

Increase of *Clostridium difficile* infections in the German state of Saxony 2002-2007

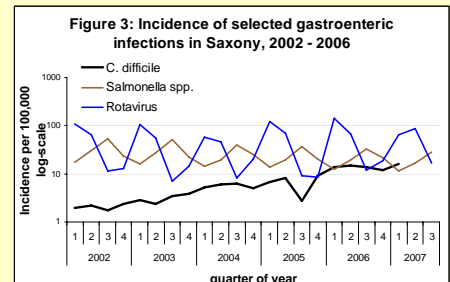
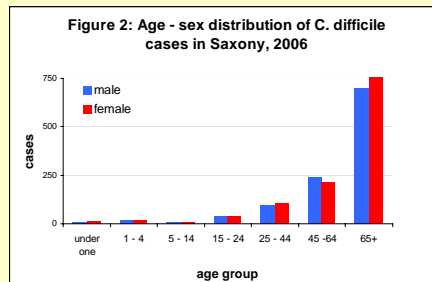
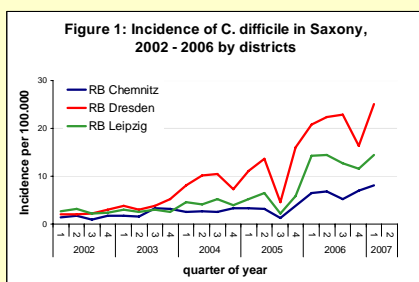
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Background

- *C. difficile* is not a notifiable disease on the federal level in Germany
- The state of Saxony (population 4,300,000) consists of the district Chemnitz, Dresden, Leipzig
- In 2002, it implemented additional surveillance of community and hospital acquired Enteritis infectiosa caused by laboratory confirmed *C. difficile*
- We analysed trends of *C. difficile* incidence in Saxony to assess the usefulness of including its surveillance in the general German population
- Information on age and sex available from 2006+

Methods

- Case definition: community or hospital acquired *C. difficile* as laboratory confirmed cause for gastroenteritis
- Laboratory reporting between 2002 and 2007 in three distinct regions: Chemnitz, Dresden, Leipzig
- Laboratory reports from all districts were aggregated by State-level health authorities and sent to the Robert Koch Institute
- Secular trend for whole of Saxony tested with Chi² trend test
- Incidence by quarter compared descriptively with data on *Salmonella spp.* and Rotavirus notifications to account for increases in notifications of gastroenteric diseases due to possible reporting bias
- Age-sex distribution



Results

- Similar reporting pattern in all districts, showing marked increases after 2004 (fig 1) and a drop in third quarter of 2005
- Elevated levels of the Dresden district (fig 1) due to a specialised rehabilitation clinic
- Highest incidence in people older 65 (fig 2)
- Men and women affected equally (fig 2)
- Increasing trend for whole of Saxony (Chi²=1905; df=1; p<0,001)
- Increase is not found in *Salmonella spp.* and Rotavirus data (fig 3)

Conclusions

- Data from Saxony shows increase of *C. difficile* with numbers reaching seasonal levels of *Salmonella spp.* and Rotavirus
- Comparison with other gastroenteric infections does not suggest reporting bias
- Drop in third quarter of 2005 unexplained; might be due to transition to new data collection and management procedures
- Data does not permit to distinguish outbreaks from sporadic cases, neither community from hospital acquired cases
- Verification needed for rest of Germany
- We recommend to extend surveillance to the whole of Germany and include information on more detailed patient characteristics

