

Ahhhcheeee!

Pet Allergies

From the National Safety Council

Contributed by Jeff Cochran, Safety

Pets teach children responsibility and comfort adults in their old age. But while dogs, cats and even ferrets are very giving creatures, not everything they have to offer is desirable. More than 10 percent of the U.S. population is allergic to fur-bearing animals.

What makes us sneeze?

Most people assume, incorrectly, that the fur itself is the problem. The real culprit is "dander," a combination of dried saliva, sweat, grease and dead skin.

Dander is rich in proteins that raise allergic reactions in humans. It is a potent allergen, a trigger for allergic reaction, so potent that a person need not actually handle a dog or cat to feel its sting. Merely being in the same room with an animal may be enough to produce an allergic response. Dander can also affect people when Fido or Fluffy is not present. Dander is carried on the fur, which can be found in great abundance in a pet's bed, a favorite chair, or in a bedroom, if the pet sleeps with its owners.

"Dogs and cats are more likely than other animals to transmit allergens through dander," says Dr. Robert Klein, assistant clinical professor of pediatrics and allergy at Columbia Presbyterian Medical Center in New York City. "Of the two, cats present the greatest risk because of their habit of preening, which transfers saliva to their coats. Cats often share their owners' beds, and this only increases the level of exposure to dander."

The list of dander-producing animals is not limited to dogs, cats and ferrets. It also includes mice, rats, gerbils, rabbits, birds and guinea pigs. Animal urine can also promote allergic reaction. Dried urine particles contain irritating proteins. Once airborne, they can wreak havoc on a sensitive individual.

The impact of animal allergies

According to Dr. Benjamin Interiano of Baylor College of Medicine in Houston, an allergic response to dander can begin at the moment of exposure or several hours later, depending on the person. The severity of the effects run the gamut from mildly irritating to downright dangerous. Most people experience hay fever-like symptoms, such as a runny nose or red, itchy eyes. Others break out in hives or suffer shortness of breath, headaches, or eye irritation so intense that the eyelids seal shut for a

while. For a few, contact may be asthmatic living with a dog worse.

"A person's allergic reaction may depend on his or her age," Interiano continues. "Babies can develop a rash known as eczema, while older children and adults may get rhinitis, an inflammation of the nose like hay fever. They may also get conjunctivitis, which irritates the lining of the eyes and makes them teary and red. The fastest and easiest solution to a pet allergy problem is to get rid of the pet. For most people, it's also the most difficult."

Dust mites are part of the problem

Dust mites are microscopic insects that live in furniture, bedding and carpeting. They survive on a diet of skin scales, both human and animal, and can trigger allergic reactions. Dust mites also make homes in the fur and feathers of indoor pets, which, to the allergy-sensitive, amounts to a double whammy. Ridding a home of animal allergens must include a program of dust-mite eradication.

Children with allergies should also not be given stuffed toys, as they are an excellent hiding place for dust mites, Knobil continues. Aquariums containing fish are another no-no, as they fill the air with moisture in which dust mites thrive.

Assuming a family doesn't want to give away a treasured pet, cats and dogs should be kept outdoors or at least have their indoor range restricted to underpopulated areas of the house. Allergic persons should also refrain from hugging, petting, or kissing their pets because of the risk of dander contamination. Installing High Efficiency (HEPA) filters on air conditioning units and heaters will also help, as they keep dust flow to a minimum.

"If you have a dog, keep him off the furniture," advises David Roberts, director of special services for the American Kennel Club in Raleigh, N.C. "Weekly baths are also a good idea. So is frequent grooming outside of the house. Remember, the hair is the transmitter of the problem, not the problem itself. As for the dog, go easy on him. It's not his fault."



A Model Full of Memories

By Mark A. Kane, Public Affairs

It took a lot of patience and hours and hours of tedious precision tooling, painting, and skill, and after six months of work, Katie Long, a 14-year-old middle school student in Sterling, Ill., finished a true work of art.

Although she gained notoriety for her accomplishment, Long didn't decide to build the working model of Lock and Dam 13 because she thought it would impress a lot of people, but because it created so many fond memories for her growing up.

"Living close to the Mississippi River allowed my family and I several chances to visit Lock and Dam 13," said Long. "We drove there many times when I was younger. We watched the barges full of corn, beans and even coal come into the lock and leave the lock. It was interesting watching the lock and the gates raise and lower the waters of the Mississippi, so that the barge traffic could pass through. Once, we were allowed to walk across the locks and also the dam on a private tour. It also provided our family a chance to watch the wildlife, especially the eagles. Sometimes we even talked to the workers on the barges. I learned a lot from them, but I've learned a whole lot more since I started this project. It was really fun and interesting. When I was thinking of a project idea, I remembered our trips to Lock and Dam 13 and decided to make a model just like it."

Long began working on the model in September 1998 and completed it in February 1999. Long built the model out of wood, fiberglass, PVC pipe, and small parts she found lying around.

"My favorite part of the project was the actual building of the Lock and Dam 13," said Long. "I really enjoyed finding materials and ideas for its construction. I also really had fun drawing the diagram of what my model would look like."

After Long completed the model she entered it in both the Regional (held in De Kalb, Ill.), and All-Illinois (held in Springfield, Ill.) History Exposition. Long's model of Lock and Dam 13 won superior awards in the model category for her age group in both history expositions.

The history expositions were in-depth and required Long to discuss what she had learned from her research and if she discovered any conflicting information along the way.

"While researching my project, I learned that the Lock and Dam system is a lot more complicated than it looks," said Long. "It's more than just opening, raising or lowering water and

opening gates again. It's amazing how they are able to control a large river and make it so that it is an asset to Illinois.

"I talked to an older man from my church who actually remembers the construction. He said it was amazing. I also visited with Larry Parker, the head lockman, and he shared a lot

with me. He said there are 12-foot tunnels along each lock wall. Valves and water gravity are the causes of the water flowing in and out of the lock. The crane is not used for lifting gates. It is used for servicing gates and runs on railroad tracks. The channel of water at Lock and Dam 13 is 17-feet wide.

There are no pumps. There are two locks, one for actual operation. The other is bolted shut, but available if it is ever needed," said Long.

"I learned that the lock chamber is 110-feet wide and 600-feet long, and it was recently reconstructed in 1996. I learned how important these locks are to Illinois transportation, agriculture and industry," she said.

With this kind of knowledge Long could probably speak for the District if it has any problems obtaining

federal funding in the future. The District can rest assured that Long's model will continue to teach others about how locks and dams work. After months of work, Long donated her work to the Lock and Dam she modeled it after.

"I couldn't believe it," said Earnest Jackson, Jr., lockmaster, Lock and Dam 13. "I had just returned from a trip out of town, came in the door and there it was. Everyone that comes here takes note of it, especially the detail and how much time was put into it."

Jackson plans to have a stand built to display Long's model and believes it will serve as an excellent learning tool during lock and dam tours.

"We haven't given many tours since we received the model," said Jim Kelly, park ranger, Thompson Ranger Center. "But it will enable us to give the public a good idea about the lock and dam before we go out and actually see it." 



Photo by Mark A. Kane, Public Affairs
Katie Long's Lock and Dam is a working model of Lock and Dam 13. It has won awards in two history expositions.