ARE URBAN TAPEWORMS ON THE RISE?

By Brendan Borrell in 60-Second Science Blog

Anthony Franz says an undercooked salmon salad gave him a 9-foot-tapeworm, and in August he sued the Chicago restaurant that served it to him.

If Franz’s tapeworm tale holds water – and the Chicago Sun-Times reports that the restaurant disputes his account – then it’s just one more data point to add to a growing urban tapeworm problem.

Once the bane of rural Japanese villagers, a paper in the June issue of *Emerging Infectious Diseases* reports on the spread of the the salmon tapeworm *Diphyllobothrium nihonkaiense*. The parasite, which can reach lengths of 39 feet (12 meters), has been steadily increasing its global distribution and prevalence – mostly among yuppies with a hankering for sashimi and ceviche.

One hospital in Japan reported 14 cases last year, up from 3 cases in 2000. And starting in 2006, the tapeworm has been popping up for the first time in North America and Europe. Meanwhile, farm-raised salmon from South America have been plagued by a closely related tapeworm that normally infects perch and other freshwater fish.

More parasite news comes from a recent study in *PLoS Neglected Tropical Diseases* which reports that the fox tapeworm, already serious public health issue in Asia, has been expanding in Europe since the 1990s along with the urban fox population. The fox tapeworm is spread to humans in canine feces and can cause a fatal disease of the liver known as alveolar echinococcosis. In the recent study, scientists used genetics to piece together the spread of the infection from its home base in the Alps out to Poland, Slovakia, and Lithuania.

So how do you keep a clean bill of health in the age of tapeworms? Since tapeworms live in the fish muscle and are destroyed by heat, it’s best to eat only fully cooked salmon. If you have to order sushi or ceviche, stick with critters like tuna that don’t spend time in rivers. (Japan’s new farm-raised tuna may be an ecological boon, but it doesn’t bode well for parasite propagation.) As for the fox tapeworm: be sure to wash your hands (and food) if they come in contact with canine poop.