As the ticks that spread Lyme disease push ever further into Canada, doctors are starting to notice an unusual fallout from the growing threat: a spike in the number of people seeking help for arthritis triggered by the bacteria.

A new study from Halifax, to be presented at an American College of Rheumatology conference in Florida this weekend, documented 17 child arthritis patients, most of whom surfaced over the last two years just in Lunenburg county.

Few had experienced any other symptoms and most had no idea they had Lyme until, complaining of swollen, painful joints, they were referred to a rheumatologist. Once blood tests indicated they had the infection, some were also diagnosed with related neurological problems.
In southern Ontario, a public-health office near one of the province’s several Lyme-disease areas has seen a five-fold increase in cases in the last year, many of the patients experiencing arthritis.

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Physicians say increasing numbers of people are likely to come down with the surprising symptom — which tends to occur months or even years after patients are bitten by a tick — as the disease takes hold in more of the country.

“The majority of children ... never knew they were bitten by a tick. Arthritis was the very first presenting symptom of their Lyme disease,” said Dr. Elizabeth Stringer, a rheumatologist at Halifax’s IWK Health Centre and co-author of the study. “There have been some families who have been surprised, definitely.”

The good news is that most cases can be cured with one to three courses of intravenous antibiotics, though some people can have lingering effects.

The disease is caused by borrelia burgdorferi — a “spirochete” bacteria related to the bug that causes syphilis — typically spread by black-legged deer ticks. Most people experience a bulls-eye-like rash around the bite location, sores and fever in early stages, followed later, if untreated, by neurological symptoms like face-paralysing Bell’s palsy, heart problems or arthritis.

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Lyme is far more common in New England and some other parts of the United States than it is here, but the tick has been moving deeper into Canada over the last several years.

With endemic areas now in six provinces – New Brunswick, Nova Scotia, Quebec, Ontario, Manitoba and B.C. – the number of infected Canadians reported to authorities has jumped to 315 in 2012 from 128 in 2009, reports the Public Health Agency of Canada.

Federal scientists have projected a further advance by the sesame-seed-sized ticks, and more disease as a result.

It makes sense that Dr. Stringer has seen what she called a “sharp rise” in pediatric cases of Lyme arthritis, since children seem more likely to go undiagnosed until the bacteria causes joint inflammation, said Dr. Gordon Dow, an infectious disease specialist in Moncton, N.B.

In fact, it was a “huge” jump in children diagnosed with juvenile rheumatoid arthritis around Lyme, Conn., that led to the illness being discovered in the mid-1970s, he said.

“You could almost see pediatric arthritis as like the canary in the coal mine,” said Dr. Dow.
“You start seeing arthritis in one joint in a bunch of kids and that should trigger you to look for Lyme disease.”

**You could almost see pediatric arthritis as like the canary in the coal mine**

IWK’s pediatric rheumatology department began recording cases of Lyme arthritis in 2008. After a smattering of patients in the first few years, about three quarters of the total so far came just in 2012 and 2013, said Dr. Stringer.

Half the children saw their symptoms disappear after one course of IV antibiotics, while the rest required two or three courses. Five months after treatment, though, two patients still had arthritic symptoms that limited their functioning.

A paper published in 2011 by doctors from Hershey, Pa., concluded that about 25% of children treated for Lyme arthritis will still suffer chronic musculoskeletal inflammation.

Chatham-Kent region in Ontario includes Rondeau Provincial Park, one of several parts of the province with Lyme Disease-ticks. Though the annual number of cases the health unit has managed to identify is still under 10, it has jumped sharply in the last year, said Dr. David Colby of the Chatham-Kent Health Unit.

“There is often a delay in diagnosis, so [arthritis] is not at all uncommon,” he said. “It can be quite severe, actually. Patients who go on to the third stage can have chronic arthritis for months or years.”

Physicians stress, however, that it is not the same as chronic Lyme disease, a controversial diagnosis promoted by some patient advocates but generally dismissed by infectious-disease specialists. Advocates say the standard tests for Lyme miss many cases, which go on to cause long-lasting pain and other problems. They argue such chronic Lyme sufferers require long-term antibiotic treatment, but specialists say science indicates those people do not actually have the bacteria.

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