



Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

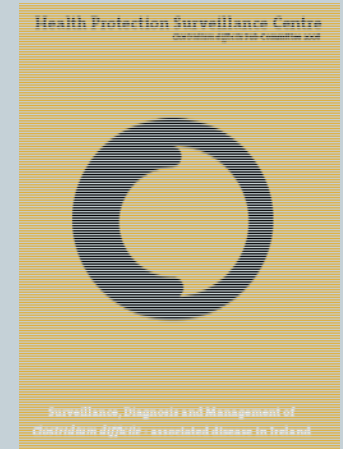
Clostridium difficile -associated Disease:

A National Overview of Notifiable Cases in Ireland 2010

Data as of 31/01/2011



- May 2008: National *Clostridium difficile* guidelines published



- New cases of *Clostridium difficile*-associated disease (CDAD) became notifiable in Ireland since the 4th May 2008 (under 'Acute infectious gastroenteritis')

***Clostridium difficile***

A confirmed *C. difficile* associated disease (CDAD) case is a patient two years or older, to whom one or more of the following criteria applies:

- Diarrhoeal¹ stools or toxic megacolon, with either a positive laboratory assay for *C. difficile* toxin A (TcdA) and/or toxin B (TcdB) in stools or a toxin-producing *C. difficile* organism detected in stool via culture or other means
- Pseudomembranous colitis (PMC) revealed by lower gastrointestinal endoscopy
- Colonic histopathology characteristic of *C. difficile* infection (with or without diarrhoea) on a specimen obtained during endoscopy, colectomy or autopsy

Notes:

1. Diarrhoea is defined as three or more loose/watery bowel movements that take up the shape of their container (which are unusual or different for the patient) in a 24 hour period.

Kuijper EJ, Coignard B, Tull P. Emergence of *Clostridium difficile*-associated disease in North America and Europe. Clin Microbiol Infect 2006;12 Suppl 6:2-18.



Objectives



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- To capture and analyse all new cases of CDAD notified through the CIDR reporting system from 4th May 2008 (week 19) until the Dec 2010 (week 52) to estimate the the burden of *C. difficile* infection in Ireland



Caveats

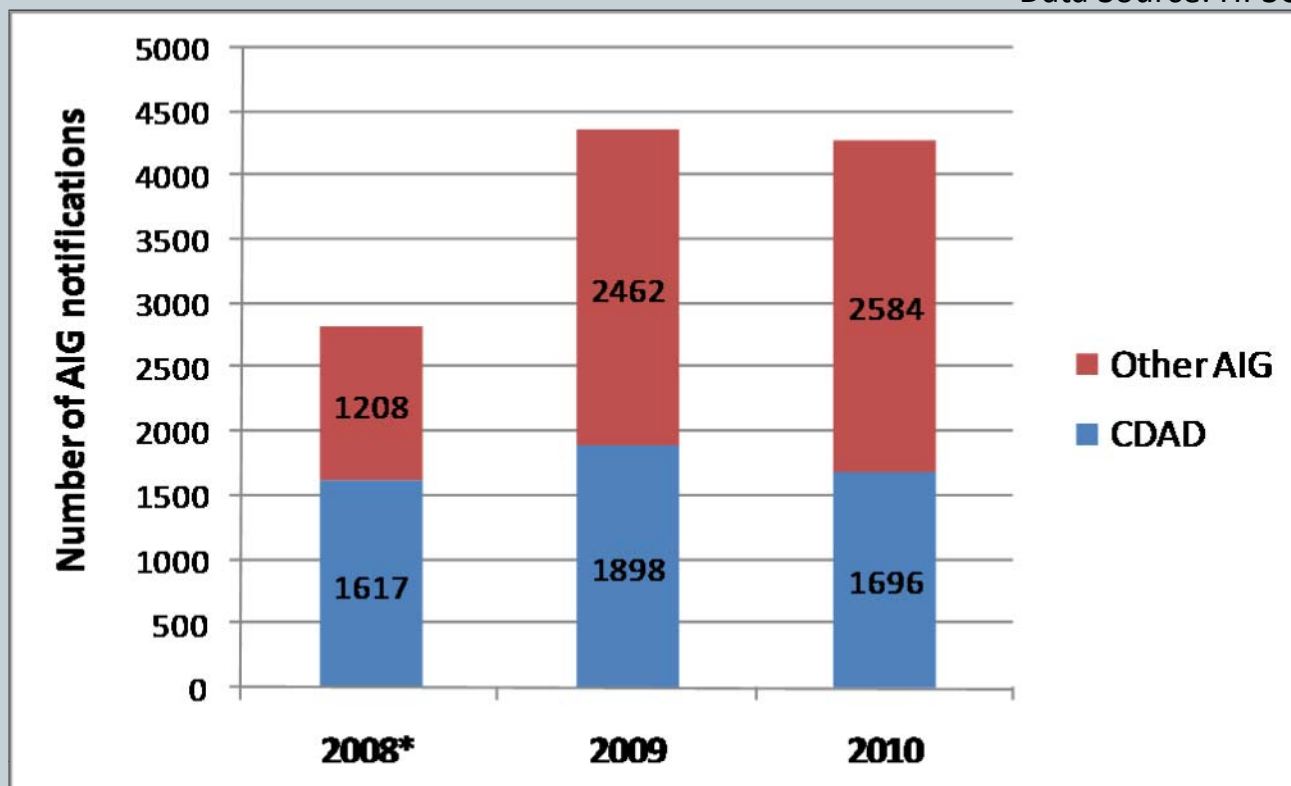


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- This data only represents new cases of CDAD and not recurrent cases.
- Recurrent cases are represented in the enhanced *C.difficile* surveillance project which began in August 2009.
- On average 15-20% of all CDAD cases are recurrent

Data Source: HPSC



* Figures for 2008 are based on data collected from week 19 to week 53 (35 weeks)

- CDAD represented 40% (n = 1696) of all AIG notifications in 2010, a decrease from 44% (n 1898) in 2009 and 57% (1617) in 2008

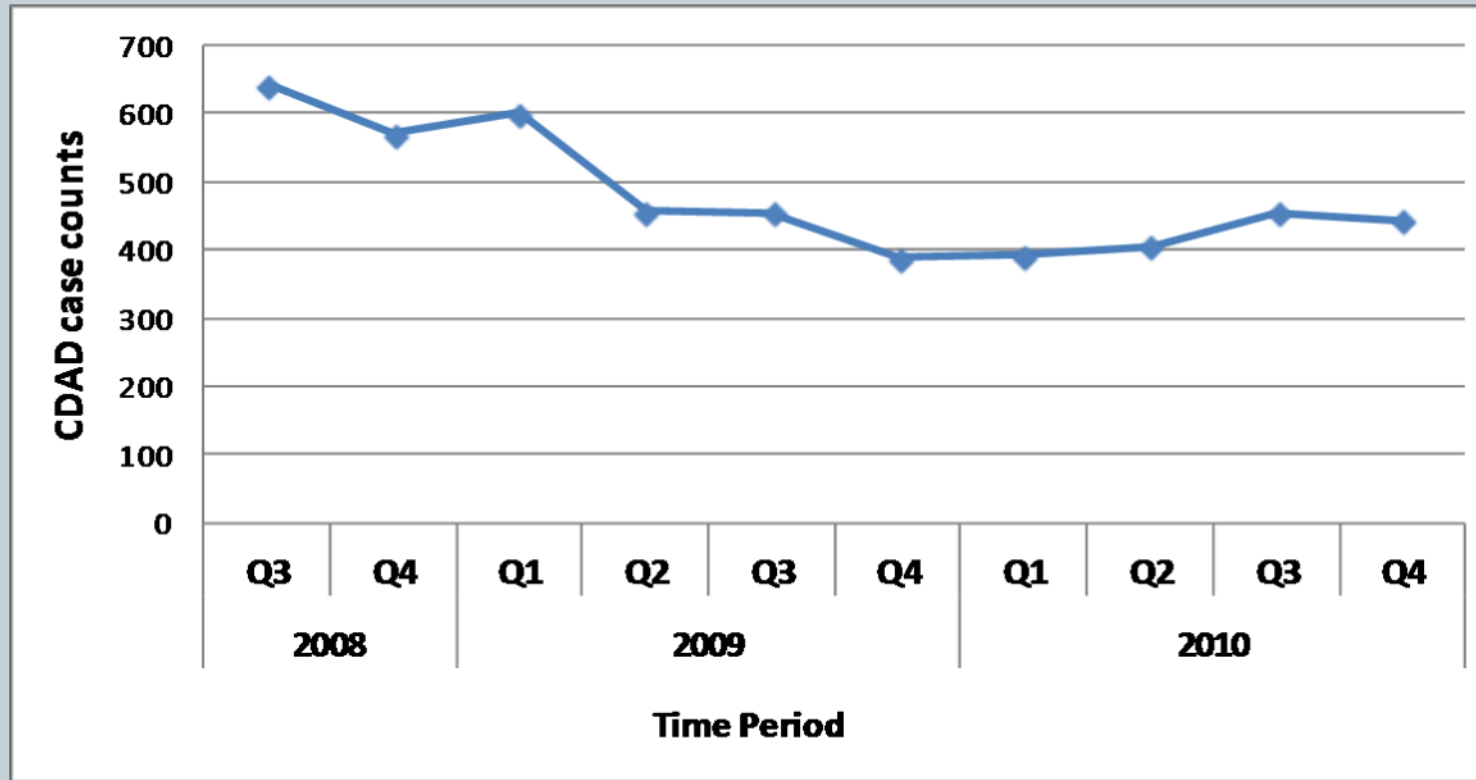


National CDAD Trends by Quarter

2008 - 2010



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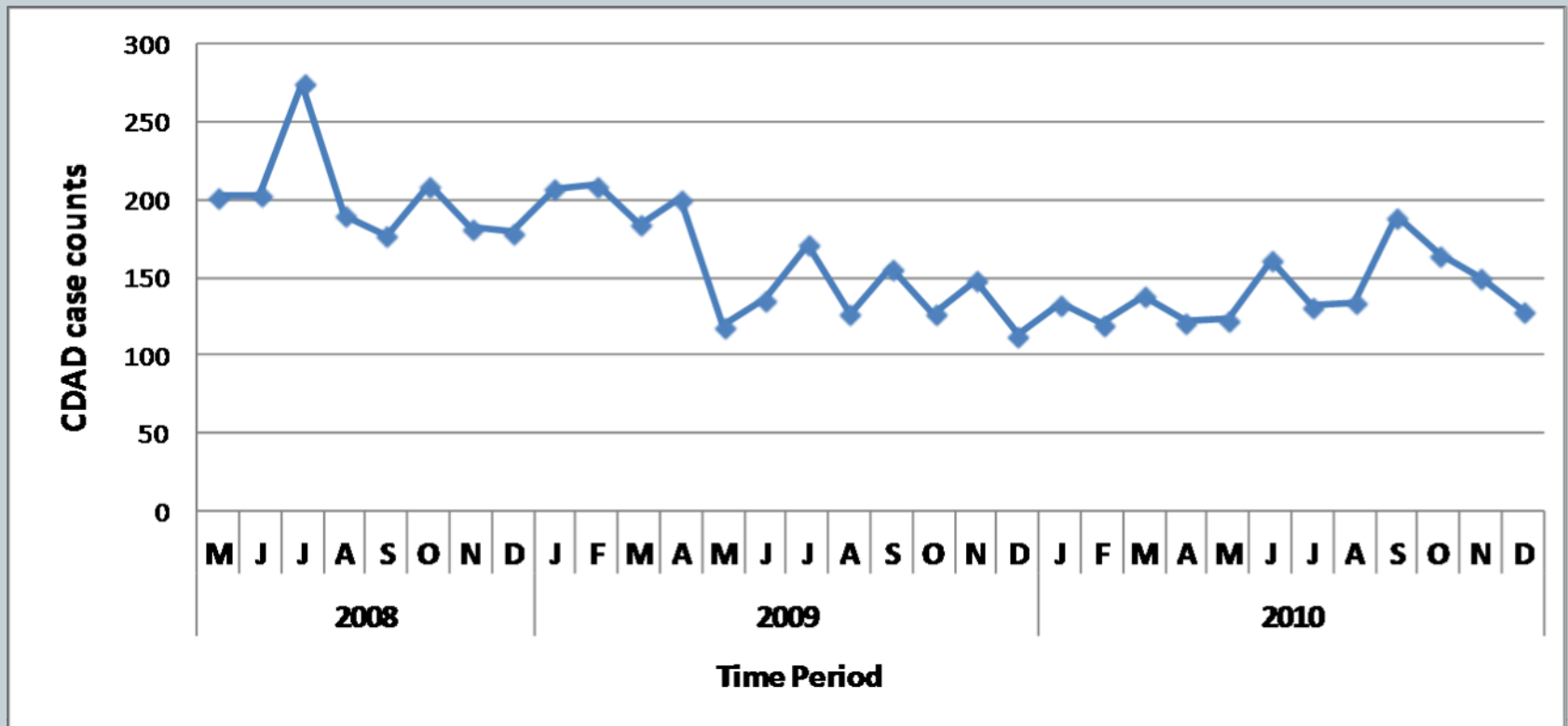
Data Source: HPSC



National CDAD Trends by Month 2008 – 2010



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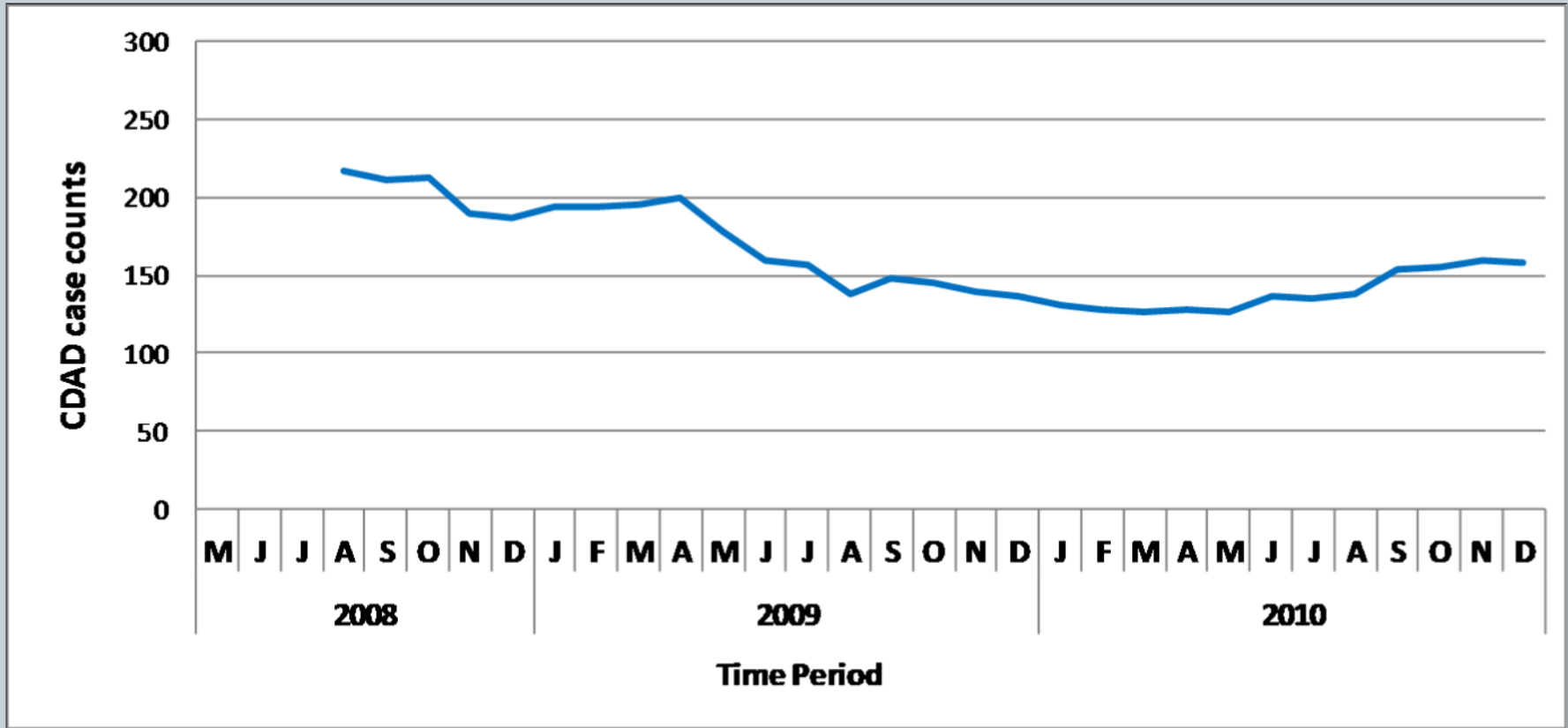
Data Source: HPSC



National CDAD Trends by Month 2008 – 2010, 4-quarterly moving average



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Data Source: HPSC



Notifications of CDAD in Ireland by HSE Region



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HSE Region	Number of CDAD Cases			CIR**		
	2008*	2009	2010	2008*	2009	2010
East	1123	705	682	74.9	47.0	45.5
Midlands	55	44	47	21.8	17.5	18.7
Mid West	140	184	91	38.7	51.0	25.2
North East	53	84	50	13.6	21.3	12.7
North West	141	134	91	59.5	56.5	38.4
South East	181	251	253	39.3	54.5	54.9
South	380	237	269	61.2	38.2	43.3
West	328	259	213	79.3	62.5	51.4
National	2402	1898	1696	56.7	44.8	40.0

* Figures for 2008 are estimated based on a 52 week period since only 35 weeks of data were collected

** Crude Incidence Rate (CIR) is expressed as the number of new CDAD cases per 100,000 population. Calculations were made using the 2006 Census data.

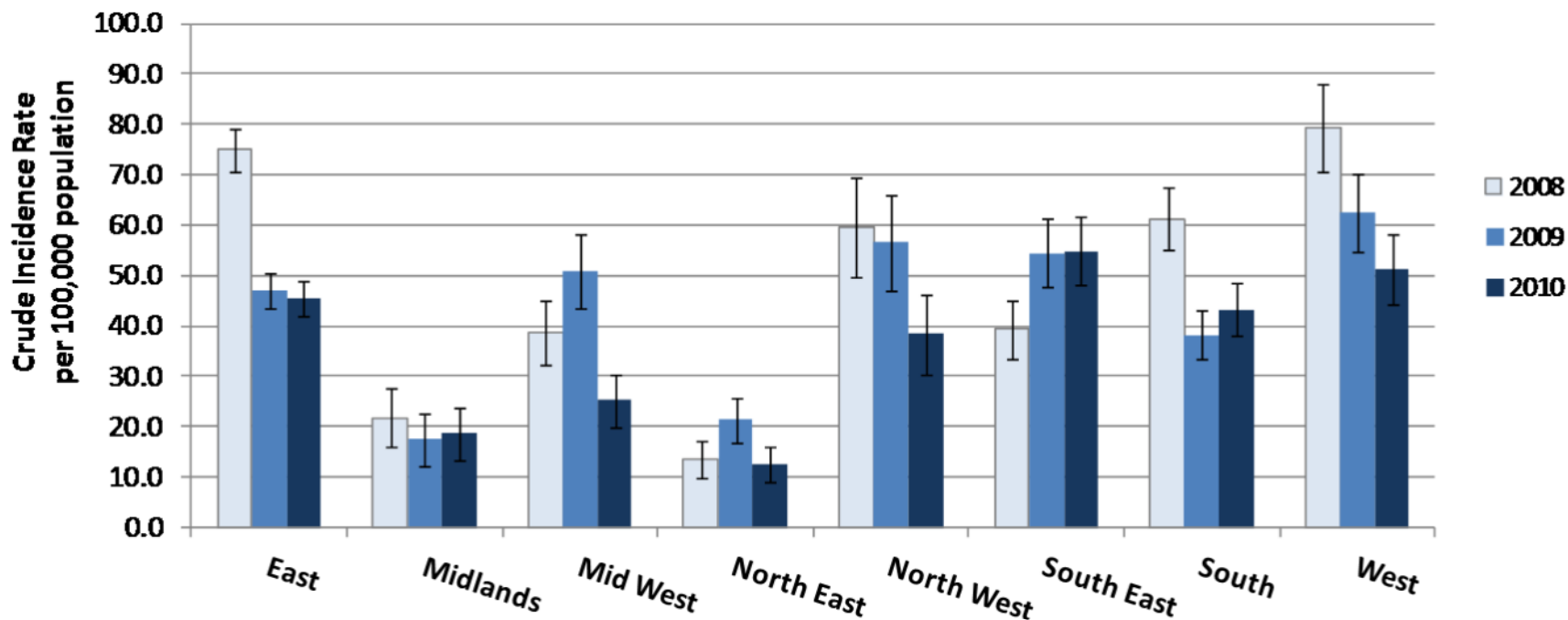
Data Source: HPSC



Incidence of CDAD in Ireland by HSE Region 2008 - 2010



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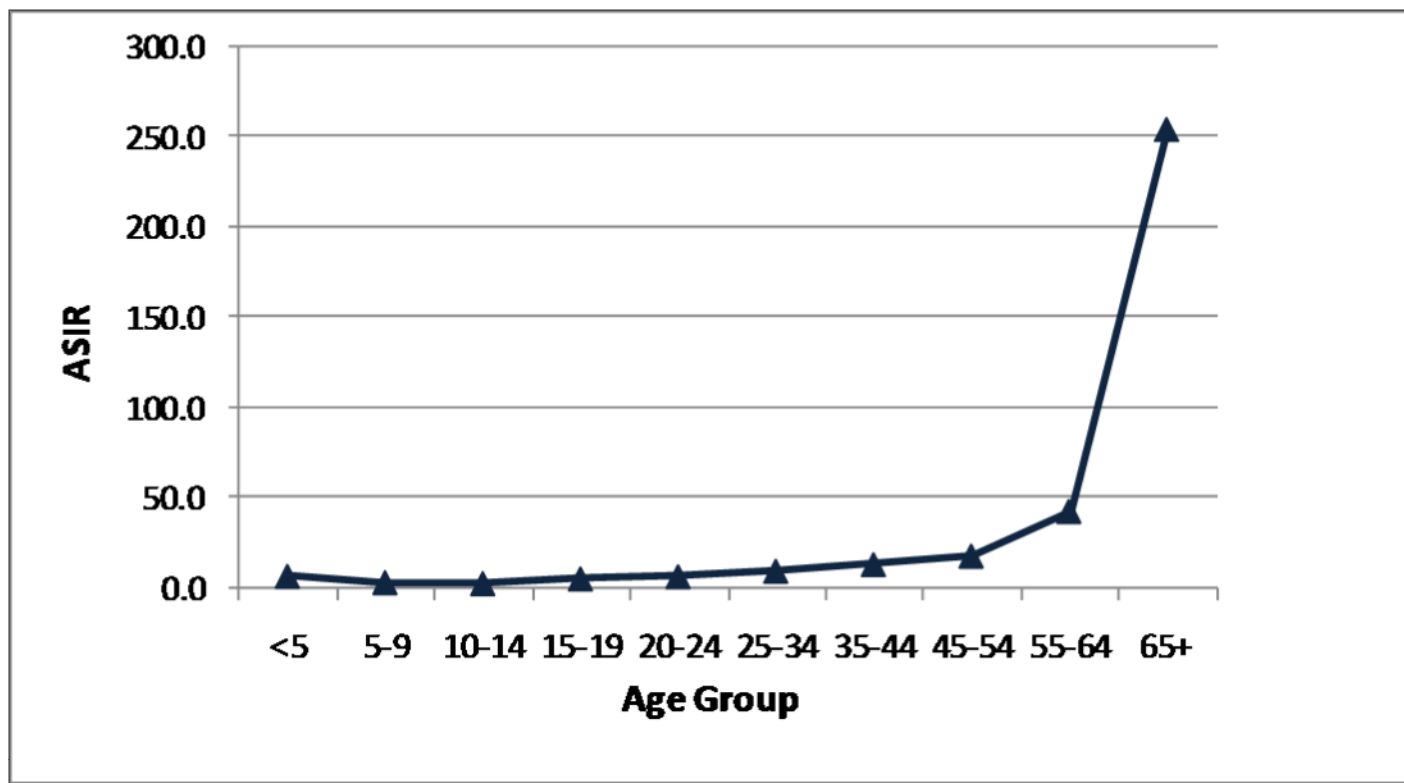


Data Source: HPSC



Age-specific incidence rates of CDAD

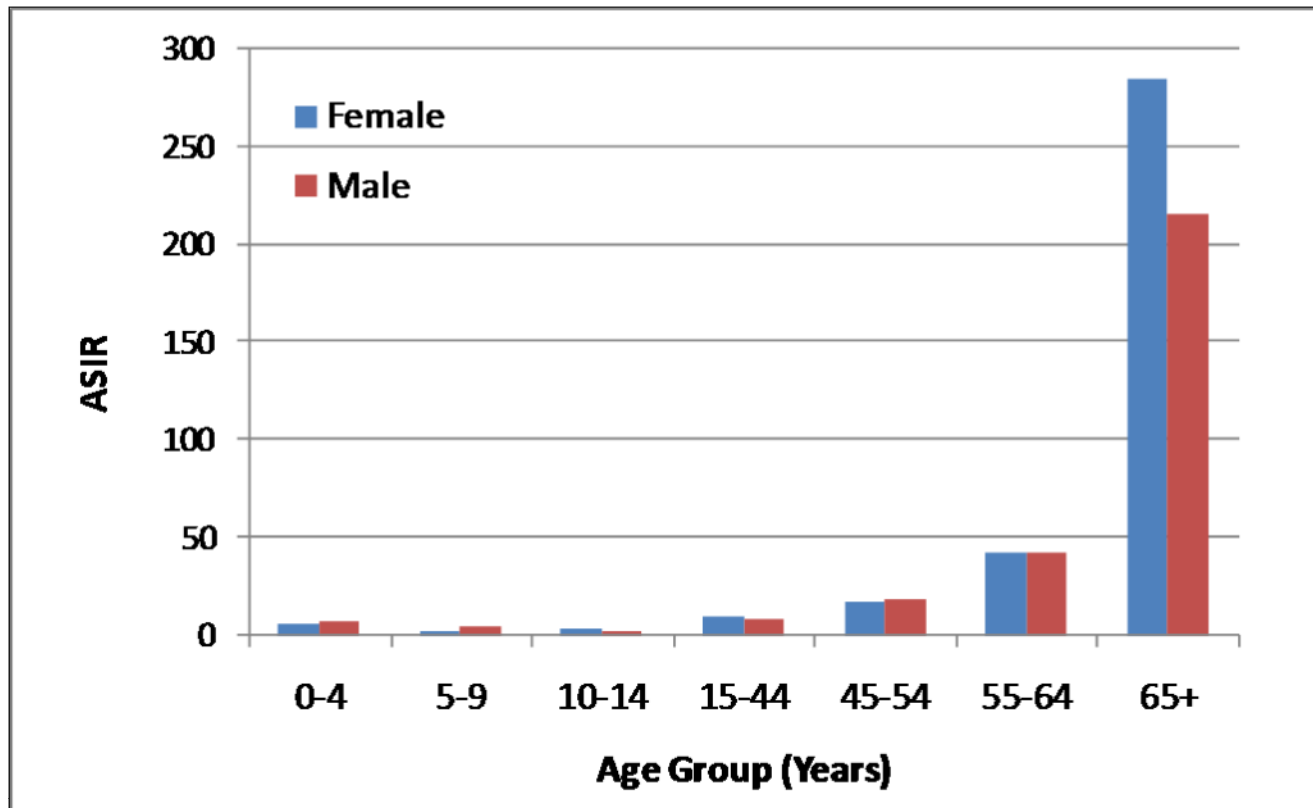
2010



ASIR, Age-Specific Incidence Rate (per 100,000 population)

Data Source: HPSC

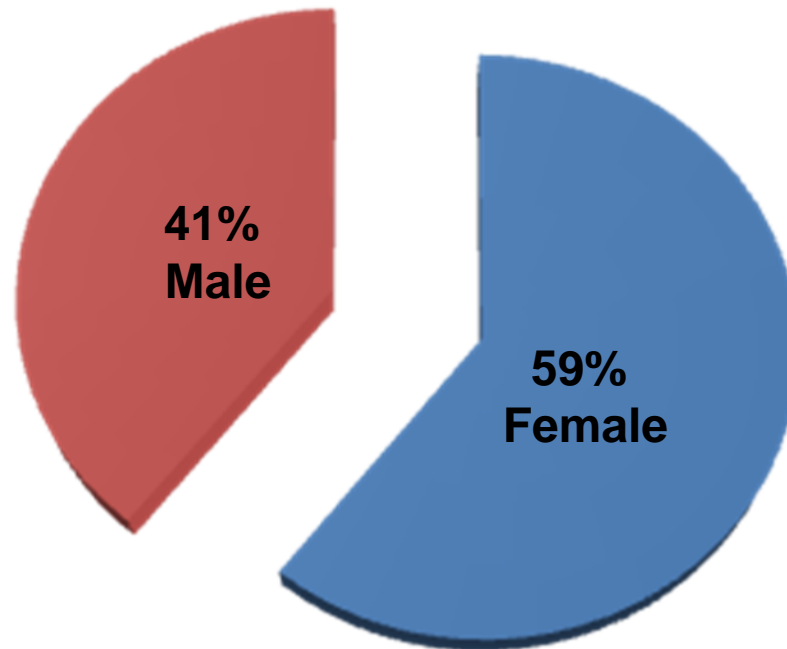
Age and sex-specific incidence rates of CDAD, 2010



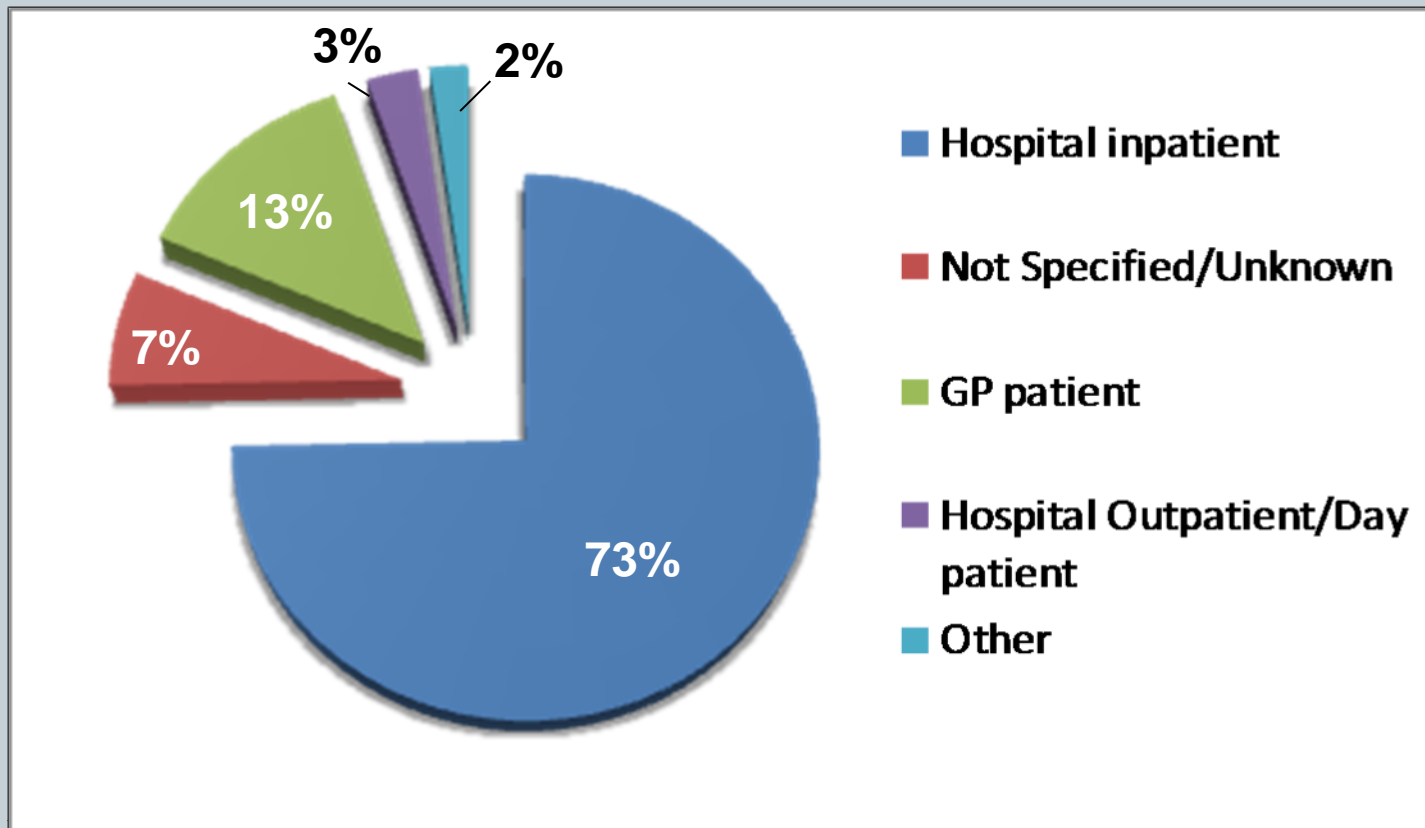
ASIR, Age-Specific Incidence Rate (per 100,000 population)

Data Source: HPSC

Breakdown by Sex, 2010



Data Source: HPSC



Data Source: HPSC



Outbreaks by HSE Region, 2010



HSE Region	Outbreak location	Total number ill
East	Nursing home	11
Midlands	Nursing home	2
NorthWest	Comm. Hosp/Long-stay unit	8
South	Residential institution	4
South	Hospital	2

Data Source: HPSC



- 1,696 new cases of CDAD were reported in 2010 (CIR: 40 cases per 100,000) representing a 10.7% decrease from figures reported in 2009.
- Regional differences were observed which is most likely due to differences in the sensitivities of the testing practices used
- The incidence of CDAD increases with age with over 65's at highest risk of infection
- CDAD has a higher preponderance among females at 59%
- The majority of notifications are from healthcare institutions
- There were five outbreaks reported in 2010

<http://www.hpsc.ie/hpsc/A-Z/Gastroenteric/Clostridiumdifficile/>



The screenshot shows the HSC website page for Clostridium difficile. The page header includes the HSE and hpsc logos, and the text "Health Protection Surveillance Centre" and "Lárionad Faire um Chosaint Sláinte". The navigation menu includes "About HPSC", "Topics A-Z", "Contact Us", "Sitemap", and "Printer Friendly Vers". The search bar is empty. The main content area shows the breadcrumb "Home > A - Z > Gastroenteric > Clostridium difficile" and the title "Clostridium difficile". There is a microscopic image of Clostridium difficile spores. Below the image, there is a link to view the Weekly Acute Infectious Gastroenteritis report. A list of links is provided, including Factsheet, Publications, Care Bundles, Case Definitions, Links, Press Releases, News, and National Surveillance Project, March 2009. The footer includes the hpsc logo and contact information for the Health Protection Surveillance Centre.

- **Weekly *C. difficile* notifications**
- ***C. difficile* guidelines**
- **Audit tool for healthcare facilities**
- **Factsheets (for patients and infection control guidelines)**
- **Results of March 2009 *C. difficile* surveillance project**
- **Enhanced surveillance forms and reports**



Factsheets



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Health Protection Surveillance Centre
Lárionad Faire um Chosaint Sláinte



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[Home](#)>[A - Z](#)>[Gastroenteric](#)>[Clostridium difficile](#)>[Factsheet](#)

Factsheets



[Clostridium difficile Patient Information Leaflet](#)

File Size: (1.3Mb)

Publication Date: May 2008



[Precautions for caring for patients with CDAD](#)

File Size: (439kB)

Publication Date: May 2008



[Management of patients with C. difficile infection](#)

File Size: (153kB)

Publication Date: July 2008

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are fit to go home. Your doctor will let you know if you need to continue treatment at home.

Can Clostridium difficile diarrhoea come back?

Yes, some patients may suffer a relapse of diarrhoea. Please contact your GP/family doctor if you develop diarrhoea after you are discharged from hospital and let him/her know that you had Clostridium difficile recently. If you need antibiotics for another illness please tell your GP/family doctor that you recently had Clostridium difficile.

If I have Clostridium difficile diarrhoea at home how do I stop my family from catching it?

To reduce the risk of spreading Clostridium difficile to others, take the following steps:

- Wash your hands thoroughly with soap and warm water and dry them after using the bathroom and before eating.
- Be strict with your personal hygiene – do not share personal items such as towels and face cloths.
- Machine wash soiled laundry separately from other washing on the hottest wash cycle suitable for linen and clothing.
- Tell your family or carers to wash their hands thoroughly with soap and water and dry them after caring for you.
- Try to avoid using the same toilet that your family members use. If this is not possible, ensure that the toilet is cleaned and disinfected after your use.
- Clean surfaces in bathrooms on a regular basis with household detergents. If you have had diarrhoea, then disinfect with a mixture of bleach and water as instructed on the container. Pay special attention to sink taps, flush handle, toilet seats and lastly the toilet bowl.

How to wash your hands properly

1. Wet your hands under running water
2. Lather with soap
3. Cover all parts of your hands
4. Rinse well under running water
5. Dry thoroughly

It should take around 30 seconds to wash your hands properly.

EFFECTIVE HANDWASHING

7 Steps to Prevent the Spread of Germs



Further information:

You can also get more information from the Health Protection Surveillance Centre (HPSC) website www.hpsc.ie.

Go into the Topics A-Z section of the site and Clostridium difficile

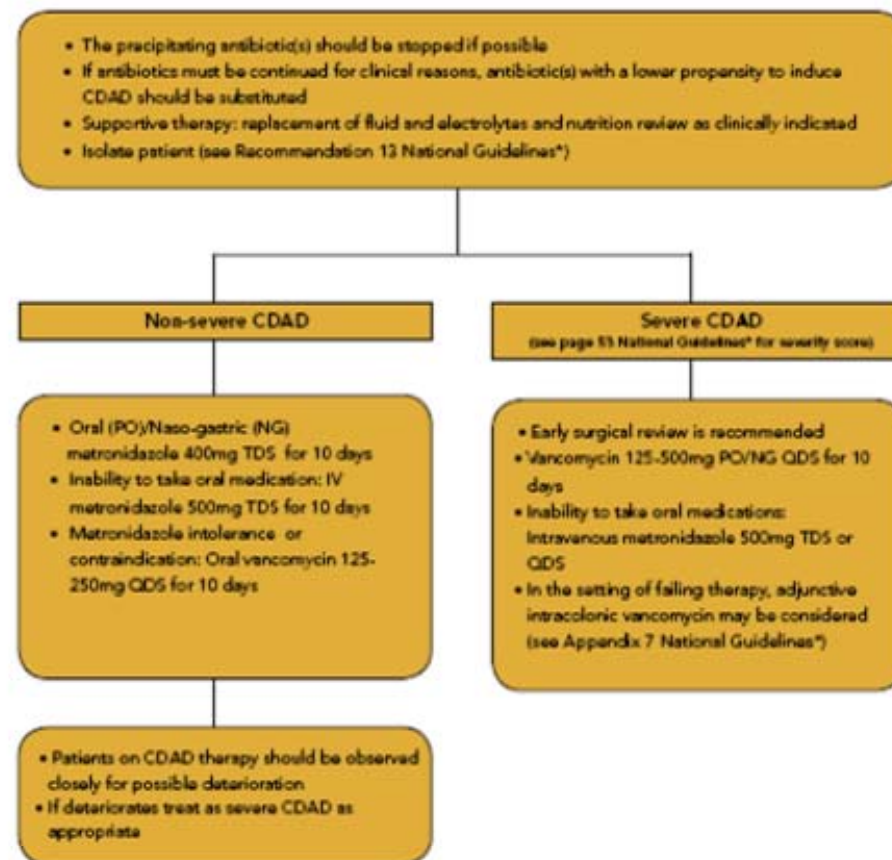
Published on behalf of the Clostridium difficile Sub-committee of the Scientific Advisory Group, Health Protection Surveillance Centre.

Health Protection Surveillance Centre

CLOSTRIDIUM DIFFICILE

First-line specific therapy of *C. difficile* – associated disease (CDAD)

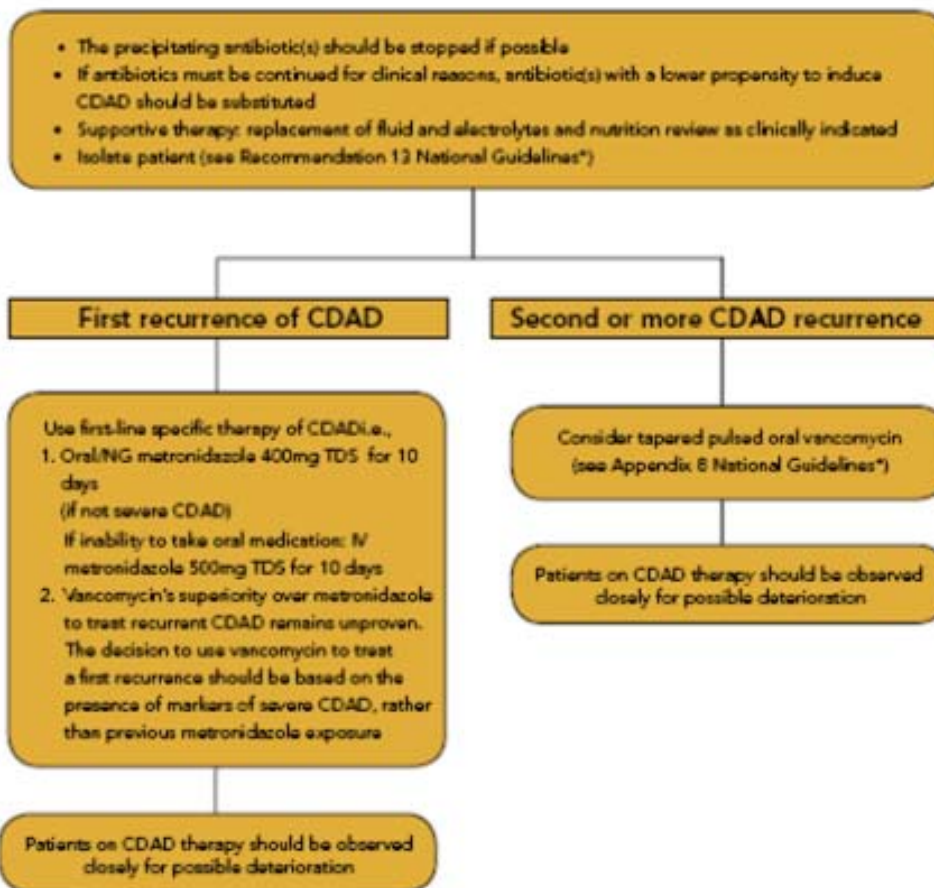
(For paediatric doses refer to the British National Formulary for Children*)



* National *C. difficile* guidelines available at: <http://www.hpsc.ie/hpsc/A-Z/Gastroenteric/Clostridiumdifficile/Publications/>

Treatment of recurrent of *C. difficile* – associated disease (CDAD)

(For paediatric doses refer to the British National Formulary for Children)



* National *C. difficile* guidelines available at: <http://www.hpsc.ie/hpsc/A-Z/Gastroenteric/Clostridiumdifficile/Publications/>