Autumn has always been my favorite time of year. The leaves are turning colors in most parts of the U.S. as you read this November issue of the *Journal of Environmental Health*. Football season is well underway and the London kids are carving pumpkins. Hopefully most of you are making plans to spend Thanksgiving with your family and friends.

As I write this column, I am well aware that many of you are still recovering from the aftermath of September’s severe hurricanes. My thoughts and prayers are with you, as well as with the many organizations working to deal with the environmental health concerns that will linger for quite some time. I am deeply thankful that our nation has such tremendous professionals responding to natural disasters such as this one, even though society does not often recognize the work that you, as second responders, do to protect it from illness and injury. I believe Thanksgiving is one more opportunity to tell our story and encourage people to help those in need.

If your extended family is anything like mine, there are a couple of questions that invariably arise around the Thanksgiving turkey feast or during halftime of the Lions game. The first question is usually related to work (“Tell me again, what exactly do you do at work?”) or the latest outbreak in the news. The second is the traditional question that asks what we are thankful for this year. Sometimes we delve into deeper conversation about the first Thanksgiving, wondering with curiosity what the Pilgrims and their Native American friends might have discussed. As you know, so much of world history is deeply influenced by environmental health. I am sure that the first Thanksgiving was no different. I am certain that there was thankfulness to God, new friends, and new beginnings in America. But make no mistake, environmental health played a role in the story of the Pilgrims, their Native American friends, and the events that preceded the first Thanksgiving.

The Mayflower contained around 130 people when it arrived at Plymouth, Massachusetts, in November 1620 after a long and difficult journey across the Atlantic Ocean. When the Pilgrims explored the nearby wilderness, they found an abandoned “Indean” village full of “sculs and bones.” What they did not know was that this village had recently been decimated by a mysterious plague. Up until recently, it was believed that this outbreak was caused by smallpox. Researchers now believe it was leptospirosis that killed most of the Wampanoag tribe living in that small village. Leptospirosis is caused by a spirochete bacterium spread environmentally through the urine of infected rats and other animals. The illness usually manifests with yellowing of the skin, reddening of the eyes, fever, vomiting, diarrhea, and hemorrhaging. The rats and the *Leptospira* bacteria they carried were both invasive species brought to North America by earlier European vessels. It is likely that rat urine containing this infectious agent contaminated grain stores, drinking water supplies, and surfaces throughout the village. Historians estimate that 90% of Native Americans in this area died between 1616 and 1619 from this outbreak of leptospirosis. While people of that time did not understand the complexities of disease transmission, they certainly understood that there was something gravely disordered and dangerous happening. The few survivors hastily abandoned their homes and fled into the wilderness to join other bands of Wampanoag.

Meanwhile, the Pilgrims were not faring much better. They spent a good deal of that first winter on the moldy Mayflower with rodents and lice. As you can imagine, the sanitation of their food and water supply was terrible. They had marginal wastewater disposal. During early 1621, they were food insecure and exposed to the harsh elements of a new world. Scores were dying from a litany of illnesses. Various sources report that causes of death included tuberculosis, pneumonia, smallpox, dysentery, and leptospirosis. The Pilgrims worked hard during 1621 to build safe shelter, identify food supplies, find safe water sources, and improve sewage management.

The amazing circumstance through which the Pilgrims encountered the English-speaking Squanto amongst the Wampanoag survivors speaks powerfully to the importance of diversity, inclusion, and loving “thy neighbor.” Squanto taught the Pilgrims how to cultivate the most successful crops for this region:
beans, maize, and squash. By November 1621, the condition of the Pilgrim settlement had stabilized, but only around 50 of them were still alive. They were, however, grateful to God for bringing them through those tough times. We often default to the imagine of the first Thanksgiving exclusively from the perspective of the Pilgrims. The people of the Wampanoag tribe also had some cause to be thankful in 1621. Despite the horrible plague of leprosyosis, a remnant of their tribe had survived to see a bountiful harvest.

There are many lessons for us to reflect upon in the story of the first Thanksgiving. As people of the post-germ theory world, we have collective amnesia about the morbidity and mortality our ancestors endured due to things that we now prevent from happening. Our modern storytelling of the first Thanksgiving often neglects the extreme suffering of the Pilgrims and Wampanoag. I cannot help but think that a few sanitarians equipped with the basic knowledge of our science could have prevented many of their deaths.

Another important lesson is the reminder to be good to one another, care for those in need, and work for healthier communities for all. These lessons are central to our profession of environmental health. You make the world a better place every day through your work.

Thank you for your work. I do, however, want you to sacrifice a little bit more this month. While we cannot go back in time to help the Pilgrims and Wampanoag, we have an opportunity to help other people who are housing insecure and faced with serious environmental health disasters. Thank you for your work. I do, however, want you to sacrifice a little bit more this month. While we cannot go back in time to help the Pilgrims and Wampanoag, we have an opportunity to help other people who are housing insecure and faced with serious environmental health disasters.