

Healthy Housing and Farm Life “Across the Pond”: My Sabbatical Experience

2008 NEHA Sabbatical Exchange Ambassador
England

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Sabbatical Goal

Environmental health practitioners, with the proper training and opportunity, can provide information and guidance for a number of healthy housing issues. In South Carolina, environmental health practitioners enter private homes for a limited number of reasons, usually for a lead-based paint issue. Environmental health practitioners in England visit private homes on a much more frequent basis, and consider a wider range of hazards during a visit. The Housing Health and Safety Rating System (HHSRS) used in England looks at 29 possible hazards during a physical survey of the home. As a credentialed Healthy Homes Specialist and a U.S. Environmental Protection Agency (U.S. EPA) certified lead risk assessor, I wanted to learn more about the HHSRS. The NEHA Sabbatical Exchange Ambassador Award made it possible for me to spend most of the month of March 2009 in England, working with environmental health officers (EHOs) from several areas of the country. In addition to healthy housing, I also learned about the British scheme for training EHOs. One of the most moving aspects of my sabbatical experience was the opportunity to meet and talk with farmers who had been affected by the 2001 and 2007 outbreaks of foot and mouth disease (FMD).

Introduction

I work as an environmental health manager in the bureau of environmental health at the South Carolina Department of Health and Environmental Control (DHEC). I have been with the agency for over 10 years and have worked exclusively in environmental health for the past three years. Environmental

health practitioners (EHPs) working for DHEC rarely conduct any sort of inspection or investigation of private residences. The main exceptions to this are general sanitation inspections, lead risk assessments for foster homes, and elevated blood lead investigations for children. NEHA now offers a Healthy Homes Specialist (HHS) credential, in conjunction with the National Center for Healthy Housing and the National Healthy Homes Training Center and Network. The HHS credential is a nationally recognized credential that covers the connection between health and housing, housing codes and related laws, housing as a system, healthy homes strategies, and resources for healthy homes. The degree to which public health and environmental health departments are involved in housing-related issues varies widely across the country and may not even be consistent within a particular state.

I was fortunate to meet Peter Wright, part-time education officer with the Chartered Institute of Environmental Health (CIEH), at the NEHA Annual Education Conference & Exhibition (AEC) in Tucson in 2008. The Chartered Institute of Environmental Health is NEHA's sister agency in Great Britain. It is the governing, educational, and professional body in England, Wales, and Northern Ireland for environmental health, with over 10,000 members across Great Britain and other parts of the world. CIEH's London headquarters is home to the central management team, which encompasses the following divisions: policy, education and professional standards, communications, memberships and information services, events, training, publishing and finance, and IT and administration. Without Peter's patience, diligence,

and amazing contacts, I am confident that my sabbatical exchange would not have been the incredibly rewarding experience that it was.

As a public health professional, I could not leave London without paying a visit to the site of the infamous Broad Street Pump. The pump is no longer there; in its place is a pink granite curbstone. On the corner is a pub named the John Snow, and there is a plaque commemorating his discovery of the connection between the water supply and health (SEE PHOTOS 1 and 2). Dr. John Snow is known as the father of modern epidemiology. He mapped cases of cholera during the 1847–1848 London epidemic and determined that a contaminated water supply was the source of the disease. Dr. Snow ordered the removal of the handle from the Broad Street water pump to prevent further spread of cholera from that source.

CIEH and EHO Training

I had the privilege of attending a daylong officers' training and student workshop for the South East Region in Crawley led by Peter Wright. This was a wonderful opportunity to meet environmental health students and to hear about their experiences. The focus of the workshop was to help students prepare for their rather complicated certification process. The workshop put on by CIEH focused on helping students in preparing their experiential learning portfolio (ELP). The ELP is work based and deals with the experiences the student has while learning the ropes in various areas of environmental health. In order to assist students in completion of their ELPs, the Chartered Institute runs a mentoring scheme. More information on the mentoring scheme as well as guidance documents



The John Snow Pub, located on the corner of the former site of the Broad Street Pump in London—a “must see” for public health professionals. Ironically, Dr. John Snow was believed to have been a teetotaler.

on the ELP can be found on the CIEH Web site, www.cieh.org. The ELP not only allows a student to demonstrate the knowledge they have gained but also allows them to show that they are capable of applying what they have learned and evaluating the success of their actions.

Housing Issues

The London metro area has a population of over seven million and covers 610 square miles. The median age of housing stock in London is pre-1919, and the majority of the residences are terraced and multilevel rather than detached housing. Rodent infestations are a common problem. A great deal of pressure is on the housing market, with overcrowding and lack of availability of suitable housing common. Long waiting lists exist for subsidized (council) housing. There is a large elderly population, which is unable to maintain their homes.

Environmental health offices have a housing section, and EHPs go to private homes and private rentals for two main reasons: to respond to a complaint or in conjunction with renewal or energy efficient projects. The underlying principle of HHSRS is this: *Any residential premises should provide a safe and healthy environment for any potential occupier or visitor.*

My first housing visits were with the staff of the city of Westminster, and it was truly a day of “firsts” for me. I visited my first housing in multiple occupancy (HMO), my first flat in council housing, and made my first overcrowding visit in a subsidized private

rental flat. Tim Carrick, environmental health enforcement officer, took me to an HMO that was being renovated and updated through a grant the owners had received. The multistory building was divided into “bedsits”—one-room chambers with sleeping and kitchen areas that required the residents to use a shared bath down the hall. This property was being made more energy efficient, as well as safer, by replacing windows, improving insulation, making the stairwells safer, and adding fire protection features.

Robert Sale, energy officer, took me on a “dampness and mold and excess cold” complaint in a council flat. The mother said that she was unable to afford to keep the entire flat at a comfortable temperature, and the family was sleeping in the living room because the bedrooms downstairs were too cold. The bedrooms also had serious mold growth on the walls, as well as on furniture and belongings in those rooms. Rob left small monitors to record temperature over several days to help him make recommendations for addressing the resident’s complaints.

My last day in London was spent with Rosie Reynolds, EHO on the private sector housing team for the Royal Borough of Kensington and Chelsea. Rosie and I visited the flat of an older woman in council housing to investigate a filthy and hoarding, possibly verminous situation. While there were no visible signs of rodent infestation at the time of the visit, the conditions were right for that type of problem. The woman accompanied us on our inspection and Rosie pointed out areas of concern. After the problem and

the desired outcome had been explained, Rosie and the occupant agreed to a two-week follow-up visit. At the time of the follow-up visit, the apartment’s clutter had been mostly cleaned up, and the flat no longer had an offensive odor.

When I left London, I went north to Lancashire. The first visits I made in the Pendle Borough Council (<http://www.pendle.gov.uk/site/index.php>), a more rural area than London, were with the pest control section. Pauline Foley provided me with an overview of environmental health, as well as the tasks carried out by the pest control section. There is currently a problem with rodent infestations all over England, and the rats seem to be having a population boom. Two problems that contribute to this are trash left in alleyways and “fly-tipping” (unauthorized dumping).

I accompanied Gemma Ratcliffe on her follow-up visits to some residential properties, and made my only environmental health visit to a detached, single-family dwelling. One residence still had signs of an active rodent infestation, so Gemma placed more bait, and set the date for the follow-up visit. Gemma told me that it is fairly easy to gain access to the home when the complaint is first made, but once the rodent population decreases, and the occupants are not seeing as many rodents or signs of rodents, it can be difficult to get back into the property for follow-up visits.

My last day in Lancashire was spent with staff from the Blackburn with Darwen Borough Council. Carol Jones, senior EHO, took me to a home with one of the worst mold

problems I saw while on sabbatical. The bedroom walls had been cleaned and repainted in December, but by the end of March, they were already covered in mold. The children in the family were experiencing respiratory problems, and the family was looking for another place to live.

In Yorkshire, I visited the city of Leeds and saw my first “back-to-back” housing units. Back-to-backs are terraced housing, two or three stories tall, and are only half as deep as the exterior structure. There are residences on both sides of the building, and the rear walls of the flats back up to one another in a shared wall, giving them their name. Most of these units are from the Victorian era, and were originally constructed with only one room downstairs, and no indoor toilet. The toilets for these structures were located at the end of the building, outside in a toilet block. Leeds has more back-to-backs still standing than any other city in England. These units have a number of hazards, including hazards from falls (*very steep staircases*), damp and mold, fire, and entry by intruders.

I then accompanied Steve Billcliffe, senior EHO with the housing regulation team, to do follow-up visits on some private rental back-to-backs. In both cases the owners had been ordered to fix a laundry list of problems (fire protection, inadequate heating, etc.), but neither owner had complied at the time of our visit. In the afternoon I toured one area that had already benefited from a renewal partnership project (Burley Lodge), and one area where the renewal project was in progress (Beeston Hill). Phil Beesting was my host and guide for these visits, and I can say that he took me places where the average tourist does not go. As we were touring the Beeston Hill area, we passed a narrow strip of grass in the middle of the block. I was shocked to learn that it had once been the site of a back-to-back. As small as the open space was, I can only imagine how small it must have been with the walls standing.

Animal Health and Farm Issues

Foot and mouth disease (FMD) is a highly contagious viral disease that can infect sheep, goats, pigs, cows, deer, and surprisingly, elephants and hedgehogs. It may be spread through direct contact, as well as by airborne virus particles present in saliva and other secretions. Feeding catering waste and used

cooking oil to farm animals is prohibited to prevent the spread of FMD. People, clothing, footwear, vehicles, equipment, or livestock-holding facilities may act as fomites. FMD is a severe livestock disease, which can lead to dramatic production losses. The virus can spread quite rapidly through routine movement of livestock.

Over 2,000 cases of FMD occurred in England between February 20 and September 20, 2001. The index case is believed to have been pigs that were fed improperly processed food waste. The disease was then spread through the movement of infected pigs, the movement of other animals in contaminated vehicles, and by an airborne route from the pigs to sheep on a neighboring farm. The delay in reporting suspicion of the disease and the movement of infected animals contributed to the rapid spread of the disease in the 2001 outbreak. Cumbria was the hardest hit area of England. Nearly seven million sheep, cattle, and pigs were culled nationally to control the disease, though an estimated 80% of those slaughtered were not infected. The cost to agriculture, tourism, and related industries was \$16 billion (DEFRA, <http://www.defra.gov.uk/footandmouth/pdf/fmdorigins1.pdf>).

The 2007 FMD outbreak was confined to a few farms in Normandy, Surrey. The source in this outbreak was a laboratory site occupied by both the Institute for Animal Health and Merial Animal Health, Ltd., in Pirbright. This is the only lab in the UK licensed to keep the foot and mouth virus and other unusual animal pathogens. It is believed that the virus escaped through a breach in a wastewater pipe. The virus was carried in the water, as well as on truck tires of construction vehicles that were doing work at the facility (<http://www.hse.gov.uk/news/archive/07aug/finalreport.pdf>). The Pirbright facility played a key role in the diagnostics of the 2001 FMD outbreak, so it is ironic that this facility was the source of the virus that caused the 2007 outbreak.

The Department for Environment Food and Rural Affairs (DEFRA www.defra.gov.uk) is similar to our United States Department of Agriculture. I was fortunate to spend a half day at the DEFRA office at Barton Hall, Preston, with two veterinary officers, as well as the readiness and resilience manager. They shared with me a time-lapse map of the country, showing the devastatingly rapid spread of the 2001 FMD outbreak. They

also shared their experiences responding to both the 2001 and 2007 FMD outbreaks, including what it was like to work with visiting veterinarians from other countries that responded to the crisis. I also received an introduction to the cattle passports that are managed by the British Cattle Movement Service (BCMS), a part of DEFRA. The BCMS was created in response to the Bovine Spongiform Encephalopathy (BSE or “Mad Cow Disease”) crisis in the UK. Every cow born in or imported into Great Britain since July 1, 1996, must have a cattle passport. All cattle must have appropriate ear tags, and all movements must be tracked. The passports contain a great deal of information about the individual animal, and add a significant time requirement and paperwork to the farmer’s recordkeeping (<http://www.defra.gov.uk/animalh/id-move/cattle/passports.htm>).

I was able to tour the lambing flocks and dairy unit at Myerscough farm with Allan Nickson and Roger Leach, the farm operations managers. While we toured the farm, Allan and Roger discussed how the 2001 FMD outbreak had impacted the farm. Myerscough is a working and teaching farm, and many of the students come from farming backgrounds. When farms were quarantined during the outbreak, many students were not able to return to the campus to continue their studies. Provisions had to be made for them to get their lessons and take their exams, so that they could keep up with their classmates who were still on campus. Myerscough has a veterinary nursing degree program, and this was also affected by the FMD outbreak.

March is lambing season, so we were able to visit a lambing barn and see the process: ewes waiting to deliver, students assisting with difficult deliveries, newborn lambs with their mothers, and lambs being fostered by other ewes. This was a particular highlight of the trip for me, since I had sheep as a young girl.

During our visit to the dairy unit, I had the opportunity to talk to Roger about his personal experience during the 2001 FMD outbreak. Roger lives and raises sheep in Cumbria, which was the area that was hardest hit by the outbreak. No disease was detected in his flock, but since he farmed within the protection area (also known as a contiguous or cull zone), all of his sheep were slaughtered. It was lambing season at the time, and the ewes were delivering lambs even as they

were being loaded onto the trucks to be taken away for slaughter. Roger's story was the only one of the FMD stories I heard that mentioned any kind of organized support for the farm families. An army officer was assigned to Roger and his wife, and was introduced to them as their liaison. The officer would check on the family once or twice a week, sometimes stopping by for a cup of tea or coffee, just to see how they were doing.

Allan had arranged a farm visit for me with a family that lost all their cattle and sheep in the 2001 FMD outbreak. Mr. and Mrs. David Newbould have the last farm in Lancashire, just before the Yorkshire border, near Gisburn. They welcomed me into their home and shared with me their experiences of the 2001 outbreak. At the time of the outbreak, they had both sheep and cattle, but were in the process of selling the sheep, to go solely to a dairy business. Their dairy herd and sheep flock had remained disease free for most of the outbreak. As the outbreak was nearing its end, they noticed that they could smell disinfectant from the neighboring farm. This was an indication that the neighbor's herd had been slaughtered and the disinfection of the entire premises was in progress. Very soon after that, they were visited by the army and told that their animals would have to be slaughtered. More than five years after the event, telling the story is still painful. The family still operates a dairy, using a closed herd and following strict biosecurity procedures.

I cannot do justice to the stories and the depth of emotions that were shared with me regarding both the 2001 and 2007 outbreaks. These stories belong to the men who told them; they are not mine to tell. I hope I am successful in portraying a little bit of the emotion and the devastation that these stories contain. Should any of the brave men who shared their stories with me read this and find my account lacking, I ask their forgiveness.

The farmer interviews I conducted with farmers who had been affected by the 2007 FMD outbreak took place in Surrey. Kevin Chesson, trading and standards officer with the Surrey County Council Trading Standards Department, and Chris Woodhatch, principal EHO in Guildford, arranged for me to meet farmers who had been directly impacted by the 2007 outbreak of FMD. Trading Standards is responsible for the inspection of records, enforcement of the other disease control legislation, and welfare and feed/food safety issues on farms. I met Chris and Kevin in the Guildford Borough Council Offices, and they gave me an overview of the 2007 outbreak and their roles in the response to it. In addition to carrying out the normal day-to-day functions of environmental health, phone banks were set up, walking paths were closed, and other measures were put into place. EHOs were involved in all aspects of the response effort. The two recent FMD outbreaks certainly

have left their mark on England's agricultural community.

The NEHA Sabbatical Exchange Ambassador Award provided me with a rare and wonderful opportunity to expand my horizons on both the personal and professional level. I am grateful to my supervisor, Michael Longshore, and our bureau director, Roger Scott, for the support they gave me, so that I could be away from my regular duties and take full advantage of this sabbatical experience. I am grateful to NEHA and Underwriters Laboratories for funding this award and allowing me that opportunity. A trip like this would not have been possible without the help of a lot of individuals. I owe my thanks to all who are mentioned in this paper, as well as the many with whom I spent time that are not mentioned by name. I simply cannot thank them enough. A number of the EHOs with whom I met while in England were interested in learning more about the award. I hope that CIEH will be able to reinstate its own version of the program in the near future. The benefits are priceless. 🐷

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