Ask the Experts
John H. Keene
Biohaztec Associates, Inc., Midlothian, Virginia

This is the first of what we hope will be a continuing forum for ABSA members to obtain answers to questions that are of particular interest to professionals in Biosafety. We encourage you to send us questions that concern you and that you feel may be of interest to others in the profession. We will attempt to get expert advice on these topics and publish them in this column in each issue of Applied Biosafety: Journal of the American Biological Safety Association. We hope to have several pertinent questions and their answers in each issue. The success of this endeavor will be up to you, the membership. Please help yourself, your organization, and your fellow biosafety professionals by submitting your questions for publication.

Question:

IATA USG 12 (International Air Transport Association Dangerous Goods Regulations Section 2 Limitations) United States Government limitation 12; page 35 IATA Dangerous Goods Regulations) refers to a 24-hour emergency response telephone number required on Shipper’s Declarations of Dangerous Goods. In our shipping training, we teach that this 24-hour number be exactly as dictated in the regulations. We get questioned on this by people who insist the CDC supplies this number. We know that the number published by CDC on the Class 6.2 label is for reporting an accident and NOT for the 24-hour emergency response. Are we correct in this stance or have we been wrong all along? If we are correct, is there some way we can get a statement from CDC explaining this? Any light you might shed on this question would be greatly appreciated.

Answer:
(From Richard Knudsen, CDC)

The 24-hour emergency response telephone number listed in the IATA DG (International Air Transport Association Dangerous Goods Regulations) should be the shipper’s emergency number. The purpose of this number is to provide 24-hour emergency access to information about the contents of the package, should there be damage to the package and potential exposure. It is completely inappropriate to use CDC’s telephone number for this purpose. The CDC number should be used only to notify CDC of a damaged package, or, in the case of a special etiologic agent, to report a package that has not arrived within the specified timeframe. CDC also provides advice on how to handle the damaged package and often advises the handler that, since CDC does not know the contents of the package, he or she should call the 24-hour emergency response number to determine the contents and then to refer back to CDC for further advice. The use of the CDC number as a shipper’s emergency response number may be considered a violation of the FAA regulations and result in stiff civil or criminal penalties.

Question:

We are involved with CDC as a regional resource under their Bio-Terrorism (BT) initiative. As such, we are required to use a “Taq-man” to identify BT agents such as “Anthrax.” As you probably know, these instruments are very expensive. We are in the process of buying such an instrument and are debating where it should be located—in the BSL-3 BT suite, or in a BSL-2 suite where it would be available for not only
BT samples but also other non BT samples. My question is “Would it be safe to prep a potential Anthrax BT sample in the BSL-3 suite and then transfer the genetic material to the Taq-man located in a non BSL-3 suite on another floor?”

**Answer:**
(From Richard Knudsen, CDC)

All work with infectious agents at BSL-3 should be done in a biosafety cabinet (BSC). Extract the DNA from your sample with lysing buffer in a closed tube in the BSC; the lysing buffer should inactivate the agent. You can then decontaminate the outside of the tube and transfer it to your BSL-2 lab for taq-man analysis. The only possible danger is spores surviving the lysing buffer. I suggest that the investigator test the lysing buffer for effectiveness in destroying the spores. If one lysing buffer doesn’t inactivate the spores, you may want to test one of several others. In any case, the limiting factor is the survivability of the agent after treatment with the lysing buffer. If you can’t eliminate the spores one way or another, this would probably require that the taq-man work be done at BSL-3. We have used a similar procedure to remove DNA extracted from BSL-4 agents from the BSL-4 lab after the investigator provided test data to verify that the agent did not survive the lysing buffer.