46 reported outbreaks. Nearly 90% of these outbreaks (40 out of 46) occurred in states that allow the sale of raw milk, suggesting that even the regulated sale of raw milk might not be adequate to prevent associated illnesses.

**COLOSTRUM**
This is the first outbreak reported to CDC in which colostrum has been implicated as a form of raw milk consumed by any patients in a raw milk-associated outbreak. Colostrum is purported to have increased concentrations of nutrients/antibodies and is marketed as a dietary supplement in California and is regulated by the CDPH Food and Drug Branch. The colostrum products tested in this investigation were nearly as contaminated as other forms of raw milk tested; therefore, in this outbreak, the risk for human illness from consuming either product was probably similar. Exception of colostrum from state dairy regulations is not supported by the findings in this outbreak investigation.

From 1998 to 2005, raw milk or raw milk products have been implicated in 45 foodborne illness outbreaks in the United States, accounting for more than 1,000 cases of illness. Additional efforts are needed to educate consumers and dairy farmers about illnesses associated with raw milk and raw colostrum. To reduce the risk for E. coli O157 and other infections, consumers should not drink raw milk or raw milk products.

This information excerpted from the Centers for Disease Control and Prevention Morbidity and Mortality Weekly Report, July 13, 2008. For the full report and references, visit www.cdc.gov/mmwr.

### IS THERE A LINK BETWEEN JOHNE’S DISEASE AND CROHN’S DISEASE IN HUMANS?

If there is a link between Johne’s disease (JD) and Crohn’s disease (CD), it hasn’t been proven, says Johne’s disease expert Mike Collins, DVM, PhD, University of Wisconsin.

What has been scientifically proven about the relationship between these two diseases, according to Collins, is:

- **Mycobacterium avium subspecies paratuberculosis (MAP)** causes JD.
- MAP contaminates food of animal-origin; primarily milk and meat.
- JD resembles Crohn’s disease in patho-logy, epidemiology and clinical signs.
- MAP is consistently found in people with CD.

“The only remaining question is whether MAP causes CD or whether CD patients merely become infected with MAP after they have their disease,” Collins says.

A report issued in August by the American Academy for Microbiology highlighted that group’s concern that MAP may cause Crohn’s disease. The report states that “people with Crohn’s disease are seven-fold more likely to have in their gut tissues the bacterium that causes a digestive-tract disease in cattle called Johne’s Disease. The role this bacterium may or may not play in causing CD is a top research priority.”


Collins says this report doesn’t come down with a firm conclusion saying “yes” or “no,” but, “it brings a lot of attention to the issue.”

---

Protecting your client’s cattle, pigs, horses and dogs with IMMVMAC is not only smart—it’s scientific.

**ENDOVAC-Bovi** with IMMUNE Plus®
Increases lymphocyte production and antibody levels in beef cattle.

**ENDOVAC-Porci** with IMMUNE Plus®
Reduces feed conversion ratios and mortality in light-weight pigs.

**ENDOVAC-Equi** with IMMUNE Plus®
Neutralizes deadly endotoxins in horses and foals.

**ENDOSERUM**
Begins to neutralize endotoxins immediately upon IV administration in equine.

**SEPTI-serum**
Neutralizes gram-negative endotoxins and 90% of parvovirus infection in dogs.

ENDOVAC-Bovi®, ENDOVAC-Porci, ENDOVAC-Equi, SEPTI-serum, ENDOSERUM and the IMMVAC LOGO are registered trademarks and IMMUNE PLUS® is a trademark of IMMVAC. ©2007 IMMVAC, All rights reserved.