Appendix Table E1. Included diagnostics

| Study Author | Country | Single or Multicenter | Sample | Patient Population | Number of Samples | N (patients) |
| --- | --- | --- | --- | --- | --- | --- |
| Alcala 2015[1](#_ENREF_1) | Spain | Single | Unformed | From October 2012 to March 2013, all loose stool specimens sent to the laboratory of the Hospital General Universitario Gregorio Marañón (Madrid, Spain) for CDI diagnosis were tested in parallel with the direct cytotoxicity assay, toxigenic culture, and the two multistep algorithms evaluated. | 979 | 799 |
| Barkin, 2012[2](#_ENREF_2) | U.S. | Single | Unformed | At least 18, able to enroll, had diarrhea defined as three or more bowel movements in 24 hours, had stool sample submitted for CDI testing per clinician discretion and fulfilled one or more criteria for increased risk of CDI. Prior history of CDI, nosocomial exposure in last 6 months, antibiotic PPI use within previous 3 months, age 65 or older or the presence of nasogastric or postpyloric feeding tube. Subjects exluded if currently being treated for documented CDI and then re-tested during study period. 80 men and 59 women. | 272 | 139 |
| Bruins, 2012[3](#_ENREF_3) | Netherlands | Single | Unformed | All unformed stool samples sent to our laboratory from hospitalized and unhospitalized patients with diarrhea, preferably those known to have CDI-associated symptoms or risk factors such as the recent use of antibiotics, were included in the study | 986 | NA |
| Buchan, 2012[4](#_ENREF_4) | U.S. | Multicenter | Unformed | Patients suspected of having C. difficile-associated diarrhea and patients suspected of having C. difficile-associated diarrhea were collected | 540 | 540 |
| Calderaro, 2012[5](#_ENREF_5) | Italy | Single | Not specified | Patients attending the University Hospital of Parma (Northern Italy) with a suspicion of CDI | 306 | 306 |
| Carroll, 2013[6](#_ENREF_6) | U.S. | Multicenter | Unformed | Included in the study were leftover deidentified stool samples submitted to the clinical laboratory specifically for C. difficile testing according to the institution’s routine practices.  | 1,875 | 1,875 |
| Dalpke, 2013[7](#_ENREF_7) | Germany | Single | Unformed | Patients at the University Hospital Heidelberg between April and July 2012 | 448 | 333 |
| de Boer, 2010[8](#_ENREF_8) | Netherlands | Single | Unformed | Three different panels of stool specimens were collected. One panel of 20 stool samples, which differed in consistency (unformed towatery, diarrhoeal), was collected at the Laboratory for Infectious Diseases. The second panel consisted of 161 clinical stool specimens from patients for whom a specific request for CDI was issued. The third panel a subset of 32 C. difficile toxigenic culture positive stool samples, that were part of a sample collection described previously  | 161 | NA |
| de Jong, 2012[9](#_ENREF_9) | Netherlands | Single | Unformed | A total of 150 patients were included during a 2-month period, of which 49.7% were male and the median age was 61 years (range 19–95). Most patients were admitted to the medical wards (56%), followed by the surgical (20.7%) and hematology/oncology wards (20.7%) and the intensive care units (2.6%) | 150 | 150  |
| Eckert, 2014[10](#_ENREF_10) | France | Multicenter | Unformed | Patients suspected of having CDI and hospitalized in one of four different university-affiliated hospitals in Paris (Saint-Antoine, Tenon, Trousseau, and Rothschild hospitals). Only diarrheic stool samples were included. C. difficile testing was done in the case of a specific request from the physician and systematically in all cases of nosocomial diarrhea (occurring after day 3 of hospitalization)." | 308 | NA |
| Eigner, 2014[11](#_ENREF_11) | Germany | Multicenter | Unformed | Suspected CDI | 250 | NA |
| Herrera, 2010[12](#_ENREF_12) | Mexico | Single | Not specified | All samples sent for detection of C. difficile toxins to the Laboratory of Clinical Microbiology | 230 | NA |
| Hirvonen, 2013[13](#_ENREF_13) | Finland | Single | Unformed | Inpatients with antibiotic associated diarrhea, ages 7-95 | 310 | 310 |
| Hoegh, 2012[14](#_ENREF_14) | Denmark | Single | Not specified | Patients at Hvidovre Hospital having routine testing for C. diff | 704 | 631 |
| Humphries, 2013[15](#_ENREF_15) | U.S. | Single | Unformed | Adult inpatients were included in this study if they had a liquid stool specimen submitted to the clinical microbiology laboratory for C. difficile testing. All patients with a positive NAAT in the study were matched with an equal number of patients with negative NAAT results daily. | 296 | 296 |
| Jensen, 2014[16](#_ENREF_16) | Denmark | Single | Not specified | Criteria for testing was infectious diarrhea | 300 | 283 |
| Kim, 2012[17](#_ENREF_17) | Korea | Single | Unformed | Severance hospital patients with diarrheal stool specimens submitted for testing. | 127 | 127 |
| Knetsch, 2011[18](#_ENREF_18) | UK | Single | Unformed | Diarrheal samples submitted to the Department of Microbiology at Leeds Teaching Hospitals | 526 | NA |
| Lalande, 2011[19](#_ENREF_19) | France | Single | Unformed | Patients suspected of having CDIs | 472 | 472 |
| Landry, 2014[20](#_ENREF_20) | U.S. | Single | Unformed | Patients at Yale-New Haven Hospital, samples submitted for C. difficile testing | 338 | 300 |
| Le Guern, 2012[21](#_ENREF_21) | France | Single | Unformed | Inpatients. Criteria for rejection included formed stools or a duplicate specimen submitted during the last 7 days. | 360 | 360 |
| Leitner, 2013[22](#_ENREF_22) | Austria | Single | Unformed | Patients of both genders with specified request for clarification of CDI were tested, 65 males with an age range of 1-88 years and 115 females with age range 2-92 years. | 180 | 180 |
| Mattner, 2012[23](#_ENREF_23) | Germany | Single | Unformed | Liquid stool samples sent to a university microbiology laboratory were investigated for toxigenic C. difficile | 256 | 256 |
| Noren, 2011[24](#_ENREF_24) | Sweden | Multicenter | Not specified | Consecutive stool specimens submitted for C. difficile diagnostics from hospitals and communities in Orebro County, Sweden, ages 3 months to 96 years | 272 | 272 |
| Noren, 2014[25](#_ENREF_25) | Sweden | Single | Not specified | Patients with clinical signs of CDI admitted to Hoglandet Hospital Eksjo and/or visited primary health care facilities | 302 | 302 |
| Planche, 2013[26](#_ENREF_26)  | UK | Multicenter | Unformed | Faecal samples from both hospital and community patients submitted for routine testing for C difficile. Had diarrhea not clearly attributable to an underlying disease or treatment from all hospital patients (aged ≥2 years) and from individuals in the community (aged ≥65 years), irrespective of C diffi cile or other testing requests. | 12,402 | 10,186 |
| Putsathit, 2015[27](#_ENREF_27) | Australia | Multicenter | Not specified | Patients from 3 hospitals in Australia | 334 | NA |
| Qutub, 2011[28](#_ENREF_28) | Saudi Arabia | Single | Not specified | Patients admitted and suspected to have CDAD were evaluated, with majority of these patients having had received different types of antibiotics, including third generation of cephalosporins, quinolones, and macrolides. | 150 | 150 |
| Reller, 2010[29](#_ENREF_29) | U.S. | Single | Unformed | Sequential weekday stool samples submitted for suspected C difficile | 600 | 600 |
| Rene, 2011[30](#_ENREF_30) | Canada | Single | Unformed | Consecutive liquid fecal samples from unique patients submitted for routine CCNA | 494 | 494 |
| Shin, 2012[31](#_ENREF_31) | Korea | Multicenter | Not specified | Patients with clinical signs compatible with CDI who were hospitalized in 3 teaching hospitals in Seoul City | 243 | 243 |
| Shin, 2012[32](#_ENREF_32) | Korea | Single | Unformed | Patients suspected of having CDI in a tertiary hospital. | 253 | NA |
| Strachan, 2013[33](#_ENREF_33) | UK | Single | Formed and unformed | Patient criteria: aged ≥65 years, taking or had recently taken antibiotics, a hospital inpatient, immunosuppressed, requested by the patient's clinician. | 860 | 860 |
| Viala, 2012[34](#_ENREF_34) | France | Single | Unformed | Patients at the Jean Verdier hospital in Paris suburb | 94 | 89 |
| Walkty, 2013[35](#_ENREF_35) | Canada | Multicenter | Unformed | Patients from Health Sciences Centre, St. Boniface Hospital, and Westman suspected of having CDI. Samples were excluded if stool submitted for a patient with a positive C. difficile test result in the preceding 7 days, and samples from patients less than 1 year of age. | 428 | 428 |
| Ylisiurua, 2013[35](#_ENREF_35) | Finland | Multicenter | Unformed | Hospitalized patients with diarrhea, more than half were over the age of 60 years. | 884 | NA |
| Zidaric, 2011[36](#_ENREF_36) | Slovenia | Multicenter | Formed and unformed | Hospitalized and nonhospitalized patients suspected of having CDI | 194 | 170 |