

O0257 **Epidemiology of *Clostridium difficile* infections in the Netherlands May 2016-May 2017**

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Background: Surveillance of *Clostridium difficile* infections (CDI) is essential in order to monitor incidence rates and early detect emerging ribotypes or changes in clinical presentation of CDI.

Materials/methods: In the Netherlands, a sentinel CDI surveillance program has been initiated since 2009. Twenty-four hospitals (both university-affiliated and general hospitals) are requested to send in stool samples and clinical characteristics of patients >2 years old who are diagnosed with CDI (defined as diarrhoea or toxic megacolon in combination with a test positive for *C. difficile* or its toxins and no alternative explanation for the diarrhoea) to the national reference laboratory, where ribotyping is performed. Here we present data from the surveillance period May 2016-May 2017 and compare trends with results of previous years.

Results: In total, 1025 patients were diagnosed with CDI and included in the surveillance. CDI diagnosis was established by ESCMID recommend algorithms in 54% of the hospitals, while the majority of the other hospitals used nucleic acid amplification tests as stand-alone test. Overall CDI incidence was 3.08 cases per 10,000 patient-days (ranging from 0.68 to 6.62 between hospitals), which is comparable to previous years. Ribotypes 014/020 and 078/126 were most frequently encountered, in 19.5% and 12.1% of cases, respectively. Ribotype 027 was found in 5 individual cases (0.6%) in 5 different hospitals, and did not cause any outbreaks. However, one outbreak due to ribotype 001 was reported (33 reported cases in a 4 month time-frame). Onset of symptoms was at home for 41.1%, while 58.9% had onset of symptoms in the hospital or any other healthcare facility. CDI was classified as severe in 17.4% of cases. The course of CDI was uncomplicated in most patients (87.3%), although 1.2% of patients was admitted to the intensive care unit because of CDI and 2.1% of patients succumbed contributable to CDI.

Conclusions: CDI incidence found through sentinel surveillance in the Netherlands from May 2016 until May 2017 was comparable to previous years. Ribotype 027 was found in 5 sporadic cases only. Although most cases have an uncomplicated course, serious complications including ICU admission and death still occur in a minority of patients.

