PURPOSE
One of the many questions raised by the events of September 11, 2001 was regarding health care providers’ preparation for disaster and terrorism, and concerns about provider readiness remained. Only 21% of physicians surveyed in 2002 reported that they felt well prepared to play a role in handling a bioterrorism event and only 24% felt that their clinic or hospital was well-prepared to deal with bioterrorism events. Similarly, a survey of family physicians showed that while 95% believed that a bioterrorist attack is a real threat, only 26% thought they would know what to do and only 18% had received bioterrorism preparedness training.

Sarin was released in terrorist attacks in Tokyo in 1994 and 1995, illustrating the reality of the threat of chemical terrorism. Despite this reality, a survey of health care providers found that less than 21% of the respondents reported confidence to provide health care in a hypothetical situation. The purpose of this study is to examine healthcare providers’ specific plans for disaster preparedness after completing a CE activity on sarin terrorism.

METHODS
The Health Resources and Services Administration (HRSA) funded the Metropolitan Chicago Healthcare Council (MCHC) for a project to provide CE for disaster and terrorism preparedness. As part of the MCHC project, faculty from Rush University Medical Center and the Uniformed Services University of the Health Sciences collaborated to develop a case series, Terrorism & Disaster: What Clinicians Need to Know.

In order to receive CE credit, the participant was required to complete a quiz and an evaluation of the case study. The following question about users’ plans for disaster preparedness was included in the evaluation:

Based upon your review of this case, please list specific action(s) that you could take to enhance disaster preparedness in your workplace.

Approximately 50% (150) of providers’ responses to the action step evaluation question included education. Preparation was also a theme in the participant responses, with 25% (75) answering about planning, specifically making contact information more readily available, drills, and general or decontamination planning. Twenty-five percent of providers listed a response about supplies, specifically purchase/inventory/stock of general supplies, nerve agent antidote, or decontamination equipment, and 10% answered they would increase vigilance and awareness of signs and symptoms specific to sarin. The percent of health care providers who responded in each category is displayed in the Table.

RESULTS
Of the 1,100 participants to complete the sarin case study, 29% (n=318) responded to the action step evaluation question discussed in this study. Of the respondents to the action step evaluation question, 48% were from the United States and of various professions as shown in the Figure. Many primary specialties were represented, specifically 10% psychiatry, 9% internal medicine, 9% family medicine, and 5% emergency medicine.

In the action step evaluation question included education. Preparation was also a theme in the participant responses, with 25% (75) answering about planning, specifically making contact information more readily available, drills, and general or decontamination planning. Twenty-five percent of providers listed a response about supplies, specifically purchase/inventory/stock of general supplies, nerve agent antidote, or decontamination equipment, and 10% answered they would increase vigilance and awareness of signs and symptoms specific to sarin. The percent of health care providers who responded in each category is displayed in the Table.

Participants were asked to estimate the probability they would act on the item they listed, and 36% reported a 100% probability for their first action item listed. Thirty percent of respondents reported a probability between 50% and 24% reported less than a 50% chance that they would act on their first action item listed. Participants were also asked about impact of the educational activity on their practice. Seventy-four percent of those who answered the action step question reported that the sarin case study would impact their practice. When asked if completing the activity had improved their preparedness to recognize and care for victims of a terrorist attack, 98% agreed or strongly agreed.

CONCLUSIONS
The results of this study demonstrate that disaster preparedness begins at the provider level. Healthcare workers who completed a brief CE activity on disaster preparedness recognized the need to train staff, stock supplies and strengthen disaster plans. Half of the respondents planned to conduct or participate in further education on the topic of terrorism preparedness. Half of the health care providers planned to strengthen disaster plans and stock necessary supplies and equipment, while 10% plan to increase vigilance and awareness of signs and symptoms. If 9% know a specific response they will make to a chemical terrorist attack.

Although drills were not part of the case study, the small number of action items that included drills is interesting. Perhaps drills were already being done by those respondents or drills are more complicated to conduct than educational efforts. Reasons for this will be evaluated in further studies.

Further study of the sarin CE activity is planned to determine whether the proposed action steps were indeed implemented at the provider level. Due to the limited amount of provider experience with terrorism events, it is yet to be seen whether disaster preparedness education will lead to an improved response to these types of tragedies.

REFERENCES