**Clostridium difficile Infection (CDI):**

**What is Clostridium difficile infection (CDI)?** CDI is a serious illness resulting from infection of the internal lining of the colon by *C. difficile* bacteria. The bacteria produce toxins that cause inflammation of the colon, diarrhoea, and in some cases, death.

**Clinical Outcomes**

- **CDI SYMPTOMS:** range from mild, self-limiting diarrhoea, to severe disease with bowel complications.
  - **Extended hospitalisation:** typically by around 6–24 days or greater.
  - 25% of people treated with current C. difficile therapies may suffer a second infection.\(^1\)

**How common is CDI?**

- **CDI is currently:** 2 to 4 times more common than MRSA in healthcare facilities.\(^2\)
- **In hospital, CDI cases contribute to death in 3–30% of cases within 30 days of diagnosis.**\(^3\)

**Who is at risk?**

- **CDI is seen most commonly in hospitals, nursing homes and in immunocompromised patients.**\(^4\)
- **Risk factors for CDI are:**
  - Recent hospitalisation\(^5\)
  - Recent use of broad-spectrum antibiotics\(^6\)
  - Extended hospitalisation: typically by around 6–24 days or greater.\(^7\)
  - Clostridium difficile infection in a family member or other contact.\(^8\)
  - Immunosuppressive conditions: cancer chemotherapy, HIV infection, liver disease, or transplant surgery.\(^9\)
  - Patients with recurrence are at a higher risk of repeated infections.\(^10\)

**How can CDI be prevented?**

- **Soap and Water:** Hands should be washed with soap and water before and after contact with patients.\(^11\)
- **Disposable gloves and gowns:** When handling a patient or touching equipment, hands should be washed or gloves used.\(^12\)
- **Product use of antibiotics:** Prudent use of antibiotics is essential in the prevention of CDI.\(^13\)

**Latest Irish Findings on CDI**

- **Only 3 in 10 Irish people have heard of CDI:** despite the fact that it is significantly more common than MRSA.\(^14\)

...This is despite the fact that approximately 71% of CDI cases occur in a healthcare facility.\(^15\)

**In Ireland, Clostridium difficile infection is a leading cause of nosocomial infection:** with approximately 35% of patients who develop CDI in Ireland developing further nosocomial infection.\(^16\)

**Increased risk of developing further infections:**

- 45–65%\(^17\)
- Patients with recurrence are at a higher risk of repeated infections.\(^10\)

**Notes:**

- Studies in the UK suggest widespread use of antibiotics may reduce the risk of CDI.\(^18\)
- The true cost of CDI is currently \(\text{£}6,386\) per patient to the cost of hospitalisation.\(^19\)
- CDI is currently 2 to 4 times more common than MRSA in health care facilities.\(^20\)

**Conclusion:** CDI is a leading cause of nosocomial infection. Prudent use of antibiotics is essential in the prevention of CDI.\(^21\)

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