**Background**
As part of a project funded by Centro per la Prevenzione e Controllo delle Malattie the incidence of *Clostridium difficile* infection (CDI) has been estimated retrospectively through a diagnostic algorithm with integration of information from hospital discharge records and results of microbiological tests.

**Results**
For the year 2011 in Emilia-Romagna Region, the incidence in the general population was 31.8 certain and probable cases of CDI per 100,000 residents and the incidence density of cases acquired in the hospital was 2.7 per 10,000 hospital days. The main place of acquisition was the hospital (76.1%). The incidence in older people (≥ 65 years) was 121.7 per 100,000 residents.

**Discussion**
The incidence rates obtained are comparable to those of other European surveillance systems, indicating that the proposed algorithm could be used to estimate CDI incidence. The application of the same methodology in other two participating regions (Lombardia and Piemonte) will either confirm or disprove its reproducibility.

**Key words**
Clostridium difficile infection, healthcare infections, administrative data, laboratory data, incidence.

**Parole chiave**
Infezione intestinale da Clostridium difficile, infezioni correlate all’assistenza, dati amministrativi, dati di laboratorio, incidenza.