Heat and humidity create an ideal environment for bacteria to grow. This can lead to a summertime spike in mastitis in your herd and increase bulk tank somatic cell counts (SCC). University of Guelph researchers spent the past summer investigating environmental and management factors that can lead to this increase. They discovered with consistent milking and management practices you can reduce mastitis cases in your herd and lower SCCs.

On-farm studies focusing on mastitis increases during the summer period are sparse, says Daniel Shock, population medicine Ph.D. candidate and dairy veterinarian. This past summer he observed the milking techniques and management practices of 50 herds across Ontario.

“I hope my research will provide producers tips on how to better manage mastitis during the summer months,” he says.

Mastitis is mostly caused by a bacterial infection. Understanding the factors that contribute to bacterial growth are critical, says Shock. High temperatures and humidity are main causes. However, factors such as environmental hygiene, consistent milking practices, stocking densities, farm-specific bacterial challenges and producer workload are also important contributors, he says.

Shock and his research team visited each of the 50 farms three times this past summer to test his hypothesis. They observed milking practices, collected milk samples for culture and had producers complete surveys about their management practices and consistency. Barn temperature and humidity were measured every half hour to determine how these factors influenced SCCs.

Shock found keeping cows cool and comfortable through good ventilation, fans and bedding management will lower SCCs. He also says making sure cows are milked with a clean, dry and properly stimulated udder, as well as paying attention to each of your cow’s milk production levels, will also reduce your herd’s overall SCCs.

“Of the 50 herds we observed, there is probably 50 ways to milk cows,” he says.

Shock acknowledges producers may not spend as much time in the barn as they would like during the summer. However, summer is the ideal time to apply more stringent udder health practices, he adds. Developing these practices now will help prevent mastitis throughout the year and prepare you for next summer, he says.

“Working with your veterinarian to devise a specific udder health plan that works for your farm is very important to keep your SCCs low,” says Shock.

Data collection will be completed this fall. Shock is optimistic the results will provide new strategies for producers and veterinarians to minimize increased SCCs during the high-risk summer period.

Laura Montgomery is a student writer for the University of Guelph’s research office. The main collaborators on this project include professors David Kelton, Ken Leslie, Stephen LeBlanc and Ann Godkin. Funding was provided by Dairy Farmers of Ontario and the Ontario Ministry of Agriculture and Food and Ministry of Rural Affairs.