

# LET LIVESTOCK-ASSOCIATED MRSA STAY IN THE BARN



## - a Danish e-learning program on veterinary infection prevention

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### Background

Denmark has a population of 5.7 million people and pig farming produces over 30 million pigs annually.

Livestock-associated methicillin-resistant *Staphylococcus aureus* of clonal complex 398 (LA-MRSA CC398) have dramatically increased over the last decade. In 2015 88% of all farms with slaughter pigs were colonized with LA-MRSA CC398 and 39% of all MRSA-types found in humans were LA-MRSA CC398.

The problem has caused intense media coverage and political interest, and people working with pigs have become stigmatized.

In 2014, the Ministries of Health and Environment and Food appointed a MRSA Expert Group to renew the risk assessment of LA-MRSA.

Based on One Health and the expert group recommendations a compulsory hygiene course was initiated for all working with live pigs.

### Method

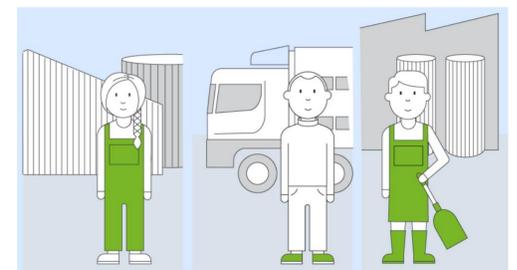
A pre investigation in 2016-17 visiting pig farms and study of existing teaching material, suggested that veterinary hygiene is a field well known to pig farmers regarding the methods of not bringing microorganisms into the barn.



### Design

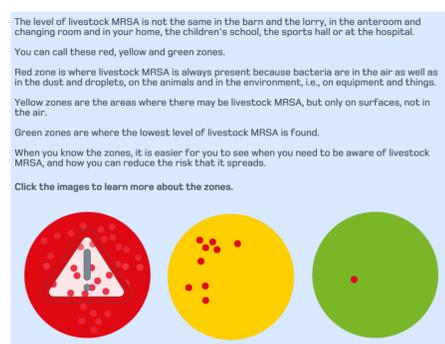
The aim of future training is

- ❖ to change behavior and thereby reducing the risk of transmitting LA-MRSA out of the barn
- ❖ to provide workers who have contact with pigs knowledge about MRSA
  - consequences for their health and how to handle contact with the health care system
  - to explain to family and friends how LA-MRSA is transmitted
  - which actions to performed on a daily basis in order to prevent infection.



A web based (e-learning) linear program was created. The program is accessible at digital devices with internet connection. The manuscript was written based on results from the pre investigation.

The program contains animated case stories representing the work area of pig farmers, pig conveyors and the barn at the slaughterhouse. The user's reflection on present behavior and knowledge is challenged with gaming, tests, illustrations, videos and graphs so all learning styles are presented. The program is presented in Danish and English. The course is completed with 12 test questions, and a personal certificate containing the result is issued. The course is freely available to ensure that everyone has access to the same information about LA-MRSA.

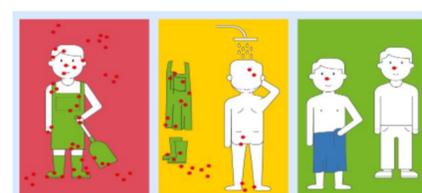


### Results/conclusion

From December 2017 to end of June 2018 almost 10,000 workers have completed the 90 minutes program. Feedback has been positive on content – but lack of computer skills and internet connection problems have required some assistance from the helpdesk at SSI.

Distribution of correct answers (%) in relation to language selection

Correct answer (%)	Danish		English	
	n	%	n	%
0-25	18	0.2	3	0.1
25-50	96	1.2	52	2.4
50-75	1391	17.7	421	19.5
75-100	6362	80.9	1682	77.9
I alt	7867	100.0	2158	100.0



Scan the code  
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