

## Infectious Diseases

Table 1.1 outlines the current number and ratio of Infectious Diseases consultants per 100,000 of the population in Ireland. Included in this table are the projected numbers of specialists per 100,000 of the population in 2024, should the current ratio remain static at the 2014 level. Table 1.1 also includes the research informed range of specialists per head of population as per expert stakeholder perspectives, the Hanly (2003) recommendations and the ratios in place, projected and/or recommended in comparable healthcare jurisdictions.

Table 1.1 Infectious Diseases Consultant Posts (Private and Public) 2014-2024

2014		2024*		Research informed range of specialists per head of population to 2024 **	
N	Ratio per 100,000 pop	N	Ratio per 100,000 pop	N	Ratio per 100,000 pop
15 (13 WTE)	.3	15 (13 WTE)	.3	20 - 30 (17 - 26 WTE)	.4 - .6

\* Accounting for population growth and an unchanged ratio of consultants

\*\* The recommendation is based on information in Table 1.2 and represents a range from the lowest to the highest ratio considered

Table 1.2

<b>Hanly (2003)</b>	Hanly (2003) recommended a ratio of 1: 87,000 Infectious Diseases consultants per head of population to achieve a consultant-provided service and to comply with the European Working Time Directive (EWTd) in 2013. This represents approximately 1.2 consultants per 100,000 of the population. Using CSO population projections (CSO, 2011), we estimate the recommended ratio to equate to 53 Infectious Diseases consultants today and approximately 57 Infectious Diseases consultants in 2024 approximately. Using a WTE rate of .86, this would equate to 46 and 49 whole-time equivalent (WTE) consultants in 2014 and 2024 respectively.
<b>Royal College of Physicians of Ireland, Faculty of Medicine and the Clinical Programme (OPAT)</b>	There are currently 12 full-time infectious diseases consultants in Ireland, representing 1 per 381,666 population (.25 per 100,000). This is dramatically less than the recommendation in the United States of 1 per 41,000 population (2.4 per 100,000) which is ten times greater than Ireland. There is no doubt that the presence of an infectious diseases specialist is essential in any acute hospital setting. A recent study in clinical infectious diseases (CID 2013;57:12) demonstrated that early infectious diseases intervention was associated with lower mortality, lower cost, and earlier discharge from hospital in a population of 130,000 hospitalised patients. The recommendations from the National Outpatient Parenteral Antimicrobial Therapy (OPAT) programme are that all hospital groups need to have a minimum number of infectious diseases specialists available in order to provide a streamlined, safe, and efficient service. 17 additional posts are required nationally for adult services. There should also be a paediatrician with a special interest in infectious diseases in at least each hospital group. The number of trainees (HST) in infectious diseases at present is 8 with a recommendation to increase to 15 in the interim, with a view to increasing the number to 21 in the medium to long term. An increase of 7 SpRs is recommended in 2014.
<b>United Kingdom – Royal College of Physicians (2013)</b>	According to the Royal College of Physicians (2013), the United Kingdom has a very low number of infectious diseases specialists in comparison to other Western countries. Currently there is about one infectious diseases specialist per 500,000 population in England and Wales (.2 per 100,000). In Scotland, the ratio is one per 270,000 (.4 per 100,000 of the population). Scandinavian countries with good provision have about one infectious diseases specialist per 50,000 population (2 per 100,000). Countries more akin to the UK, such as the Netherlands or Australia, have one per 200,000 (.5 per 100,000) which would constitute the provision of one infectious diseases specialist for each general district

	hospital in the UK. Taking the population served by a district hospital to be 250,000, this yields a recommended ratio of 0.4: 100,000. Medical microbiologists contribute greatly to the management of infection in the UK, but even if their numbers were included in the tally of infectious diseases specialists, the UK is still underprovided for in comparison to other similar countries.
<b>England – Centre for Workforce Intelligence</b>	The Royal College of Physicians (2008) recommends one whole-time equivalent (WTE) infectious diseases and tropical medicine consultant per 250,000 population, giving an estimated demand of 209 WTE trained specialists for England (ONS, 2010). The National Health Service Information Centre census reports that there were 84 (79 WTE) infectious diseases consultants employed in England as of September 2010 (NHS IC, 2011). This represents a ratio of 0.2 per 100,000. The estimated number of posts to achieve full service delivery, as recommended by the Royal College of Physicians has been predicted to increase to around 225 WTE in 2020. The supply of infectious diseases Certificate of Completion of Training (CCT) holders over the next 10 years is forecast to increase to 234 WTE in 2020 (249 headcount, representing a ratio of 0.44 per 100,000), an average increase of 11.47 per cent annually (due to a low number of predicted retirements and a high number of current trainees).

**Notes:**

- Infectious Diseases: 15 specialists were employed in the public sector (excluding specified purpose contract employees and those on career breaks) Source: HSE Workforce Planning, Analysis, & Informatics Unit, Dec 2013
- Infectious Diseases: No specialists were estimated to be employed in the private sector. Source: Medical Directory; Google and hospital websites
- WTE rate used herein is .86. Source: HSE Workforce Planning, Analysis, & Informatics Unit, Dec 2013
- Population 2014 is projected to be 4,626,423 using the M2F2 scenario CSO (2011)
- Population 2024 is projected to be 4,979,921 using the M2F2 scenario CSO (2011)
- Information in Table 1.2 does not necessarily represent the views of HSE-NDTP