Reducing Occupational Exposure to Zoonotic Pathogens in California Dairy Farmworkers

Rob Atwill, DVM, MPVM, PhD

Problem: This project aims to reduce dairy farmworker exposure to infectious diseases spread through infected cattle.

Project Overview: Occupational tasks that substantially elevate the risk of exposure to zoonotic pathogens will be characterized. Workplace controls, personal protective behaviors, and equipment that reduce the risk of acquiring zoonotic disease will be identified.

Progress to date: Three working dairies have agreed to participate in the study. Laboratory methods have been optimized to quantify five zoonotic pathogens including one parasite, Cryptosporidium parvum, and four bacteria: Campylobacter jejuni, Escherichia coli O157:H7, Listeria monocytogenes, and Salmonella spp. Samples have been collected and processed from two dairies, with a scheduled visit to the third dairy in mid-October.

Anticipated Project Outputs: Knowledge gained and training materials developed for zoonotic disease risk reduction will be communicated through outreach workshops and on-farm training.

Contact: Rob Atwill (ratwill@ucdavis.edu) & Jennifer Chase (jachase@ucdavis.edu)