Local biotech company may benefit from federal lab mishaps

BY: Stephen T. Watson (mailto:swatson@buffnews.com) Published: July 14, 2014, 05:42 PM Updated: July 15, 2014, 07:32 AM

News that federal health officials are considering changing how deadly viruses are handled after scientists with the Centers for Disease Control and Prevention mishandled samples of anthrax and bird flu won’t hurt ZeptoMetrix, a Buffalo biotech company that works with highly infectious agents, a top company executive said Monday.

In fact, the CDC’s decision to temporarily shutter its flu and anthrax laboratories and halt its shipments of potentially dangerous specimens may boost demand for ZeptoMetrix’s services, which include preparing samples of HIV, SARS and other agents for testing at other research centers.

“If anything, it’s going to increase our business, because people will work more with our inactivated, safe materials than work with the live, actual viruses,” said Gregory R. Chiklis, ZeptoMetrix president and chief operations officer.

Rep. Chris Collins, R-Clarence, is a former owner of the company and now serves as its chairman.

ZeptoMetrix has one of at least three laboratories in the Buffalo area with a license to handle highly pathogenic agents, along with those at the University at Buffalo and the Erie County Health Department.

The biotech company has 48 employees in Buffalo and a similar number at a satellite lab in Franklin, Mass. ZeptoMetrix, whose Main Street offices sit on the edge of the Buffalo Niagara Medical Campus, is eyeing a move into a third building in Buffalo.

“For us, with all of this new molecular technology, it’s been huge for ZeptoMetrix. We’ve had
rapid growth because of it. We’re expanding in the Buffalo area to try to keep up with that as well,” said Chiklis, who is based in Franklin, Mass.

The ZeptoMetrix executive spoke three days after CDC officials disclosed the serious laboratory mishaps.

In one incident, more than 60 CDC employees who thought they were working with inert anthrax bacteria may have been exposed to live anthrax by mistake, the New York Times reported. In another episode, a CDC lab accidentally mixed a relatively safe flu sample with a potent strain of bird flu.

In response, agency officials Friday said they are closing CDC anthrax and flu labs until new safety controls are put in place.

David Pawlowski, UB’s biological safety officer and a research assistant professor of microbiology and immunology, said that the accidents are embarrassing but that he believes the CDC acted appropriately in disclosing them and developing an improvement plan.

Pawlowski said that there are more than 1,000 biosafety level-3 labs across the country and that serious lab mishaps, which must be reported to the federal government, are rare.

The reward of a potential breakthrough in medicine outweighs the risk inherent in handle these dangerous organisms, Pawlowski said.

“The only way that you can understand the disease is actually by working with the agent that causes it,” he said.

The UB biosafety level-3 lab is on the South Campus in Buffalo and is used for bacterial and viral research. Erie County’s level-3 lab doesn’t host ongoing research, but it is licensed to handle highly infectious specimens from patients.

ZeptoMetrix’s Buffalo lab is an enhanced level-3 facility, but Chiklis said the company does not handle a lot of highly potent agents, such as anthrax or swine flu, because the difficulty of being certified to work with that material isn’t worth it from a business perspective.

ZeptoMetrix receives a handful of specimens from the CDC, but most come from state health departments. State health employees send samples of live organisms — typically clinical samples from sick patients, with a preliminary diagnosis of the virus or other agent — to ZeptoMetrix in secure packaging.

Company technicians isolate the specimens, confirm what it is they are working with and grow a version that can’t replicate itself to cause further infection. “So nothing leaves the company until we have all sorts of validated information that these things are just dead as a door nail,” Chiklis said.

ZeptoMetrix ships the inactive specimens to doctors’ offices, research facilities and testing labs for use as a quality control in testing of the original patient specimen. “There’s a huge need for it, because you need to make sure you’re giving an accurate result to a patient,” he said.

The company’s customers are trying to catch a potential infection as early as possible, before patients have developed symptoms. That quest is aided by advances in genomic medicine that hold out the promise of personalized treatments targeted to specific patients.

“We can detect a virus or a bacteria in your blood before your body even sees it, OK – before you even get sick in some cases. That’s why the blood supply is so safe now,” Chiklis said.

All of that is driving demand for ZeptoMetrix’s services.

The company has its roots in one of Buffalo’s first biotech companies, Cellular Products, which since 1988 operated a research and testing lab at 872 Main St. ZeptoMetrix took over the site, which once housed a car dealer’s offices, in 1999 when it acquired Cellular.

The company moved into a new headquarters building next door, at 872 Main St., after rehabilitating the long-vacant, circa-1850s Hoyt Mansion.

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