PUBLIC HEALTH

Allergies Plague 19 Million

Substances such as pollens or grasses, drugs or dust, feathers or fish, poison ivy or bee stings cause allergic reactions in one out of 10 Americans.

By FAYE MARLEY

See Front Cover

NINETEEN MILLION Americans suffer from allergies—the largest percent from hayfever or asthma or both, which are trouble for an estimated 12.6 million people in the United States.

The first thing to do, if you are one of the allergy sufferers, is to find out exactly what is causing the reaction. Don't rely on drugstore counter remedies, which may relieve symptoms but not give permanent relief. Go to your doctor for help.

You will probably be given skin tests, either by injection of a suspected substance, called an allergen, or by placement of a drop of the allergen on each of several small scratches made in the skin. If you are allergic to the substance being tested, you will develop a welt like a mosquito bite within minutes.

Shot Series Advised

Once the offending substance is determined, you should avoid it if possible, but a series of shots will lessen your symptoms or actually cure the allergy.

Hayfever (which has nothing to do with hay or fever) can last from spring to frost, but the peak of the season is between mid-August and mid-September during the ragweed flowering. This peak period has been chosen for National Allergy Month, with the best advertising not from the Advertising Council, but by hayfever victims.

Just why the sneezing, weeping eyes and running nose of the hayfever victim seem funny to the nonallergic observer is a mystery, for it is no joke.

One in three persons with hayfever develops asthma, the Allergy Foundation of America says, and asthma can lead to permanent bronchial trouble, with damage to the lungs and heart. In one year, 4,896 deaths were attributed to asthma. The choking, wheezing ailment is the indirect cause of many more deaths.

Pollens from trees cause hayfever in the spring. In the midsummer, pollens of the grasses—orchard grass, blue grass, timothy and red top grass mainly—cause most of the trouble.

Mold allergy is another cause of hayfever that is more or less a problem in all parts of the U.S. In the Central states, especially in Nebraska, Iowa, Kansas, Illinois, Indiana, Ohio, Wisconsin and Michigan, molds grow abundantly on wheat, corn, oats, grasses, leaves and soil. In these states mold spores,

or seeds, can be found in the air even in midwinter.

When hayfever symptoms continue the year around, the condition is known as perennial allergic rhinitis, which is caused by nonseasonal allergens, the substances that cause allergies. Dust, feathers, animal hairs and even food are some of the plaguing allergens.

Air conditioning may give relief if you spend much time indoors, but the room temperature should not be more than 12 degrees lower than that of the outside air.

Many of the household air purifiers sold in retail stores are not effective in preventing or treating allergic conditions, the U.S. Food and Drug Administration warns, so get your doctor's advice on what to buy.

You may have to give up horseback riding, get rid of a dog, cat or bird, change cosmetics, provide a substitute for a feather pillow, enclose a mattress in a dust-proof cover, or even change jobs to get away from what is causing your allergy.

If someone in your family is allergic to eggs, wheat or milk, you can get a 64-page booklet of Allergy Recipes for 50¢ from The American Dietetic Association, 620 North Michigan Avenue, Chicago, Ill. Here you will find such substitutes as rice, soy, barley, potato and tapioca flour. You can learn how to make eggless mayonnaise and to use fruit juices or water instead of milk in cakes.

Other allergies afflict many people who never have the leading kinds. Some people are allergic to aspirin, and get big, itchy swellings called hives after taking even one tablet. The danger of taking penicillin by those allergic to it is well known. Foods that cause hives include strawberries, peaches, cantaloupe, fish, shellfish and nuts as well as more common foods.

More than 3,000 persons sensitive to insect stings replied to questionnaires from the insect allergy committee of the American Academy of Allergy in Milwaukee, Wis., which is interested in the long-time effects of desensitization treatments.

Hyposensitization Treatment

Dr. Eloise Kailin of Washington, D.C., former chairman of the committee that made the survey, reported that of 647 persons who were given shots for their allergy and then stung again, only 26 reported a worse reaction than before treatment. Although 41 said their reactions to stings were unchanged after hyposensitization, 580 found improvement with treatment.

Among 763 untreated re-stung allergic persons, 492 said their reactions were pro-

gressively worse, 199 reported reaction unchanged and 72 said they had lessened reactions to a sting.

The committee continues to recommend that desensitization be given whenever possible to persons who have had a systemic reaction to insect sting. Medication at the time of a sting does not give as good results as hyposensitization, Dr. Kailin said.

If you are allergic to insect stings and are stung, fast-acting drugs such as epinephrine are recommended, with antihistamines and corticosteroids used only for mild reactions or as supplementary medication. Isoproterenol, not to be used at the same time as epinephrine, acts rapidly to counteract pulmonary symptoms, but it does not constrict the blood vessels and cannot counteract shock symptoms.

Reduce Venom Spread

Spread of insect venom can be minimized by use of a tourniquet or the local application of ice. Flicking, but not mashing, the venom sac of a bee (like the one seen on this week's front cover) to remove it within two minutes of the sting reduces the volume of venom injected.

Serious reactions to wasp, yellow jacket and hornet stings as well as to the venom of the bee, like the one shown on this week's front cover busily sucking nectar from the flower, could occur. Dr. Kailin reported that one man, sensitive to wasp stings, had a sixweek course of treatment and had good protection when stung repeatedly by wasps. But four years after his treatment lapsed he was stung by a yellow jacket and suffered a near-fatal reaction, with hemiplegia, or partial paralysis, remaining.

Poison ivy is one of the best-known plants that cause contact dermatitis, or skin eruption. No one is affected by it the first time he touches it, experts say, but on later exposure an allergy appears in about half or more exposed persons. Some people are allergic to contact with primrose, ragweed, tulip bulbs and other plants, as well as to industrial chemicals, metals, cosmetics, deodorants, mouth washes, dyes and some kinds of textiles. Handling some medicines can cause allergic persons' hands to break

Research of various kinds is sponsored by the National Institute of Allergy and Infectious Diseases, Bethesda, Md. Cooperating in fields not covered by the Institute is the Allergy Foundation of America, founded in 1953 by the American Academy of Allergy, Milwaukee, Wis., and the American College of Allergists, Minneapolis, Minn.

The fundamental causes and positive cures of allergic diseases are still not known. What affects your friend or helps his allergy may not apply to you. There are fewer than 2,000 allergy specialists in the country.

• Science News Letter, 88:42 July 17, 1965