

Secondary Non-Target Exposures to Anticoagulant Rodenticide Baits

A secondary poisoning is described as an exposure to an active ingredient via consumption of another organism that has already consumed the bait. As shown below, the probability of a secondary poisoning from one of the anticoagulant rodenticides is extremely unlikely.

While a rat need eat only a few grams and a mouse about one gram of these baits to reach a toxic dose, they often eat far in excess of lethal dose. A rat can consume 20 - 25 grams of bait in a day, a mouse, 5 - 10 grams. The rat or mouse will die in approximately 3 to 5 days, during which time it will have excreted up to 50% of the active ingredient. If we consider the worst case scenario, that the rat or mouse has just eaten the bait and the pet then consumes the entire rat/mouse, thereby essentially eating the bait via the rat/mouse, we get the consumption quantities shown in Table 1 (rat/mouse totals are rounded up).

Table 1 -

% of Body Weight of Bait Consumed	<1%	1 - 5%	5 - 10%	>10%
10 lb. pet	2 rats 5 mice	2 - 9 rats 5 - 22 mice	9 - 18 rats 22 - 44 mice	More than 18 rats More than 44 mice
25 lb. pet	4 rats 11 mice	4 - 22 rats 11 - 56 mice	22 - 45 rats 56 - 112 mice	More than 45 rats More than 112 mice
40 lb. pet	7 rats 18 mice	7 - 36 rats 18 - 91 mice	36 - 73 rats 91 - 182 mice	More than 73 rats More than 182 mice
100 lb. pet	18 rats 46 mice	18 - 91 rats 46 - 227 mice	91 - 182 rats 227 - 454 mice	More than 182 rats More than 454 mice
Suggested Response	Treatment optional but probably not necessary. Observe for overt symptoms.	Treatment optional but pet should be observed for overt symptoms. Consider Prothrombin Time (Pro-Time) test 24 hours after ingestion.	Treatment advisable, consult your veterinarian. Consider Prothrombin Time (Pro-Time) test 24 hours after ingestion.	Seek immediate treatment. Bring product packaging with you

As can be seen from this table, while possible, unless the rats or mice are the primary food source for the pet, consumption of a sufficient quantity of poisoned animals is not likely. Please remember that dead rodents should be picked up and disposed of, preferably daily. The probability of getting a disease from the dead or dying rodents probably exceeds the likelihood of getting sick from any residual active ingredient in the baits.

If you have any questions or require any additional information please see our web site or give us a call at 1-608-241-0202.