

**House General, Housing and Military Affairs Committee  
Harry Chen, MD, Commissioner of Health  
Natural Burial (H.25) Testimony**

For the most part, from a public health perspective, there are little to no concerns over the natural burial of individuals. Most viruses and bacteria that cause disease do not survive more than a few hours in human remains. For most diseases, the same precautions -latex gloves, for example - that were taken during the care of an individual apply after death.

In rare circumstances, such as with diseases like Ebola, there could be a concern if a person were to be buried. According to the published literature, “there has been some evidence of microbiological contamination in the immediate vicinity of cemeteries, [but] the rapid attenuation of these microorganisms suggests they pose little risk. Bacteria live for a few months in ideal growing environments. To be safe, it would be appropriate for the Department of Health to adopt rules that would prohibit the natural burial of persons suffering from such diseases.

Once buried, removing any potential route of exposure of an individual to the human remains would eliminate any possibility of a public health concern. Therefore, ensuring water sources do not become contaminated by human remains would eliminate any (albeit small) risk to the public. This is the same science that went into the rules and regulations of septic system design and placement.

Historically, Town Health Officers have been used in some towns to assist people with choosing a burial site in an effort to be sure water sources are protected. Adding setbacks to the statute would clarify and make it consistent across towns and allow people who may not be using their town health officers to become aware of the recommendations. We receive a few technical assistance calls from town health officers each year. They are provided the Secretary of State’s excellent guidance document.

So-called traditional burials are not without health concern. Formaldehyde, one of the solvents in embalming fluid, would be considered by some to be more dangerous than the pathogens which will eventually die. Formaldehyde is a known human carcinogen. Studies have found an increase in cancer such as myeloid leukemia and formaldehyde specifically among funeral industry workers. Embalming is typically not required in Vermont nor is it required to bury a body in a casket or vault. According to the Vermont Funeral Directors Association, most caskets and vaults are not waterproof and allow air, water and other fluids to move in and out.

In sum, natural burials have been happening in Vermont for some time. The Health Department is not aware of any incidents of public health concern from any of these.

**Modifications to the Bill**

The Health Department would recommend two changes to the bill. The Health Department would like the discretion to adopt rules to prohibit natural burials under certain conditions

such as an individual has a disease or condition that is considered a Public Health Emergency of International Concern (PHEIC) (for example, smallpox) or when 2 or more of the following criteria are met:

- the public health impact of the event is serious
- the event is unusual or unexpected
- there is significant risk of international spread
- there is a significant risk of international trade or travel restriction

In addition to infectious diseases, radiological or chemical events could fit into these reporting criteria. With regard to radiological, this would not include individuals with medical diagnoses or treatment as these are radionuclides with short half-lives.

Additionally, in order to ensure no pathway of exposure to a water source, Health would like siting requirements to be added. These will be described by DEC.

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Here they are:

- (a) The boundaries of a new or expanded cemetery or natural burial ground shall be located:
- (1) no less than 200 feet up gradient of a groundwater source that is drilled into bedrock or into a confined and unconsolidated aquifer that is part of a potable water supply or transient non-community public water system source;
  - (2) no less than 500 feet up gradient from any other groundwater source that is part of a potable water supply or transient non-community public water system;
  - (3) no less than 150 feet cross or down gradient from any groundwater source that is part of a potable water supply or transient non-community public water system;
  - (4) outside zone one or two of the source protection area for a public community water system; and
  - (5) outside the source protection area for a non-transient non-community public water system.