



# Proficiency Testing on VTEC detection and typing: results of a 6-years experience

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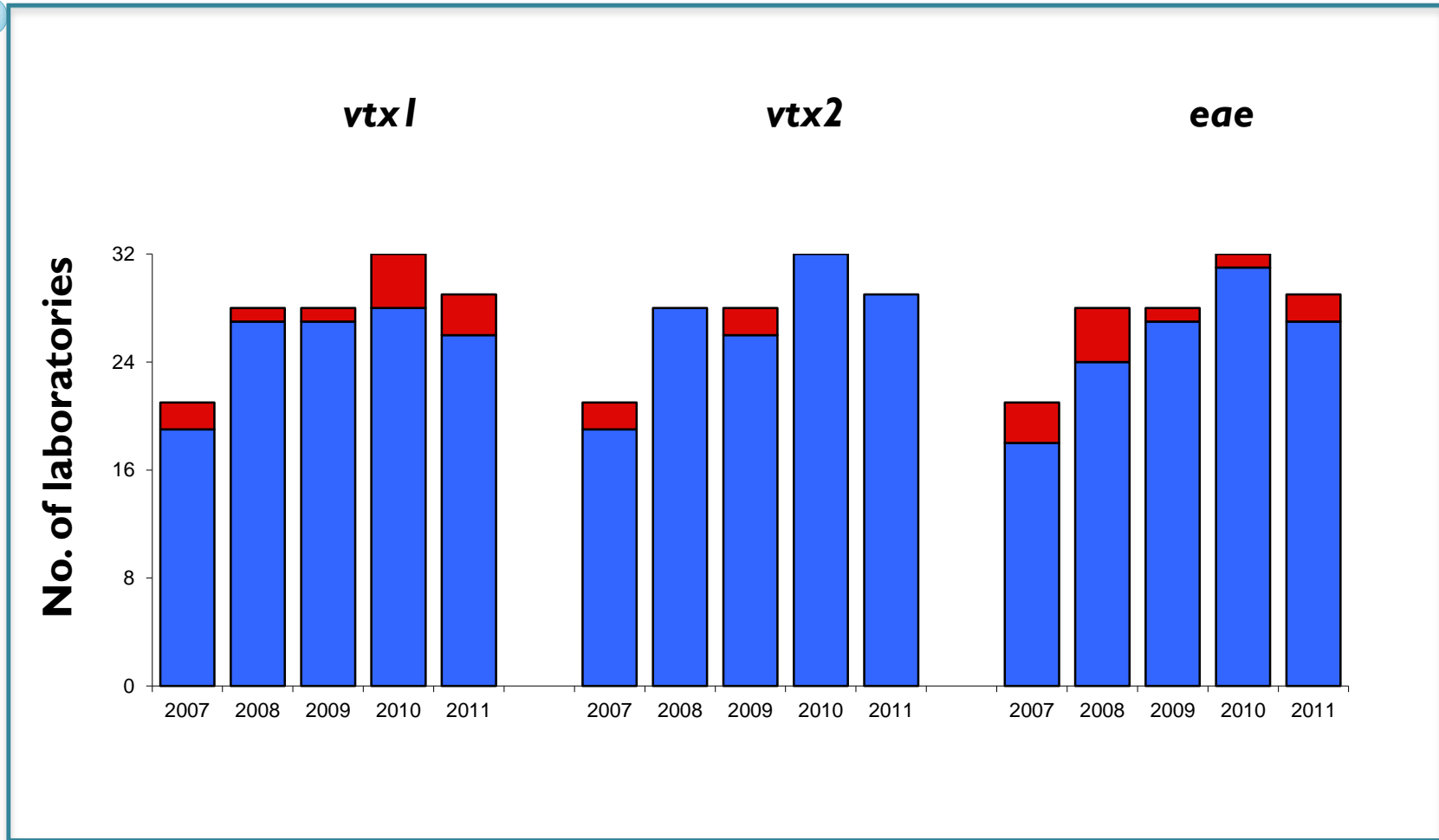




# VTEC identification and typing

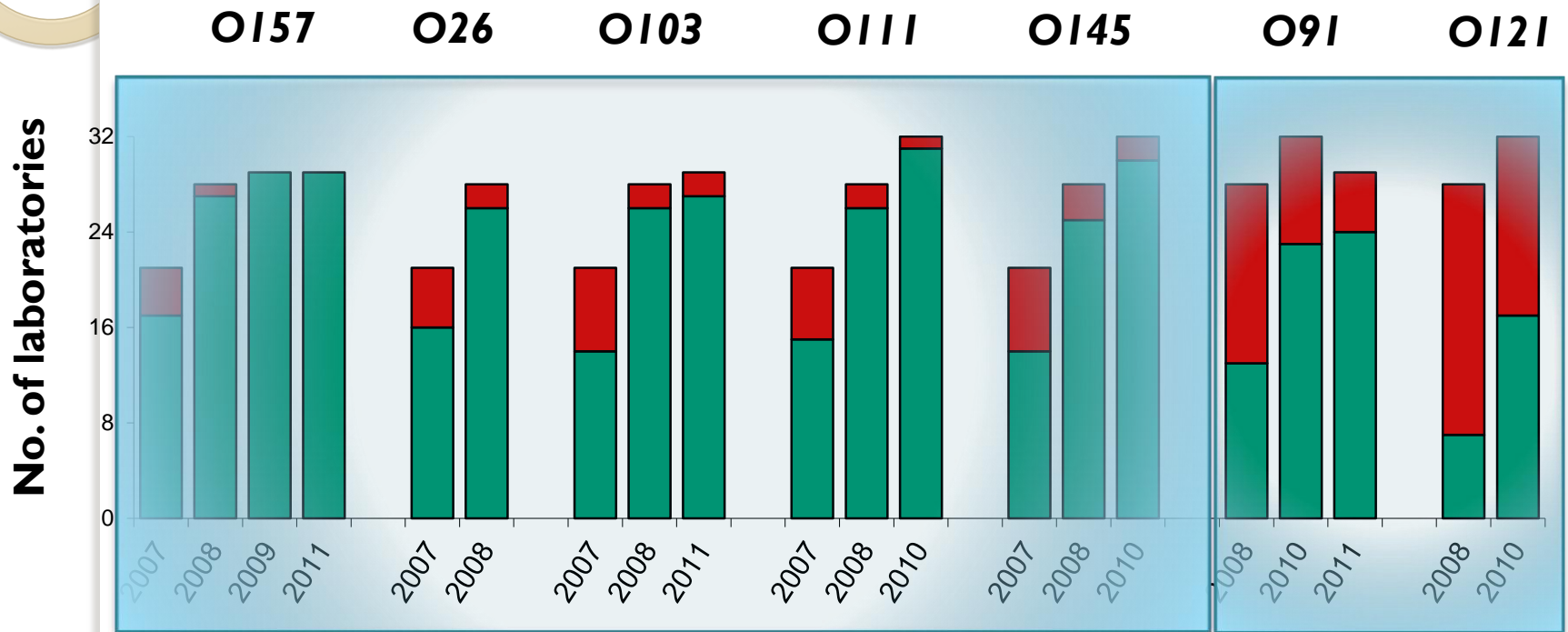
- **2007:** Bacterial strains. End point PCR, slide agglutination
- **2008:** Bacterial strains. End point/Real Time PCR, slide agglutination
- **2009:** Bacterial strains. End point/Real Time PCR, slide agglutination
- **2010:** Bacterial strains. Real Time PCR, slide agglutination
- **2011:** Bacterial strains: End point/Real Time PCR, slide agglutination- Joint PT with ECDC

# Detection of virulence genes in VTEC strains



No. of laboratories Includes EU, EFTA and other third countries NRLs who participated to the PT programs

# Detection of O-groups in VTEC strains (phenogenotyping)

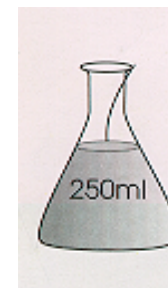


No. of laboratories Includes EU, EFTA and other third countries NRLs who participated to the PT programs

# PT organized by the EU-RL VTEC

4 PT rounds on  
detection of VTEC in various  
matrices.

Period 2009 – 2012

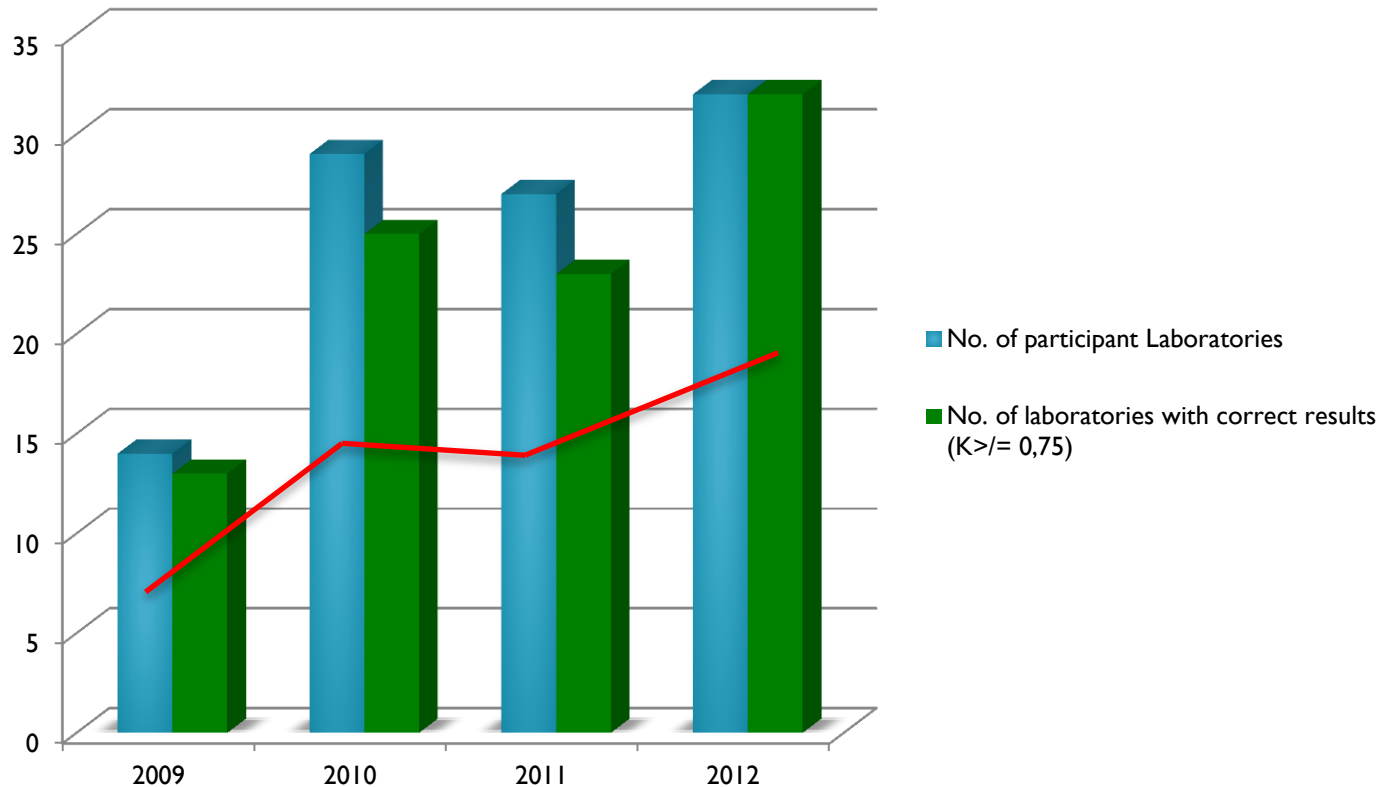




# VTEC detection in spiked matrices

- **2009:** 5 Samples. Simulated carcass swabs - O157 and O26
- **2010:** 2 Samples. Milk - O103
- **2011:** 3 Samples. Spinach - O157 and O145
- **2012:** 2 Samples. Water - O157

# Trends in participation and proficiency ( $K \geq 0,75$ )



No. of laboratories Includes EU, EFTA and other third countries NRLs who participated to the PT programs



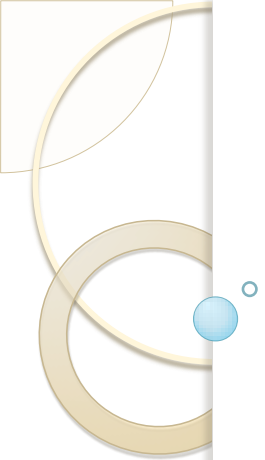
## Concluding Remarks

- The rate of participation to the EU RL VTEC PT program increased over the time.
- Most of the EU NRLs correctly identify a VTEC strain (>90% for the top five).
- The capacity to correctly detect a VTEC in a matrix is available in as much as 80% of the EU NRLs.
- 100% of correct results in the 2012 PT ( $K \geq 0,75$ ).
- Objective: 100% coverage of the EU MS



## Corrective Actions

- Management of under-performance.
- Development of specific training stages for the staff of the underperforming NRLs.
- On-site technical advice/training.
- Prioritization of *ad hoc* visits to those NRLs who do not participate in two PT rounds in a row.



**Thank you for your attention and  
for collaborating to the success of  
the Network!**