During December 2008 and January 2009, two incidents involving passenger planes in the United States garnered immediate international attention. A Continental Airlines plane was taking off from Denver International Airport when it suddenly veered off the runway, rolled across the grass and down a slight embankment, came to a stop, and caught fire. All 107 passengers and 5 crew members escaped. There were 38 persons with injuries, none of them life-threatening. Less than a month later, on January 15, a U.S. Airways plane had both engines fail shortly after takeoff from Laguardia Airport in New York City. The plane had reached about 3,200 feet altitude when the engines failed, and the captain was able to fly it over parts of New York City to the Hudson River, where he put it down in the water. Fortunately, no serious injuries were suffered by the 155 persons on board.

The extensive coverage of both incidents concluded that preventing the loss of any lives was due to the training of the pilots and attendants on each flight. The pilots and the rest of the crew have all been through countless hours, and in some cases years, of training, exercises of the training, and experience. We place our lives in their care from start to finish of each flight. In the two cases cited above, we saw immediately how the training and exercises paid off in preventing more serious injuries and loss of life.

We stress training in the biosafety profession too, with numerous training opportunities available from ABSA and many other venues. The opportunities are such that an individual does not have enough time or money to attend them all. Most of the training courses are classroom-style training with varying amounts of interaction and exercises about what the training taught. When we enroll in and complete a training course, do we practice what was taught? Are the notebooks, CDs, and other materials we received during the training courses worn from repeated use, or are they sitting neatly on shelves in excellent near-new condition? Do we go back home, and exercise the training to be sure we can make it work in our own unique environment?

Moreover, training is not just for biosafety personnel. Include other safety personnel, facilities and maintenance personnel, laboratory animal personnel, and greenhouse managers, and definitely include laboratory investigators. Exercising the training we obtain should not be limited to emergency response protocols. Correct use of biosafety cabinets and autoclaves, use of eye washes, donning and doffing lab clothing and personal protective equipment, and other procedures are best practiced before utilizing them in the lab.

When conducting emergency response protocol exercises, be sure to include emergency responders from the community. They are the professionals who will be summoned when fires and medical emergencies occur. When they are included in your exercises, emergency responders can give valuable advice that may save lives in an emergency. It is also a learning experience for them and will enhance their ability to assist when emergencies do occur. Emergency responders who are included and have input into biosafety training protocols and exercises become ambassadors for the research community to the general public and can assure the public that the research community is taking the proper actions to ensure the safety of the community regarding infectious disease research.

Remember when conducting training that the general public does not have an accurate understanding of the breadth and depth of the training that is conducted to ensure that the persons doing the research and the surrounding community are adequately protected from the agents utilized in the research. When discussions arise regarding the safety of the research (don’t be timid in initiating some of those discussions), be sure to communicate accurately how we in the biosafety profession are constantly being trained, the many opportunities for training that our profession offers, how highly we all value training, and the importance of the training to the community.

In conclusion, you can apply examples from outside the biosafety world to illustrate how training and exercise of the training pay substantial dividends in daily safe research applications and in instances when emergencies occur. Remember in all our training and training exercises that “failure to conduct our research safely is not an option.”

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