

NORTHERN AREA HEALTH BOARD

Report No 45/2002

A Report on the Epidemiology of Tuberculosis in Ireland 2000

Introduction

In Ireland, information on all notified cases of tuberculosis (TB) is sent to the National Disease Surveillance Centre (NDSC) for analysis. From January 1st, 2000, NDSC, in consultation with the eight health boards and the National Tuberculosis (TB) Advisory Group, implemented an enhanced National TB Surveillance System (NTBSS)

This report presents a review of the epidemiology of the cases of TB notified to the NDSC by each of the health boards in Ireland during 2000. 2000 is the third year that national epidemiological data on TB has been collated by NDSC.

While global TB control is improving, with more cases than ever being managed using the World Health Organisation's Directly Observed Treatment Short-course (DOTS) strategy, the number of cases of TB worldwide has continued to increase each year. In 1999, there were an estimated 8.4 million new TB cases worldwide, an increase on the 8.0 million cases estimated in 1997. This continuing rise in the caseload, despite the improved global control programme, is largely due to the increases seen in developing countries and particularly in the African countries most affected by HIV/AIDS pandemic where the two diseases are frequently associated and where there has been a 20% increase in TB incidence.

With the overall improvement in the management of TB, high treatment success rates have been achieved. At the same time, however, multi-drug resistant forms of *Mycobacterium tuberculosis* have been increasingly emerging. In 2000 395 cases of TB were reported in Ireland which represented the lowest annual incidence rate ever in the country. In the previous two reporting years the number of reported cases of TB in Ireland had increased after a persistent decline in the early nineties.

Looking at the incidence rates for the indigenous population in each health board nationally, the rate in the Mid-Western Health Board was still the highest seen in 2000 at 14.0 cases per 100,000 population, with the rate for the Southern Health Board remaining the second highest at 13.9. *In 2000, 11.4% of all cases of TB notified were known to have been born outside Ireland.* This is less than in 1999 when the rate was 13.8%. Compared to other European countries it is still one of the lowest proportions of TB cases in non-nationals in the EU.

Case Definitions

A number of case definitions have been used in compiling the report, these definitions were based on those recommended by the National TB Working Party (1996) and include :-

- A notified case of TB refers to clinically active disease due to infection with organisms of the Mycobacterium tuberculosis complex.
- A definite case of tuberculosis is a case with culture confirmed disease due to Tuberculosis complex.
- Pulmonary TB is defined as a laboratory confirmed case.
- Extra pulmonary TB is defined as a patient with a smear, culture or histology specimen from extra-pulmonary site.
- A recurrent case is defined as a patient with a documented history of TB prior to their 2000 notification.
- Indigenous population is defined as those who were born in Ireland.

Methods and Data Analysis

Individual case notification forms were completed by Area Medical Officers using clinical, microbiological and histological data available to them. These forms were then collated in the Departments of Public Health.

Results

There were 395 cases of TB notified in the period January 1st – December 31st, 2000.

Table 1 – TB cases in each health board in the year 2000

Health Board	Cases	Crude rate/100,000	95% Crude Incidence for rate
ERHA	143	11.0	9.2-12.8
MHB	16	7.8	4.0-11.6
MWHB	47	14.8	10.6-19.1
NEHB	21	6.9	3.9-9.8
NWHB	9	4.3	1.5-7.1
SEHB	41	10.5	7.3-13.7
SHB	80	14.6	11.4-17.8
WHB	38	10.8	7.4-14.2
Ireland	395	10.9	9.8-12.0

Geographic origin of TB cases

Forty-five of the TB patients (11.4% of all notified cases) were known to have been born outside Ireland. The corresponding figure for 1999 was 13.8%. In 2000, the non-national patients with TB originated from 18 countries. TB cases in non-nationals are shown in Table 2.

Table 2. Cases of TB in non-nationals patients, 2000

Health Board	Born outside Ireland	% of health board cases
ERHA	25	17.5
MHB	2	12.5
MWHB	3	6.4
NEHB	4	19.0
NWHB	0	0
SEHB	4	9.8
SHB	5	6.3
WHB	2	5.3
TOTAL	45	11.4

Table 3. Diagnostic categories of TB cases in Ireland, 2000

Diagnosis	No. cases	%
Pulmonary	280	70.9
Pulmonary + Extrapulmonary	21	5.3
Extrapulmonary	92	23.3
Unknown	2	0.5
Total	395	100

Treatment Outcome

Of the 395 cases of TB notified in 2000, the outcome was recorded in 235 cases (59.5%). Of these cases, 181 (77%) completed treatment, 37 (15.7%) died and six (2.6%) were lost to follow-up. In 11 cases (4.7%) treatment was interrupted. In six of the 37 deaths TB was recorded as the cause of death.

BCG Vaccination

As reported by the Working Party on Tuberculosis in their Report on Tuberculosis (Department of Health and Children, 1996), cessation of neonatal BCG should be considered provided certain basic requirements are in place. Ireland currently does not meet all of the criteria set by the International Union Against Tuberculosis and Lung Disease for discontinuation of national BCG vaccination programmes.

Conclusions

- There was a 15.8% decrease in TB case notifications in 2000 compared to the previous year.
- 11.4% of all TB cases notified in 2000 were in people known to have been born outside of Ireland, a decrease on the proportion of non-nationals noted in the previous year (13.8%).
- 76.2% of the TB cases notified in 2000 had a pulmonary component.
- There were three cases of Multi-drug resistant TB notified in 2000.
- Recorded treatment outcome data on TB case notification forms was available on 60% of cases notified in 2000.

T.B. Services – Northern Area Health Board

The TB clinic at the Mater Hospital was established in 1986. The clinic provides a dedicated TB contact tracing service for all patient's in our Board's area suffering from TB. The clinic operates on Monday and Thursday mornings and alternate Fridays.

The clinic is staffed by a respiratory physician and his team who attend on Thursday mornings to monitor the on-going treatment of TB patient and to assist with any queries that arise as a result of contact tracing. The clinic is also staffed by a public health doctor and public health nurse from our Board. Secretarial support is also provided by our Board.

Ninety cases of TB were diagnosed in our Boards area in 2001. Details for the period 1997 – 2001 are as follows :-

Community Care Area	1997	1998	1999	2000	2001
Area 6	21	30	23	27	30
Area 7	15	28	25	23	36
Area 8	19	21	19	21	24
TOTAL	55	79	67	71	90

Both Community Care Areas 6 & 7 continue to have significantly higher levels of TB cases. In addition a significant number of homeless persons and asylum seekers reside in the North Inner City.

This has to be seen in the context of homeless persons presenting in Dublin and the national perspective relating there to. See details attached at Appendix I

Contacts of 67 cases of TB were screened at the clinic in 2001. Of these, 62 cases were diagnosed with pulmonary disease and 5 with extra-pulmonary disease.

The numbers attending the clinic continue to increase and many individuals present at the clinic with complexities such as non-compliance and an unwillingness to adhere to a medication regime. These complexities are often compounded by socio-economic issues.

In order to address the increasing demands on this vital service, we have sought additional development proposals for 2003 in order to increase the existing staffing resources.

Asylum Seekers – Medical Screening

Medical screening is made available to all asylum seekers who wish to avail of it, by the Northern Area Health Board (adults and children). These services are available in 2 clinics which are located in Parnell Square West and in Baleskin, St. Margaret's, Co. Dublin.

Each centre provides a full range of screening, including screening for TB and other infectious diseases. TB screening initially involves a mantoux test and in most cases a chest x-ray is offered.

The Mater Hospital provides an x-ray screening facility for adults attending the clinic in Parnell Square West.

St. Mary's Hospital, Phoenix Park also provides an x-ray screening facility for clients attending Baleskin.

We are currently investigating the feasibility of a dedicated x-ray facility being located in the clinic in Baleskin.

M. Windle
Chief Executive

21st November, 2002

NORTHERN AREA HEALTH BOARD

HOMELESS PERSONS UNIT

Cases presenting to the Homeless Persons Unit for the provision of emergency accommodation in 2001 and 2002 (to 30/09/2002), according to County / Country of origin.

County / Country of origin	2001	2002
Dublin	1577	1728
Antrim	2	0
Carlow	5	9
Cavan	2	4
Clare	4	2
Cork	28	15
Donegal	8	6
Kerry	8	5
Kildare	31	41
Kilkenny	3	6
Laois	1	2
Leitrim	1	1
Limerick	17	14
Longford	5	1
Louth	13	13
Meath	15	26
Northern Ireland	30	-
Offaly	0	4
Roscommon	4	4
Sligo	2	4
Tipperary	5	4
Tyrone	3	0
Waterford	7	11
Westmeath	7	7
Wexford	5	5
Wicklow	18	26
UK	304	-
Other EU Country	16	-
Non EU/Other/Unknown	303	-