

Disease researchers taking hunt for clues down on to the farm

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by Martin Johnston
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Thousands of New Zealanders will be asked about their contact with cows as part of a search for clues to the causes of asthma.

One of the leading theories on the causes of the disease, which afflicts one in six people in New Zealand, is the so-called hygiene hypothesis.

A Herald investigation has found widespread mismanagement of the chronic illness at virtually every age and social grouping in this country. The cost to the economy is estimated



ASTHMA

OUR BREATHLESS NATION

to be more than \$800 million.

Experts are frustrated at being unable to pinpoint the reason for asthma's exponential growth — New Zealand is among the world's worst-affected countries — but say underfunding is hampering preven-

tion of the disease.

The hygiene hypothesis holds that as life in the West has become cleaner and children have suffered fewer infections, people's immune systems have been primed to become allergic to harmless substances. But no one is advocating a return to high rates of infections, which themselves can cause severe sickness and death.

Researchers comparing countries have found that higher asthma rates are associated with higher national income and lower rates of reported tuberculosis.

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TOMORROW

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Between 70 and 80 per cent of asthma in New Zealand is linked to allergies. Some of the most common allergens — substances that trigger these asthma attacks but are harmless to other people — are dust mite faeces, pollen and cats' hair. Like

much asthma, hay fever and the

skin condition eczema are linked to allergies.

Massey University researchers will start a survey next month of 4000 lower North Island families to test the theory that children living on farms are less likely to develop asthma.

Using postal questionnaires, they will compare 3000 families living on farms with 1000 living in cities and towns. Later in the three-year study, they will visit 800 families to interview them, test for allergies and take dust samples.

Professor Neil Pearce, the direc-

tor of the university's Centre for Public Health Research, said evidence was growing that children who lived on farms had a lower asthma risk, despite exposure to many allergens.

European studies had revealed but not explained this lower risk, which appeared to be linked to contact with farm animals, particularly cattle. European farming families had a lot of contact with their animals because they were often kept inside the home.

Many researchers believe that bacterial toxins from the animals

may prime the immune systems of infants into fighting infections, thus preventing them from developing down the allergic path.

Associate Professor Innes Asher, an asthma expert at the Starship children's hospital, said a European study had expected 19 cases of asthma among 129 farmers' children, but found none.

The pregnant mothers and the newborns had spent time in the stables and untreated farm milk had been drunk.

"It's a good advertisement to say that clean dirt is good for you."