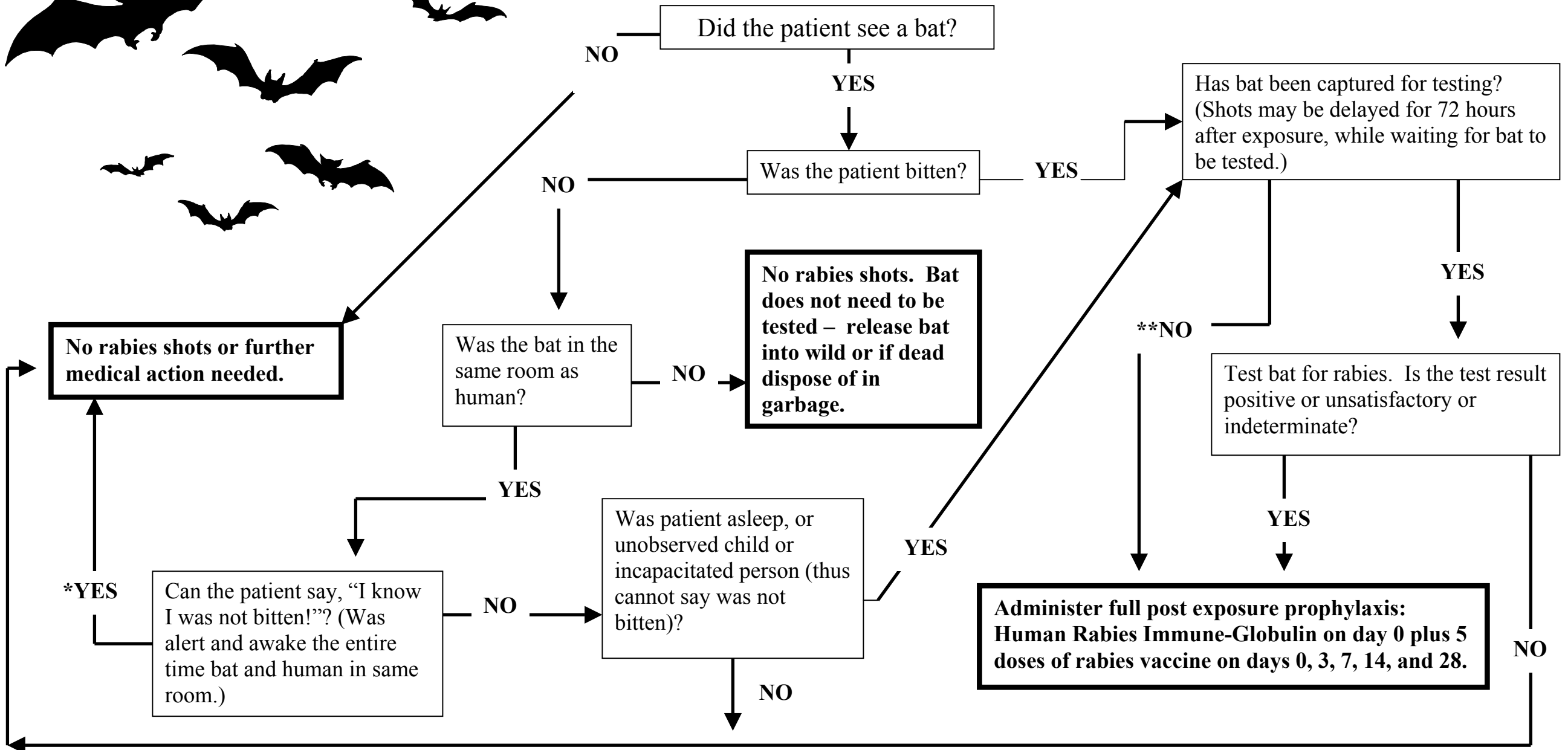


Rabies Exposure Management for Bat-related Incidents

09/2003 Version 2.0



* If bats are found routinely in house, and house cannot be “bat proofed” preexposure vaccination can be considered but boosters may be needed for future exposures.

** In incidents where the bat is confirmed as, or highly likely to be, a big brown or little brown bat species, i.e. “house bats” the risk of rabies transmission is greatly reduced compared to silver-hair/pipistrelle species and Mexican free-tail species (not present in Iowa). After careful examination of patient(s) and no evidence of bite it would be permissible to consider not administering rabies post-exposure treatment. (See statement on reverse side of this illustration.)

Rabies Risks - Role of Bat Species

Over the past fifty years, human rabies in the U.S. has evolved from a pattern of dog-transmitted rabies to bat-transmitted rabies. For the period 1990 to 2002, there have been 27 human cases of rabies from bats in the U.S (Refer to Table 1). The phylogenetic-type of rabies virus strains are as follows: Mexican freetail = 6, silver-hair/pipistrelle = 19, big brown = 1, and myotis species unknown = 1 (Refer to Table 2). We do not have Mexican freetail bats in Iowa. Silver hair and pipistrelle bats are two separate species that are solitary tree dwellers and rarely found at all in the U.S. and certainly not a colonial bat in our homes, and thus are certainly over-represented in this summary. (The Iowa human rabies case in 2002 involved a silver-hair/pipistrelle rabies virus strain.) Big brown bats, a colonial species, are very common in Iowa homes and do sustain rabies activity; all 27 positive bats in 2002 were big browns. Little brown bats, also a colonial species, but less commonly found in Iowa homes, rarely develop rabies. The data clearly support the view that "house bats" i.e. big browns and little browns - in spite of known rabies activity, especially in big browns -- do not pose the rabies exposure risk of their chiropteran cousins, silver-hairs and eastern pipistrelles. Accordingly, bat incidents indoors, especially in older homes with previous or known bat activity, very likely represents big/little brown species and certainly do not pose the threat of exposure risk of other species and should be considered in clinical judgments of whether to administer prophylaxis.

For more detail on this biological peculiarity, refer to the following CDC paper on this web site:
<http://www.cdc.gov/ncidod/EID/vol9no2/contents_v9n2.htm>.

Table 1

Human Rabies, U.S., 1990-2002		
• U.S. bat-associated	=	27
• U.S. carnivore-associated	=	2
• Foreign carnivore-associated	=	7
<hr/>		
• Total cases by source	=	36

Table 2

Rabies from Bats, U.S., 1990-2002		
• Mexican Freetail	=	6
• Silver-hair/pipistrelle	=	19
• Big Brown	=	1
• Myotis, species unknown	=	1
<hr/>		
• Total	=	27