Efficacy of sow washing on the livestock-associated MRSA skin status

Verhegghe, M.1,2, Bekaert, M.3, Pletinckx, L.J.4, Crombé, F.1,5, Haesebrouck, F.1, Butaye, P.1,5, Heyndrickx, M.1,2 and Rasschaert, G.2, 1Ghent University – Faculty of Veterinary Medicine, Department of Pathology, Bacteriology and Avian Diseases, Belgium, 2Institute for Agricultural and Fisheries Research (ILVO), Technology and food science unit, Belgium, 3Ghent University – Faculty of Sciences, Department of Applied Mathematics and computer science, Belgium, 4Catholic University College South-West-Flanders, Department HIVB, Belgium, 5Department of Bacteriology and Immunology, Veterinary and Agrochemical Research Centre (VAR), Belgium; geertrui.rasschaert@ilvo.vlaanderen.be

The present study investigated the effect of sow washing, a common Belgian measure, on the skin MRSA status of the sow. A sponge of the back skin of 48 sows, originating from four farrow-to-finish farms (farms A to D; 12 sows sampled per farm) was taken before and after washing. Sow washing included 3 steps: (1) spraying with water; (2) soaping in with product; and (3) rinsing with water. The MRSA skin contamination remained unchanged in 64% of the sows both before and after washing. MRSA was found on the skin of 13% of the sows before washing but not after washing. From the skin of the remaining sows (23%), MRSA was only isolated from the skin samples after washing. Spa types t011 and t034 were observed, which are associated with livestock-associated MRSA. Although hygiene measures are used to diminish the MRSA load on a farm, the present study indicates that sow washing before farrowing has no significant effect on the skin MRSA status of the sow (SAS 9.2, P=0.32). Further research is needed to develop a procedure that reduces the MRSA contamination of the sows.