## Seasonal Allergies

As with most winters, many people in the Yankton area began looking forward to spring as soon as the holidays were over—for some, it was since that first cold snap last fall. But for those with allergies, the upcoming seasonal warm-up isn't exactly something to look forward to.

While environmental allergies like pet dander, molds and dust mites don't take a seasonal break, spring is notorious for incurring seemingly perpetual and sometimes severe cold-like symptoms on allergy sufferers, from sneezing and nasal congestion to sore throat and asthma.

Short of relocating to a region without an individual's specific allergen, there is no foolproof way to avoid seasonal allergies, says Dr. Tyler Hanson of the Yankton Medical Clinic, though there are effective treatments. Especially for new allergy sufferers and their loved ones, though, a little education is in order.

## How Allergies Develop

While allergies often mimic contagious respiratory illnesses, they're very different. Allergies aren't caused by a virus, bacteria or another disease-causing pathogen but by the body's very own immune system designed to protect the body from foreign invaders. What happens when allergies develop is that the body's immune system over-reacts to a normal substance as if it was dangerous to the body, Hanson explains. That over-reaction causes physical discomfort to the body.

Dr. Carrissa Pietz of the Yankton Medical Clinic puts it this way: "When the body develops an allergy, it produces antibodies against specific allergens, or substances. When the antibody combines with the specific allergen, it triggers a chemical reaction in the body that leads to the development of the symptoms that we commonly associate with allergies"—that runny nose, rash, itchy eyes and other annoying symptoms that pop up as soon as the trees start flowering every spring without fail, or every time you visit your friend who has a house cat, for example.

Not everyone has an allergy, and certainly not everyone who has allergies has the same ones as other people. Allergies and allergy risk is tailored to each person.





Dr. Carrissa Pietz

"Our genes are what hold the blueprint for creating the proteins and chemicals in an immune response," said Hanson, who is board-certified in internal medicine. "So often times, allergy problems will run in families."

While the risk to develop allergies is genetic, specific allergies are not, Pietz says. Therefore, if a parent has seasonal ragweed allergies, the child would be more likely to develop an allergy himself but not necessarily to ragweed; it could be to ragweed, another type of pollen, a different allergen entirely, multiple allergens whether environmental or not—or nothing at all since family history increases risk, but that's not always a given.

In addition, of those people who do develop allergies, some develop allergies as babies; others do sometime during childhood; still others begin suddenly reacting to something as an adult.

"When babies are first born, their immune systems are brand new and just learning how to respond to foreign substances," Hanson said. "It takes time and exposure to multiple different potential allergens to fully develop a functioning immune system. Just like adults, some babies as they get older develop an overzealous immune response to certain foreign substances as their immune system is learning how to respond. Sometimes it takes multiple exposures to an allergen before the immune system becomes hyperactive, and that is why some people don't get allergies until later on."

Because of this, different allergies tend to develop at different

