



Is Fresh Cider Safe?

As the foliage turns to brilliance and the weather turns brisk, family excursions to apple orchards for apple picking, cider pressing demonstrations and sampling begins. But, is fresh cider safe?

The concern over the safety of fresh apple cider arises from the incidence of foodborne illnesses caused by fresh unpasteurized cider, especially from a bacterium called *Escherichia coli* O157:H7. Although most frequently associated with hamburgers, *E. coli* O157:H7 has resulted in significant outbreaks from the consumption of unpasteurized cider. Symptoms have ranged from bloody diarrhea to hemolytic uremic syndrome (HUS), a serious condition, which can cause kidney failure. Massachusetts had an *E. coli* O157:H7 outbreak from unpasteurized cider in 1991. 23 people were ill and four children were hospitalized.

Animals, such as cattle, deer and sheep, are the primary reservoir for the organisms associated with cider outbreaks. Manure was suspected to have contaminated the apples. The use of drop apples is common in cider making and contamination can occur by contact with manure contaminated ground.

Since the 1991 outbreak in Massachusetts, the Department's Division of Food and Drugs (DFD) has required wholesale cider mills to implement several procedures to reduce the risk of producing contaminated cider, including grading and culling drop apples, washing and brushing apples before pressing and adhering to strict sanitary operating procedures. The DFD also conducts annual sanitation training sessions for the wholesale cider industry and has provided them with an informational document entitled "Sanitary Operating Procedures for Massachusetts Cider Mills."

Despite these intensified efforts, there is no assurance that unpasteurized cider is safe. Only a small number of organisms may result in infection, and, although apple cider is an acidic product, these organisms are acid tolerant and can survive in the product for as long as four weeks. There are three high-risk population categories that should not consume unpasteurized cider: children, the elderly and those with weakened immune systems (people with cancer, AIDS, other chronic illnesses, or taking certain medications).

Pasteurization and boiling apple cider can kill *E. coli* O157:H7 and *Cryptosporidium*. Of the 25 licensed wholesale cider mills in Massachusetts, a few have installed their own pasteurization systems and some now have their cider pasteurized at dairy plants.

To provide education and guidance for consumers, the federal Food and Drug Administration (FDA) and the DFD require wholesale and retail cider mills to label their products with a warning statement.

This information is provided by the [Food Protection Program](#) within the [Department of Public Health](#).