	1840 Rosemount Avenue Frederick, Maryland 21702	301-600-1548
Soil Conservation District Office	92 Thomas Johnson Drive, Suite 230 North Amber Frederick, MD 21702	301-695-2803, ext. 3
University of Maryland Extension Office	330 Montevue Lane Frederick, MD 21702	301-600-1594 www.extension.umd.edu/frederick- county
Frederick County Health Department	350 Montevue Lane Frederick, MD 21701	301-600-1719 https://frederickcountymd.gov/
Additional Notes:		

GARRETT COUNTY

Maryland Department of Agriculture	50 Harry S. Truman Parkway Annapolis, Maryland 21401	410-841-5700 www.mda.maryland.gov
Regional Animal Health Lab Frederick Office	1840 Rosemount Avenue Frederick, Maryland 21702	301-600-1548
Soil Conservation District Office	1916 Maryland Highway, Suite C Mountain Lake Park, MD 21550	301-334-6951
University of Maryland Extension Office	1916 Maryland Highway, Suite A Mt. Lake Park, MD 21550	301-334-6960 www.extension.umd.edu/garrett-county
Garrett County Health Department	1025 Memorial Drive Oakland, MD 21550	301-334-7777 http://www.garretthealth.org/
Additional Notes:		

HARFORD COUNTY

Maryland Department of Agriculture	50 Harry S. Truman Parkway Annapolis, Maryland 21401	410-841-5700 www.mda.maryland.gov
Regional Animal Health Lab Frederick Office	1840 Rosemount Avenue Frederick, Maryland 21702	301-600-1548
Soil Conservation District Office	19 Newport Drive, Suite 103 Forest Hill, MD 21050	410-838-6181 ext. 3
University of Maryland Extension Office	P.O. Box 663, 2335 Rock Spring Road Forest Hill, MD 21050	410-638-3255 www.extension.umd.edu/harford-county
Harford County Health Department	120 S. Hays Street Bel Air, Maryland 21014	410-838-1500 http://www.harfordcountyhealth.com/
Additional Notes:		

HOWARD COUNTY

Maryland Department of Agriculture	50 Harry S. Truman Parkway Annapolis, Maryland 21401	410-841-5700 www.mda.maryland.gov
Regional Animal Health Lab Frederick Office	1840 Rosemount Avenue Frederick, Maryland 21702	301-600-1548
Soil Conservation District Office	708 Lisbon Center Drive, Suite E Woodbine, MD 21797	410-489-7987
University of Maryland Extension Office	3300 North Ridge Road, Suite 240 Ellicott City, MD 21043	410-313-2707 www.extension.umd.edu/howard-county
Howard County Health Department	George Howard Building 3430 Courthouse Drive Ellicott City, MD 21043	410-313-2640 http://www.howardcountymd.gov/Depar tments.aspx?ID=290
Additional Notes: Dead animals shall not be accepted for disposal at sanitary landfill sites.		

KENT COUNTY

Maryland Department of Agriculture	50 Harry S. Truman Parkway Annapolis, Maryland 21401	410-841-5700 www.mda.maryland.gov
Regional Animal Health Lab Salisbury Office	27722 Nanticoke Road Salisbury, Maryland 21801	410-543-6610
Soil Conservation District Office	122 Speer Road, Suite 4 Chestertown, Maryland 21620	410-778-5150 ext.3

University of Maryland Extension Office	709 Morgnec Road, Suite 202 Chestertown, Maryland 21620	410-778-1661 www.extension.umd.edu/kent-county
Kent County Health Department	125 S. Lynchburg Street Chestertown, Maryland 21620	410-778-1361 http://www.kenthd.org/
Additional Notes:		

MONTGOMERY COUNTY

Maryland Department of Agriculture	50 Harry S. Truman Parkway Annapolis, Maryland 21401	410-841-5700 www.mda.maryland.gov
Regional Animal Health Lab Frederick Office	1840 Rosemount Avenue Frederick, Maryland 21702	301-600-1548
Soil Conservation District Office	18410 Muncaster Road Derwood, MD 20855	301-590-2855
University of Maryland Extension Office	18410 Muncaster Road Derwood, MD 20855	301-590-9638 www.extension.umd.edu/montgomery- county
Montgomery County Health Department	Dennis Avenue Health Center 2000 Dennis Avenue Silver Spring, MD 20902	301-251-4850 http://www.montgomerycountymd.gov
Additional Notes:		

PRINCE GEORGE'S COUNTY

Maryland Department of Agriculture	50 Harry S. Truman Parkway Annapolis, Maryland 21401	410-841-5700 www.mda.maryland.gov
Regional Animal Health Lab Frederick Office	1840 Rosemount Avenue Frederick, Maryland 21702	301-600-1548
Soil Conservation District Office	5301 Marlboro Race Track Road, Suite 100 Upper Marlboro, MD 20772	301-574-5162 ext.3
University of Maryland Extension Office	6707 Groveton Drive Clinton, MD 20735	301-868-9366 www.extension.umd.edu/prince-georges- county
Prince George's County Health Department	1701 McCormick Drive Largo, MD, 20774	301-883-7879 http://www.princegeorgescountymd.gov
Additional Notes:		

QUEEN ANNE'S COUNTY

Maryland Department of Agriculture	50 Harry S. Truman Parkway Annapolis, Maryland 21401	410-841-5700 www.mda.maryland.gov
Regional Animal Health Lab Salisbury Office	27722 Nanticoke Road Salisbury, Maryland 21801	410-543-6610
Soil Conservation District Office	211 East Water Street Centreville, Maryland 21617	410-758-3136 ext.3
University of Maryland Extension Office	505 Railroad Avenue, Suite 4 Centreville, Maryland 21617	410-758-0166 www.extension.umd.edu/queen-annes- county
Queen Anne's County Health Department	206 N. Commerce Street Centreville, Maryland 21617	410-758-0720 http://qahealth.org/
Additional Notes:		

ST MARY'S COUNTY

Maryland Department of Agriculture	50 Harry S. Truman Parkway Annapolis, Maryland 21401	410-841-5700 www.mda.maryland.gov
Regional Animal Health Lab Frederick Office	1840 Rosemount Avenue Frederick, Maryland 21702	301-600-1548
Soil Conservation District Office	26737 Radio Station Way, Suite B Leonardtown, MD 20650	301-475-8402 ext. 3
University of Maryland Extension Office	21580 Peabody Street Leonardtown, MD 20650	301-475-4482 www.extension.umd.edu/st-marys- county
St. Mary's County Health Department	21580 Peabody Street Leonardtown, MD 20650	301-475-4330 http://www.smchd.org/

Additional Notes: It shall be unlawful to dispose of animal carcasses at any county trash disposal facility (or any public or private area).

SOMERSET COUNTY

Maryland Department of Agriculture	50 Harry S. Truman Parkway Annapolis, Maryland 21401	410-841-5700 www.mda.maryland.gov
Regional Animal Health Lab Salisbury Office	27722 Nanticoke Road Salisbury, Maryland 21801	410-543-6610
Soil Conservation District Office	30730 Park Drive Howard H. Anderson Bldg. Princess Anne, Maryland 21853	410-651-1575 ext. 3

University of Maryland Extension Office	30730 Park Drive Howard H. Anderson Bldg. Princess Anne, Maryland 21853	410-651-1350 www.extension.umd.edu/somerset- county
Somerset County Health Department	8928 Sign Post Road Westover, MD 21871	443-523-1790 http://somersethd.org/
Additional Notes:		

TALBOT COUNTY

Maryland Department of Agriculture	50 Harry S. Truman Parkway Annapolis, Maryland 21401	410-841-5700 www.mda.maryland.gov
Regional Animal Health Lab Salisbury Office	27722 Nanticoke Road Salisbury, Maryland 21801	410-543-6610
Soil Conservation District Office	28577 Mary's Court, Suite 3 Easton, Maryland 21601	410-822-1577 ext. 3
University of Maryland Extension Office	28577 Mary's Court, Suite 3 Easton, Maryland 21601	410-822-1244 www.extension.umd.edu/talbot-county
Talbot County Health Department	100 South Hanson Street Easton, MD 21601	410-819-5600 http://talbothealth.org/

Additional Notes: According to Easton Town Code Charter, it shall be unlawful for any owner of any dead horse, cow, sheep or other animal carcass, to permit the same to lie within the town limits longer than a reasonable time for removing or burying the same.

WASHINGTON COUNTY

Maryland Department of Agriculture	50 Harry S. Truman Parkway Annapolis, Maryland 21401	410-841-5700 www.mda.maryland.gov
Regional Animal Health Lab Frederick Office	1840 Rosemount Avenue Frederick, Maryland 21702	301-600-1548
Soil Conservation District Office	1260 Maryland Avenue, Suite 101 Hagerstown, Maryland 21740	301-797-6821 ext.3
University of Maryland Extension Office	7303 Sharpsburg Pike Boonsboro, Maryland 21713	301-791-1304 www.extension.umd.edu/washington-county
Washington County Health Department	1302 Pennsylvania Avenue Hagerstown, Maryland 21742	240-313-3200 http://www.washhealth.org

Additional Notes: According to WASHINGTON COUNTY, MARYLAND SOLID WASTE MANAGEMENT & RECYCLING PLAN 2011 – 2021. 3.1.1.7 DEAD ANIMALS. Dead stock are NOT accepted at the county landfill. However, road kills picked up by County road crews are occasionally brought to the County landfill for disposal. The two nearest rendering plants processing dead farm animals

operated by Valley Proteins, Inc. are located near Baltimore and Winchester, VA.

City of Hagerstown Code§ 87-4. Animal carcasses. It shall be unlawful for any owner of any dead animal to permit the carcass to lie within the City limits longer than a reasonable time for removing or burying the same.

WICOMICO COUNTY

Maryland Department of Agriculture	50 Harry S. Truman Parkway Annapolis, Maryland 21401	410-841-5700 www.mda.maryland.gov
Regional Animal Health Lab Salisbury Office	27722 Nanticoke Road Salisbury, Maryland 21801	410-543-6610
Soil Conservation District Office	2322-B Goddard Parkway Salisbury, Maryland 21801	410-546-4777 ext.3
University of Maryland Extension Office	28647 Old Quantico Road Salisbury, Maryland, 21801	410-749-6141 www.extension.umd.edu/wicomico- county
Wicomico County Health Department	William C. Fritz Building 300 West Carroll Street Salisbury, MD 21801	410-546-4446 http://www.wicomicohealth.org

Additional Notes: Wicomico County Landfill will not accept dead farm animals or livestock, including equines.

According to the County Health Department, burial and incineration of large livestock is allowed as long as does not cause a nuisance.

WORCESTER COUNTY

Maryland Department of Agriculture	50 Harry S. Truman Parkway Annapolis, Maryland 21401	410-841-5700 www.mda.maryland.gov
Regional Animal Health Lab Salisbury Office	27722 Nanticoke Road Salisbury, Maryland 21801	410-543-6610
Soil Conservation District Office	304 Commerce Street Snow Hill, Maryland 21863	410-632-5439 ext. 3
University of Maryland Extension Office	P.O. Box 219, 305 Bank Street Snow Hill, MD 21863	410-632-1972 www.extension.umd.edu/wocester- county
Worcester County Health Department	6040 Public Landing Road Snow Hill, Maryland 21863	410-632-1100 http://worcesterhealth.info/

Additional Notes: Under Code of Public Laws Worcester County § PS 2-101. General provisions [amended 4-19-2005 by Bill No.05-3] Disposition of dead animals. It shall be unlawful for the owner or guardian of any animal to deposit or leave such animal, upon its death, on public property or on the property of another person without permission from such person. All such dead animals shall be promptly disposed of by cremation, burial or other sanitary means.

NOTES	

REFERENCES

Alberta Equine Welfare Group. 2008. *Alberta Horse Welfare Report*. Alberta Farm Animal Care. Pp. 27-29.

Becker, J., Bell, M., Felton, G., Fultz, S., and Semler, J. *Guidelines for Composting Large Animal Mortalities in Maryland*. University of Maryland Extension. Environmental Science and Technology FS-2. http://www.enst.umd.edu/sites/default/files / docs/FS-2.pdf. Accessed April 2014.

Bonhotal, J., Schwartz, M., Williams, C., and Swinker, A. 2012. *Horse Mortality: Carcass Disposal Alternatives*. Cornell Waste Management Institute. Department of Crop and Soil Sciences.

Brodie, H. and Carr, L. *Composting Animal Mortalities on the Farm*. University of Maryland Extension. Department of Biological Resources Engineering. Fact Sheet 717. www.enst.umd. edu/sites/default/files/_docs/

FS-2.pdf. Accessed April 2014.

Burke, A. 2013. Associate Professor and Extension Horse Specialist, University of Maryland. Personal Interview.

Cronquist, M. 2007. *Livestock Mortality Management.* Small Acreage Series. Colorado State
University Cooperative Extension – Adams County.

Fraser, H. 2014. *Burial of On-Farm Deadstock*. Ontario Ministry of Agriculture, Food and Rural Affairs. Factsheet ORDER NO. 09-029. http://www.omafra.gov.on.ca/english/engineer/facts/09-029. Accessed June 2014.

Rahman, S., Dvorak, T., Stoltenow, C., and Mukhtar, S. 2009. *Animal Carcass Disposal Options*. North Dakota State University Extension Service. NM-1422.

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