## Study 12b

## Field Summary

The ActiveGuard® Mattress Liner, is an Active Liner impregnated with 1.64% permethrin on a polyester fabric, and is labeled to kill bed bugs for up to 2 years. The Active Liner is typically installed inverted on the mattress and/or box spring once the bed bugs are largely cleared from the structure. Any missed bed bugs or nymphs from newly hatched eggs are killed thus preventing the start of new infestations.

ActiveGuard was evaluation by PMP (Pest Management Professionals) firms located in 4 states (MA, MD, NY, and PA). The PMPs provided bed bug control services and once the residence was cleared of bed bugs, the Liners were installed on the mattresses and/or box springs as the last step in their bed bug control program. Residences in NY received only ActiveGuard for the control of bed bugs.

In these field trials, PMPs made follow up calls to their customers or the customers contacted their PMP directly if bed bug activity had returned and required additional control measures. As a unit of measure, a month without bed bug activity was called a "Liner Month" and used as a way of determining the value of the Liner in the bed bug control program in that bed bug control measures typically only last a matter of weeks and the Liner was labeled to kill bed bugs for 2 years. Thus, a Liner Month was a month free of bed bug activity.

A total of 155 Liners were installed by PMPs and data were collected from 5 to 12 months, depending upon when the Liners were installed. A total of 1,321 Liner Months went by with 2 complaints. One bed bug was found in a bedroom in MD and another in NY but they were not on the bed. The addition of *Active*Guard to the PMP bed bug control program was instrumental in preventing the development of bed bug infestations in residences in the field trial.