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## **Probable Source of Monkeypox Virus Associated with Outbreak Traced to Rodents Imported from Ghana**

The Centers for Disease Control and Prevention (CDC) is announcing laboratory test results showing that rodents imported into the United States from Africa nearly 3 months ago were infected with monkeypox virus. The findings provide the first laboratory-based evidence implicating imported African rodents as the likely source of the current U.S. outbreak of monkeypox, which has affected at least 81 people in six states.

Since early June, CDC and state and local health departments have been investigating cases of monkeypox among persons who had contact with wild or exotic mammalian pets. As part of that effort, traceback investigations of animals have been conducted to identify how monkeypox virus was introduced into the United States. These investigations identified a common animal distributor in Illinois; prairie dogs sold by this distributor have been linked to many of the human cases of monkeypox reported to date. The distributor reported housing prairie dogs and Gambian giant rats (*Cricetomys* sp.) in close proximity at his facility.

Because Gambian giant rats often are imported from regions of Africa where monkeypox is endemic, and serosurveys have demonstrated the presence of anti-orthopoxvirus antibodies in species of these genus, traceback investigations of the Gambian giant rats were initiated. These investigations identified a shipment of animals from Ghana, including Gambian giant rats, that were delivered to an animal importer in Texas on April 9; some of the Gambian giant rats from this shipment were in turn sold to the vendor in Illinois. The shipment of animals from Ghana contained approximately 800 small mammals of nine different species, including six genera of African rodents that might have been the source of introduction of monkeypox. These rodent genera included rope squirrels (*Funisciurus* sp.), tree squirrels (*Heliosciurus* sp.), Gambian giant rats, brush-tailed porcupines (*Atherurus* sp.), dormice (*Graphiurus* sp.), and striped mice (*Hybomys* sp.).

CDC has been conducting laboratory testing of animals from the April 9 importation from Africa. On June 30, CDC laboratory tests (based on polymerase chain reaction and virus isolation methods) showed that one Gambian giant rat, three dormice, and two rope squirrels were infected with monkeypox virus. Evidence of infection was found in animals that had been separated from the rest of the shipment as early as April 9 – the day the shipment first arrived in the United States – indicating early and possibly widespread infection among the remaining animals in the shipment. The laboratory investigation confirms that multiple animal species are susceptible to infection with monkeypox virus and supports earlier public health actions recommending that any rodent originating from the April 9 shipment should be considered infected.

CDC has recommended previously that state health officials place quarantines on commercial facilities or households that received African rodents from the April 9 importation. Subsequent interim guidance (<http://www.cdc.gov/ncidod/monkeypox/quarantineremoval.htm>) is available for the removal of quarantine orders and the euthanasia of animals affected by the monkeypox outbreak, including specific recommendations for rodents that were part of the April 9 importation.

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*The Centers for Disease Control and Prevention (CDC) protects people's health and safety by preventing and controlling diseases and injuries; enhances health decisions by providing credible information on critical health issues; and promotes healthy living through strong partnerships with local, national and international organizations.*

**DEPARTMENT OF HEALTH AND HUMAN SERVICES**