

Terrestrial Rabies and Human Postexposure Prophylaxis, New York, USA

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[Karen Hunter] Hello. I'm Karen Hunter. With me today is Dr. Brett Petersen, an EIS officer in the rabies program at the Centers for Disease Control and Prevention. We're talking about a paper appearing in the March 2010 issue of CDC's journal, *Emerging Infectious Diseases*. The article, *Terrestrial Rabies and Human Postexposure Prophylaxis in New York State*, examined rabies trends within the state but did not include the city of New York. Welcome, Dr. Petersen.

[Brett Petersen] Thanks, Karen. It's great to be here.

[Karen Hunter] Dr. Petersen, the article describes rabies exposure data collected in New York from 1993 through 2002. Now, in the United States, isn't rabies in humans a very rare disease?

[Brett Petersen] Fortunately, yes, human rabies has become rare in the United States. We really only see a handful of cases each year, and this is thanks to successful animal control and vaccination programs. However, exposure to the rabies virus is not a rare event, and most of these exposures are from animal bites, so keeping animals healthy helps to protect humans as well. It's also possible to prevent rabies after an exposure occurs by administering rabies vaccine and immunoglobulin. Now this is called postexposure prophylaxis, or P-E-P.

[Karen Hunter] How common is rabies P-E-P in the United States?

[Brett Petersen] Well, we don't really know. We know that thousands of people receive P-E-P every year, but we don't have an exact number because human exposures to rabies virus and P-E-P are not nationally notifiable events. Estimates suggest that up to 40,000 people receive P-E-P each year, but even this might be an underestimate. The study, for example, notes that over 18,000 people received P-E-P in the ten years their study covered. And keep in mind that the study excluded the most populous part of the state, New York City, and it also excluded the people who received P-E-P due to exposures to bats, which can be quite common.

[Karen Hunter] Now, what else stands out about this article? Did anything in it surprise you?

[Brett Petersen] Well, it does re-emphasize a number of things that we know already. One is the importance of vaccinating companion animals against rabies. About two-thirds of the potential exposures in the study were from dogs and cats, and, even though most of these animals were not rabid, several hundred of them were. Also, over half of the P-E-P administered in the study were due to exposures from animals that were never captured for observation or testing, and it's likely that increased efforts to capture these animals would make it possible to rule out rabies and thereby decrease unnecessary P-E-P. One other interesting aspect of the study was the data showing what percentage of patients actually completed the P-E-P protocol.

[Karen Hunter] What do you mean by that?

[Brett Petersen] Well, in the study, about 10 percent of the patients did not receive all five doses in the rabies vaccination series, and the new recommendations from the Advisory Committee for Immunization Practices has actually reduced the number of doses of vaccine from five to four, and we hope this will help make it easier to complete the series. But it's also reassuring that, even though not everybody received all five doses, nobody got rabies. These updated recommendations can be found from the Morbidity and Mortality Weekly Report website at www.cdc.gov/mmwr.

[Karen Hunter] Besides the E-I-D article and the A-C-I-P recommendations, where else can listeners find more information on rabies?

[Brett Petersen] Well CDC's rabies website is a great resource and has information about the disease for both the general public and healthcare professionals. The website is www.cdc.gov/rabies.

[Karen Hunter] Thanks, Dr. Petersen. I've been talking with CDC's Dr. Brett Petersen about a paper that appears in the March 2010 issue of CDC's journal, Emerging Infectious Diseases. You can see the entire article online at www.cdc.gov/eid.

If you'd like to comment on this podcast, send an email to eideditor@cdc.gov. That's eideditor – one word - at cdc.gov. I'm Karen Hunter, for Emerging Infectious Diseases.

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