

MRSA EQAS 2009



$$f(x+\Delta x) = \sum_{i=0}^{\infty} \frac{(\Delta x)^i}{i!} f^{(i)}(x)$$

$$\Delta \int_a^b \epsilon \Theta + \Omega \int \delta e^{i\pi} = \{2.7182818284\}$$

$$\infty \chi^2 \Sigma !$$

MRSA EQAS 2009

- Assess the performance of laboratories on the use of selective isolation procedures for detection of MRSA from dust samples in laboratories involved in the MRSA baseline studies
- Assess the identification and confirmation of MRSA isolates using molecular methods
- Assess typing of MRSA by spa typing

Description of the MRSA EQAS 2009

- Prenotification and participation
 - All NRL's have been notified
 - NRL's not involved in baseline were invited to give the contact info on lab that performed baseline studies for their participation
 - Participant list- please report changes if needed
 - New participants- will need to be reported to get passwords for database access

Description of the MRSA EQAS 2009

- Samples
 - 8 Dust samples (about 0,1g of dust each)
 - Might contain MRSA as well as other staphylococci and other background flora existing in the pig farm environment
 - Expected to be sent off in June
 - Require immediate processing.
- Welcome letter and password access
 - Samples will be accompanied by welcome letter containing password for database access

Description of the MRSA EQAS 2009

- Isolation procedures
 - Due to the type of sample, we will ask to **perform the isolation procedure immediately after the reception of the samples**
 - The protocol is based on the media and methods used in the baseline studies and will be posted online

Description of the MRSA EQAS 2009

- Confirmation of MRSA ID and presence of *mecA* gene
 - The detection of methicillin resistant *Staphylococcus aureus* (MRSA) must be confirmed using molecular methods and the results described on the database
 - Only isolates identified as *Staphylococcus aureus* containing the *mecA* gene should be considered MRSA
 - Other Staphylococci found and tested should be reported as negative for MRSA, but described as: MSSA, MSCoNS, MRCoNS...

Description of the MRSA EQAS 2009

- Typing of MRSA
 - Any MRSA isoaltes obtained from these samples should be kept frozen at -20°C for eventual re-testing and should be typed using *spa* typing (optional)
- Keep records of all results obtained during the process

Data collection

- Data will be collected on our database using a password protected website
- Deadline 1st September 2009
- An evaluation report will be generated immediately
- Data will be processed by the CRL-AR and will not be disclosed to any other laboratories (check prenotif)

Evaluation of data

- The evaluation report will be immediately generated based on the data reported
- The sample isolation and detection procedure will be evaluated only qualitatively, based on detection of the confirmed MRSA vs the expected result (Positive/negative)
- The intermediate results will be used to describe the isolation process and detect possible difficulties or problems.
- The typing result will be optional for the laboratories able to perform *spa* typing, however if reported it will be evaluated by comparison with the expected *spa* type.

Data analysis

- As for other EQAS the data will be subjected to a descriptive analysis
- No threshold for acceptance has been defined yet, since the MRSA EQAS is new
- Data will be checked and if necessary re-test will be performed
- A report of the data is expected to be drafted at the end of 2009 and circulated among the NRL's for approval

Questions