



Tuberculosis in South East London

Annual Report for 2004

Sam Perkins
on behalf of the South East London TB Sector Group

December 2005

Foreword

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Dear Colleague,

We are pleased to enclose the Annual Report for Tuberculosis in South East London for 2004. This report outlines the epidemiology of TB locally, and describes the implementation of some recent regional and national TB control initiatives within the South East London Sector.

2004 saw the launch of the CMO's National TB Action Plan, *Stopping Tuberculosis in England*. A number of initiatives have been developed and are currently being implemented, both within the sector and across London, to take this action plan forward and strengthen TB control activities further, and these are described in section 11 of this report.

There has been a considerable change to the national BCG programme in 2005, with an emphasis on ensuring at-risk neonates, infants and young adults (including new entrants) are immunised. This new programme has presented a number of challenges for PCTs locally, not least in prioritising how and to whom the programme should be delivered. Both the South East London Health Protection Unit and the TB Sector Group continue to work with PCT and Acute Trust colleagues locally in the implementation of this policy.

The first and second drafts of the NICE guidance for the clinical diagnosis and management of TB, and measures for its prevention and control were published for consultation in 2005, and these were reviewed and commented on by the South East London TB Sector Group. Publication of the finalised guidance is expected in Spring 2006.

Preliminary data for 2005 indicate that the number of cases has continued to increase, with more than 500 notifications being entered onto the London TB Register by mid December 2005. Further development of the South East London TB Network, and continued engagement with stakeholders locally, regionally and nationally will continue, in order to meet the challenge of controlling and preventing TB in South East London.

With best wishes,

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on behalf of the South East London TB Sector Group

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1. Introduction

This is the third annual tuberculosis (TB) report for South East London. As for 2003, all data are from the London TB Register (LTBR), unless otherwise stated. The LTBR is a web-based real-time surveillance system, which has been used throughout the sector since its launch in 2002. Note that all LTBR data are provisional, as records can be amended at any time.

This report describes the local epidemiology of TB in 2004. Wherever possible, comparisons are made with previous years. Additional PCT level information is provided in the appendices (see Appendix 1 – PCT snapshots).

At a glance:

- TB notifications in South East London rose by 6% to a total of 492 in 2004, with Southwark, Lambeth and Greenwich reporting the highest numbers of cases
- 51% of all cases occurred in the Black African community
- the peak age for notifications for both men and women was in the 20-29 year age group
- 47% of all cases were pulmonary TB
- paediatric cases accounted for 12% of all TB notifications in 2004, an increase of 41% on 2003

2. Notifications for 2004 and geographical distribution

In total, 492 patients (resident in South East London) were notified with TB in 2004, an increase of 6% on the previous year. This represents an overall incidence rate of 33 per 100,000 population for the sector.

Table 1: Number of notifications and rates per 100,000 population by borough in South East London, 2002-2004

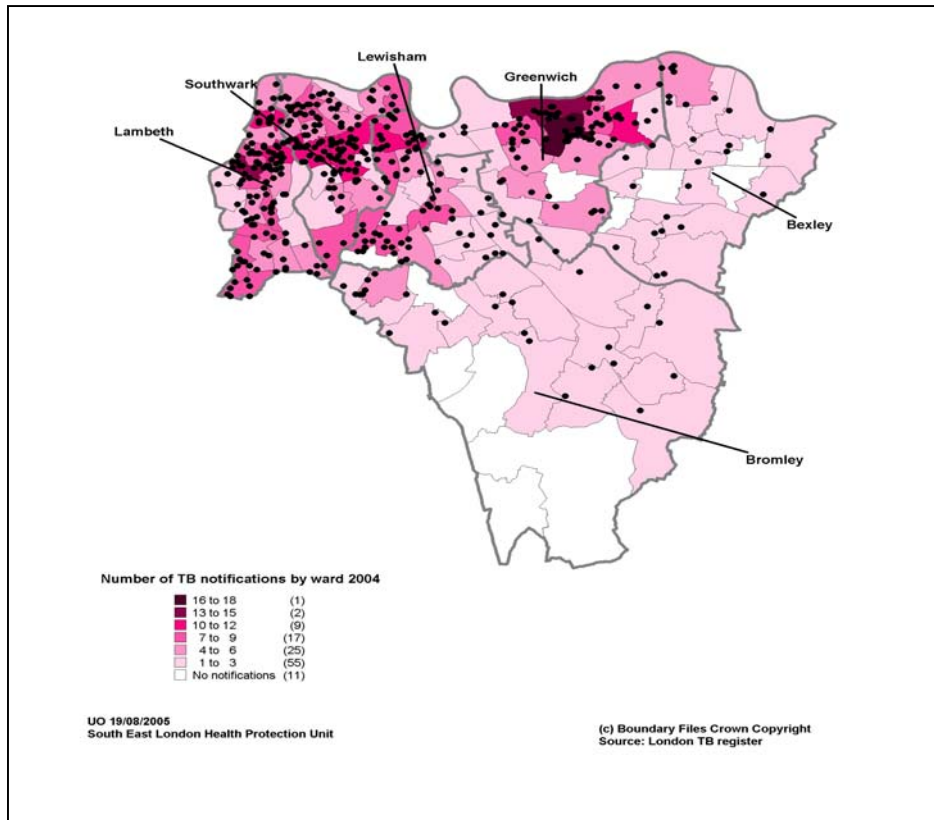
Borough	No. of notifications 2002 (rate per 100,000)	No. of notifications 2003 (rate per 100,000)	No. of notifications 2004 (rate per 100,000)
Bexley	19 (8.7)	29 (13.3)	30 (13.7)
Bromley	24 (8.1)	32 (10.8)	29 (9.8)
Greenwich	80 (37.3)	73 (34.0)	91 (42.4)
Lambeth	136 (51.1)	151 (56.7)	127 (47.7)
Lewisham	94 (37.8)	78 (31.3)	80 (32.1)
Southwark	108 (44.1)	101 (41.1)	135 (55.1)
Sector total	461* (31 per 100,000)	464 (31 per 100,000)	492 (33 per 100,000)

*one missing postcode in the 2002 data

NB: all rates calculated using 2001 Census data (to maintain continuity of trend analysis)

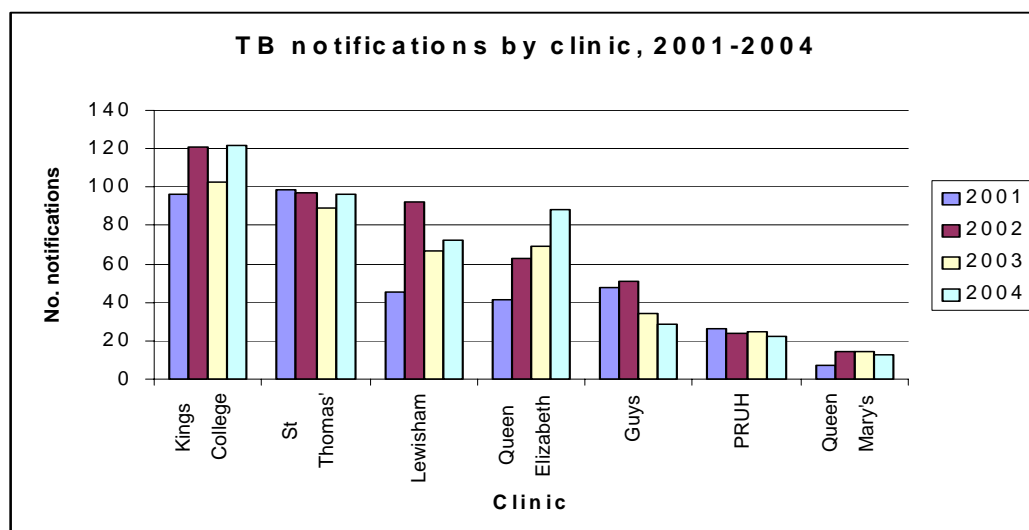
Southwark, Lambeth and Greenwich reported the highest numbers of cases, with Southwark showing a 34% increase in notifications between 2003 and 2004. Conversely, Lambeth showed a 16 % decrease in notifications for the same period, while Greenwich continued to show an upward trend, with a further 25% increase in cases between 2003 and 2004.

Figure 1: Notifications by ward in South East London, 2004



Ninety per cent of all cases (442) were notified in clinics in South East London, with the 50 remaining cases being notified at clinics outside of the sector (see Appendix 2 – table 3: TB notifications by clinics outside of the South East London sector, 2004). Additionally, an estimated 44 patients were notified in clinics within the sector who were resident elsewhere.

Figure 2: Notifications by clinic, 2001-2004 (SE London residents only)

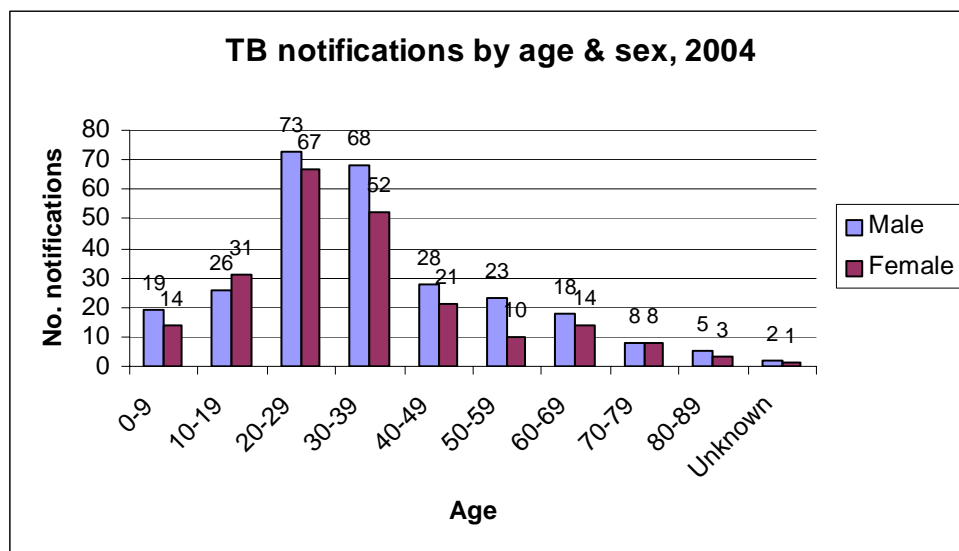


Compared to other parts of the capital, South East London continued to have fewer notifications than North West, North East and North Central London, and more notifications than South West London in 2004. The incidence rate for London as a whole was 43 per 100,000 in 2004, based on mid-year population estimates (see Appendix 2, table 4: TB notifications and rates by London sector, 2002-2004).

3. Age and sex distribution

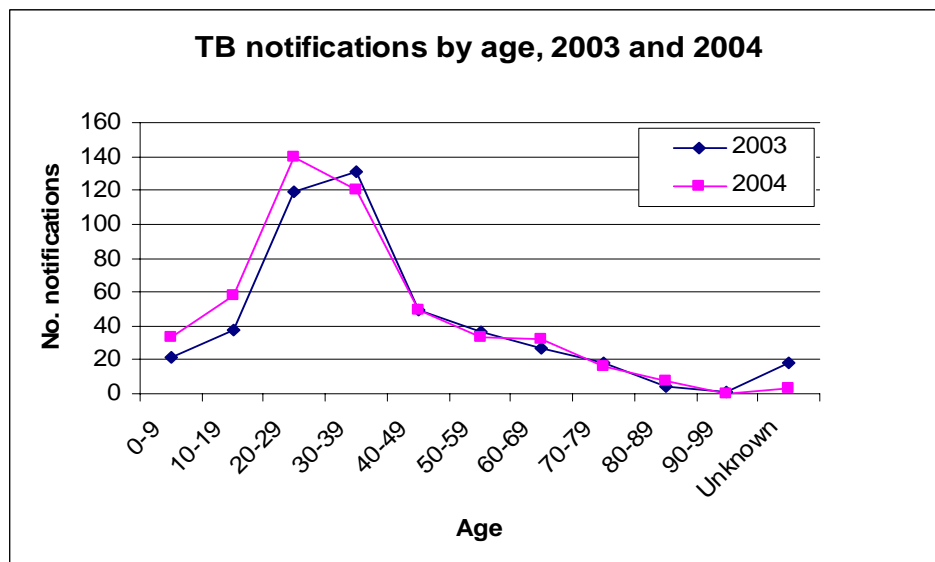
As in previous years, more cases of TB were notified in males (n = 270) than females (n = 221, plus one case where the sex was not noted). In both sexes, the peak incidence occurred in the 20-29 year age group, which reflects national trends (see also http://www.hpa.org.uk/infections/topics_az/tb/epidemiology/figures/figure8.htm).

Figure 3: TB notifications by age and sex, 2004



Compared with 2003, where the peak incidence was seen in the 30-39 year age group, this indicates a shift to the left and suggests ongoing transmission in the younger age groups. It is worth noting that in patients who were born overseas

Figure 4: TB notifications by age, 2003-2004



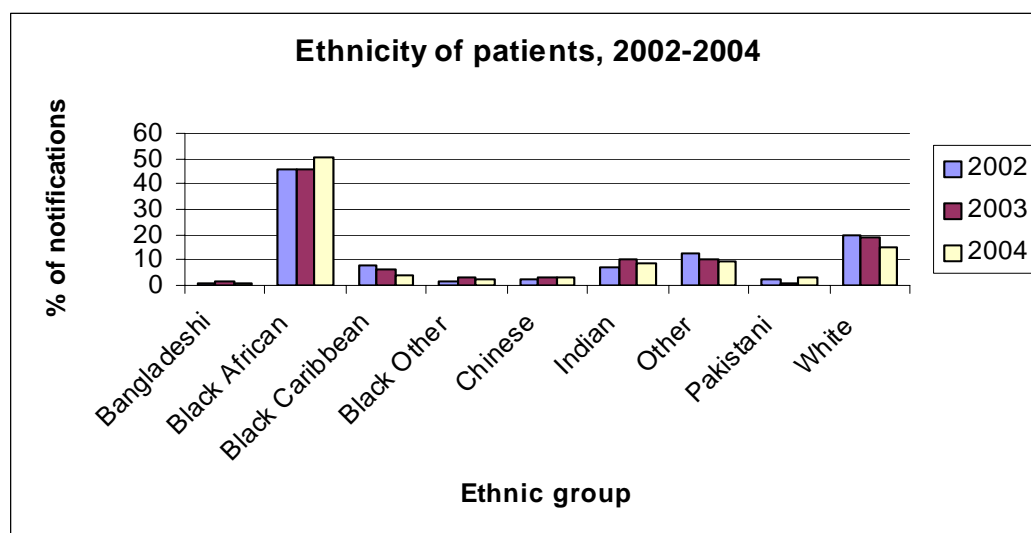
(67% of all notifications, equivalent to 331 patients), the age distribution of cases mirrors that of the overall cohort, with a peak number of notifications also seen in the 20-29 year age group (see Appendix 2 – figures 11: Age distribution of patients born outside the UK, 2004).

Conversely, amongst those patients who were born in the UK the peak age group for TB notifications is in the 0-9 year olds, indicating ongoing transmission in the community from adults to children, with a second, smaller peak in the 30-39 year age group (see Appendix 2 – figure 12: Age distribution of patients born in the UK, 2004).

4. Ethnic origin

Fifty one per cent of TB notifications were seen in the Black African population in 2004, an increase of 6% on the previous two years. Notifications in the white population showed a slight decrease, from 19% in 2003 to 15% in 2004, with notifications in other groups remaining similar to previous years.

Figure 5: Ethnicity of patients, 2002-2004



NB: ethnic group is a mandatory field on the LTBR, but it currently only records pre-2001 Census ethnic groups, and does not therefore allow for more detailed interpretation of ethnicity at this stage.

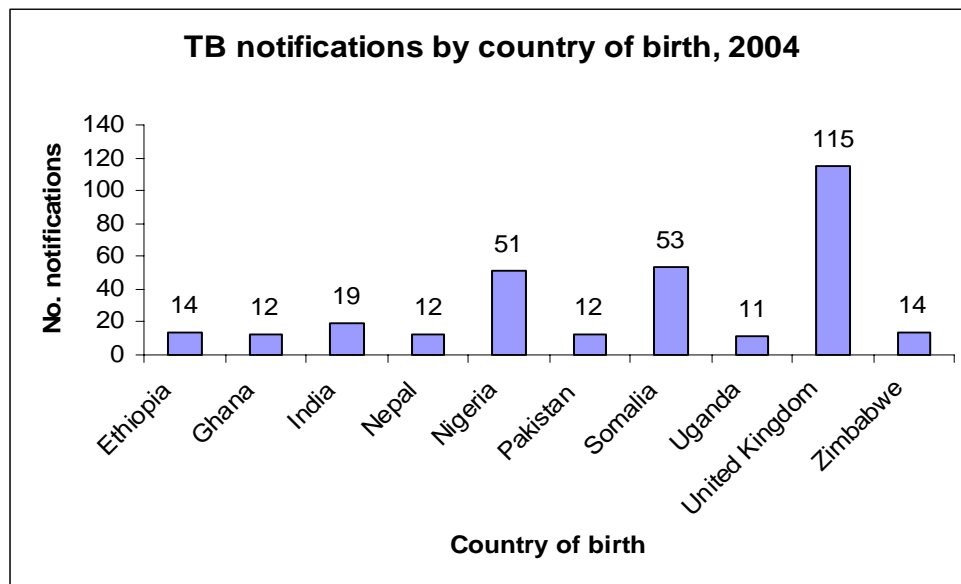
Country of birth was noted for 91% patients (n=449), with 63 different countries being reported. Those countries with more than 10 notifications are shown in figure 6 below. As in previous years, patients born in Somalia show the largest numbers of notifications after those born in the UK, with increases of 15% (n=7) and 22% (n=21) respectively. A significant increase in notifications is also seen in patients born in Nigeria, up by 34% (n=13) in 2004.

Amongst those patients born in the UK, 56% (n=64) were White, and 18% (n=21) were Black African, 6% (n=7) were Black Other, 4% (n=5) were Black Caribbean, 3% (n=4) were Indian, 1% (n=1) were Pakistani, 2% (n=2) were Chinese, and 9% (n=10) were Other.

The year of entry to the UK was identified in patients from the five countries of origin with the most TB notifications in 2004 (see Appendix 2 – figure 13: TB notifications

by year of entry for the five countries with the highest notifications, 2004). Of the 151 patients concerned (originating from Somalia, Nigeria, India, Ethiopia and Zimbabwe), 49% (n=74) of cases were notified in patients who had entered the UK since 2000, with a peak in notifications seen in those patients arriving in 2002, most notably in the Somali-born population. Conversely, the peak for notifications in the Nigerian-born population was seen in the five year period of entry from 1995-1999.

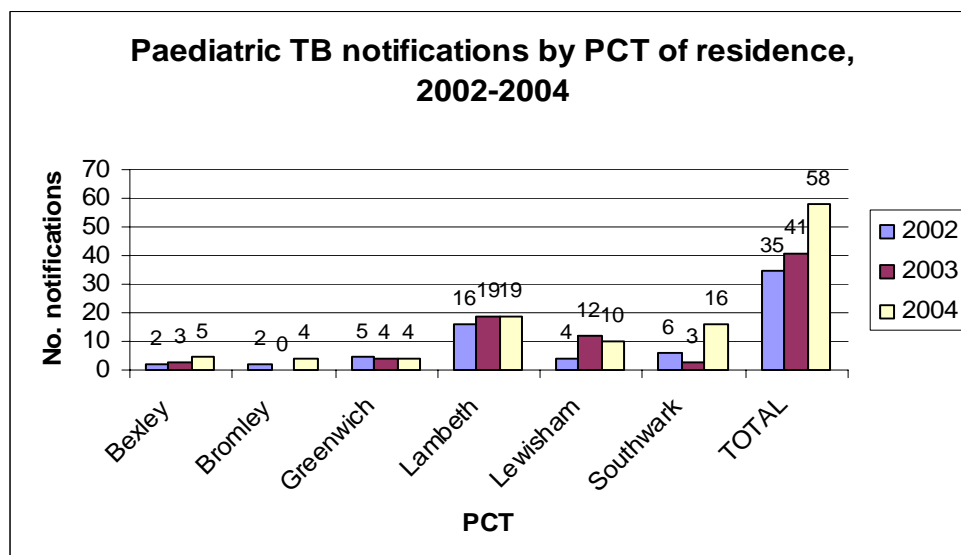
Figure 6: TB notifications by country of birth (with more than 10 notifications), 2004



5. Paediatric cases

Fifty eight cases of paediatric TB (ie: in patients aged 0-15 years inclusive) were notified in 2004, an increase of 41% (n=17) from 2003. Paediatric cases accounted for 12% of all notifications in 2004, and the continuing upward trend in notifications since 2002 indicates ongoing transmission in the community, partly due to possible delays in diagnosis of pulmonary smear positive TB in the adult population.

Figure 7: Paediatric notifications by PCT of residence, 2002-2004



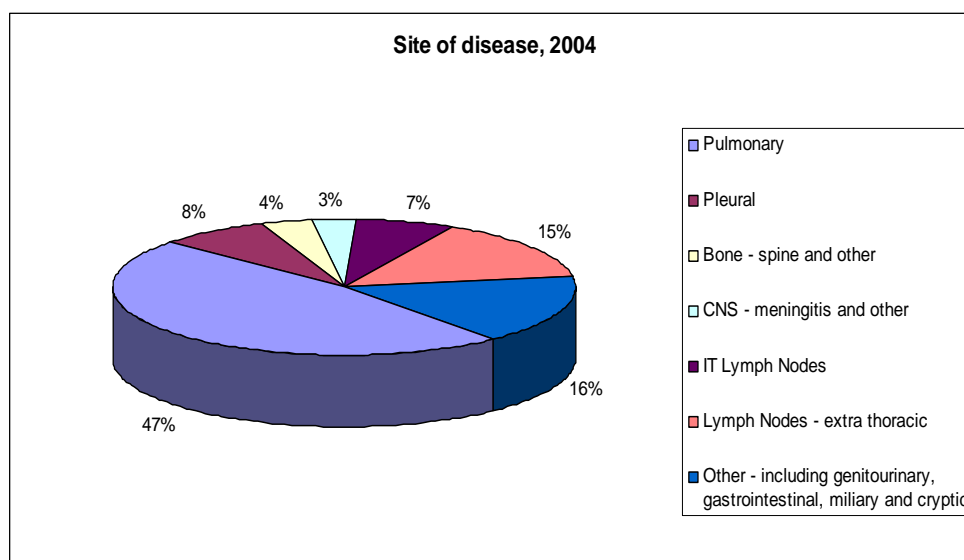
Although these data should be interpreted with caution due to the low numbers involved, it is noteworthy that the number of paediatric cases was highest in Southwark, with an increase of more than 400% on the previous year. Paediatric notifications in Greenwich remained low, despite an increasing trend in overall notifications in the borough in the last three years. Paediatric notifications remained the same in Lambeth in 2004 and accounted for 33% of all paediatric cases, despite an overall decrease in notifications in the borough of 16% in 2004.

In terms of ethnicity, 50% (n=29) of paediatric cases were in the Black African population, mirroring overall notifications within the sector, with 12% of paediatric cases occurring in the white population (see Appendix 2 – figure 14: Paediatric cases by ethnic group, 2004). In total, 62% (n=36) of paediatric cases were born in the UK.

6. Site of disease

Pulmonary TB accounted for 47% (n=251) of all notifications in 2004, 4% lower than in 2003, with all sites of disease reflecting similar trends as in previous years. NB: in some cases, more than one site of disease was recorded.

Figure 8: Site of disease, 2004 notifications



7. Sputum smear status

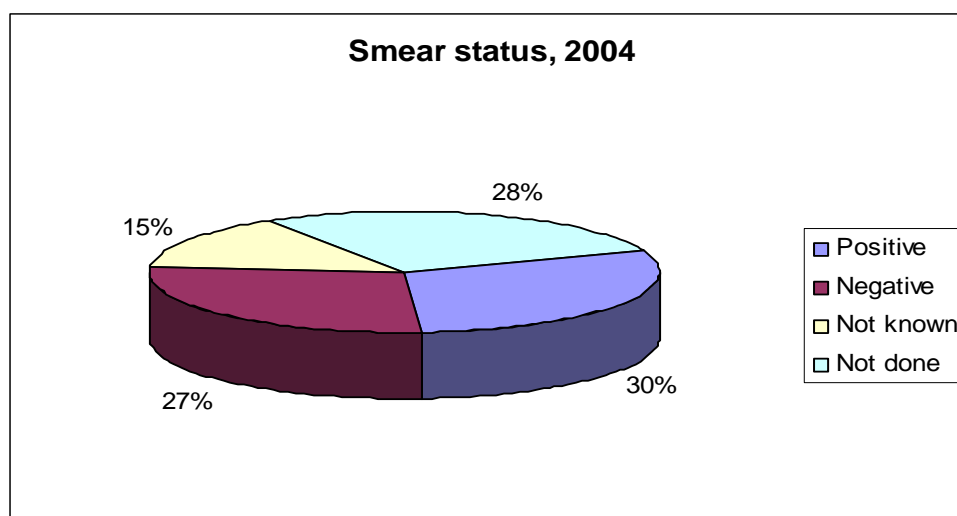
Results for smear status were not found to be significantly different in 2004 from previous years, with 57% of cases confirmed as either sputum smear positive or sputum smear negative.

Investigation of smear status was not done in 28% (n= 140) of cases, largely due to extrapulmonary disease in these patients. However, in 32 of these cases (23% of all cases where smear status is not known), pulmonary TB was diagnosed, which is of some concern, as smear status could not therefore be ascertained.

In 15% of cases (n=73) sputum smear results was not known. Of particular concern were the 29 cases (40%) where the diagnosis was pulmonary TB. Reasons for the lack of sputum smear information in this group is not known, but may be due, at least

in part, to poor specimen quality, or specimens not being submitted for laboratory assessment in an appropriate way.

Figure 9: Smear status, 2004 notifications



Laboratory results were received by the South East London Health Protection Unit from a number of sources, including the Mycobacterium Reference Unit (MRU), and QEH Pathology, along with a number of local authority notifications. These were cross-checked against the LTBR to ensure that all patients were notified (or denotified) appropriately. Cross checking with the LTBR was not possible for 4 patients where *Mycobacterium tuberculosis* was isolated, as patient information was coded and could not be accessed.

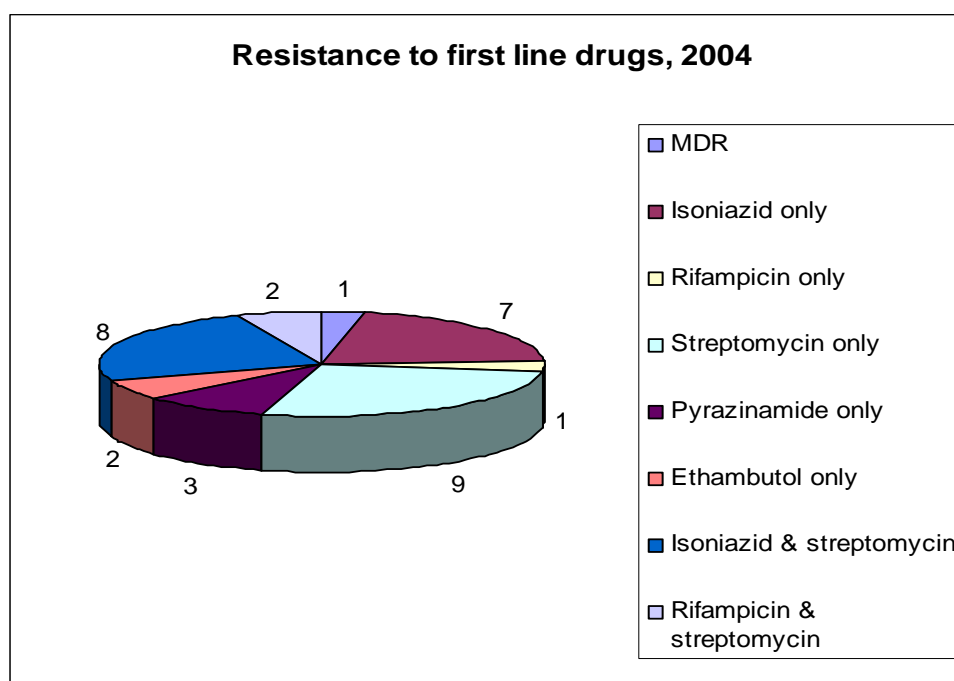
8. Drug resistance

First line drug sensitivities were only recorded in 39% (n=190) of notifications in 2004. Resistance to any first line TB drugs (isoniazid, rifampicin, streptomycin, pyrazinamide and ethambutol) was noted in 33 cases (see figure 10 below), representing 7% of all notifications in the sector, an increase of 2% on 2003. It should be noted that because of incompleteness of drug sensitivity information in many cases, the rates of drug resistance presented here may be an under-estimate of the true situation.

Only one case of multi-drug resistant TB (MDR TB – resistance to at least isoniazid and rifampicin) was notified in 2004, in a patient in Lambeth with no prior history of TB. In addition to isoniazid and rifampicin resistance, this case was also resistant to streptomycin and pyrazinamide.

Isoniazid mono-resistance accounted for 1% (n=7) of all cases in the sector, and 21% of all drug resistant cases in 2004, a decrease of 12% compared to 2003. None of these cases were associated with the North London isoniazid-resistant TB outbreak in 2004 (personal communication – Sarah Forrester, HPA London).

Figure 10: Resistance to first line drugs, 2004



9. Progress towards London TB targets in 2004 – report on the first two quarters of the year

(i) Treatment completion to be 90% or more (to be reported 12-15 months after the start of treatment)

The overall treatment completion rate for the first two quarters of 2004 was 84.8% (compared to a treatment completion rate of 86.3% for 2003) – see table 2 below. Although not quite meeting the London target, this compared favourably with the national treatment completion target of 85% (as mentioned in the National TB Action Plan, October 2004), and for treatment completion rates for London as a whole.

Treatment completion rates were lower at the Queen Elizabeth Hospital in Greenwich in the first two quarters of 2004, due to a proportionately large number of patients being lost-to-follow up (n=5) or transferred out (n=6) during this period. Similarly, treatment completion rates were lower at the Princess Royal University Hospital in Bromley, due to a larger proportion of patients being transferred out (n=2) or lost-to-follow-up (n=1), although it should be noted that in this case the overall number of notifications was much smaller.

(ii) Maintain specialist TB nursing posts at one nurse per 40 notifications

Four hundred and ninety two patients (resident in SE London) were notified across the sector in 2004, corresponding to a nurse : patient ratio of 1:43 (NB: equivalent to 11.5 nursing posts across the sector, including vacant posts). However, with 2.5 nursing posts vacant by the end of the year, this meant that the overall nurse: patient ratio was 1: 55, which has continued to put pressure on an already stretched service locally.

Meanwhile, two TB caseworkers were recruited, at Kings College Hospital and St Thomas' Hospital, and have provided significant benefits to staff and patients in providing multi-disciplinary support, liaison and advocacy, in line with recommendations in the National TB Action Plan (see below).

Table 2: Treatment outcomes by clinic for the first two quarters of 2004

Clinic	No. notifications in 1 st & 2 nd quarters (01/01/2004 – 30/06/2004)	No. patients still on initially planned treatment	No. patients treatment stopped – not TB	Number (%) of patients who completed treatment	Number (%) of patients who completed treatment	Combined treatment completion for 1 st & 2 nd quarters. 2004
	(SE London residents only)	(1st & 2nd quarters)	(1 st & 2 nd quarters)	1 st quarter 01/01/2004 – 31/03/2004 (*)	2 nd quarter 01/04/2004 – 30/06/2004 (*)	
St Thomas	54	1	1	23 (88.5%)	26 (92.3%)	90.4%
Kings	58	1	6	16 (100%)	34 (97.4%)	98.0%
Guys	14	0	0	7 (100%)	5 (71.4%)	85.7%
Lewisham	28	1	0	11 (78.6%)	12 (92.3%)	85.2%
Queen Elizabeth Hospital	43	0	2	18 (72%)	9 (56.3%)	65.9%
Queen Mary's Sidcup	7	0	1	1 (50%)	4 (100%)	83.3%
Princess Royal Univ. Hospital	16	0	3	6 (60%)	3 (100%)	69.2%
SE London	220	3	13	82 (82%)	91 (87.5%)	84.8%
London						83% ⁽¹⁾

Source: London TB Register

* ie: (no. patients who have completed treatment)/(total number of notifications minus those patients still on initially planned treatment, and those whose treatment was stopped - found not to be TB), expressed as a percentage (in accordance with the recommendations outlined in the ⁽¹⁾First Annual Report on Tuberculosis Treatment Outcome Surveillance in England, Wales and Northern Ireland, July 2004, HPA Tuberculosis section – available from the HPA website – www.hpa.org.uk).

(iii) All new patients to be entered onto the London TB Register

The London TB Register has been used as the sole source of TB surveillance and epidemiology data in SE London since 2003. Cross checking of laboratory notifications with the LTBR locally ensured that laboratory confirmed cases were notified (or denotified) in a timely and appropriate manner.

(iv) Monitor how many patients presenting with/being treated for TB have been offered and recommended an HIV test (between ages 16-64 years)

Across the sector an increasing number of patients are being offered and recommended an HIV test, although these data are not available from the LTBR. A sector wide audit is recommended, to identify current practice and areas for further development.

(v) By April 2004 the maximum time between first contact with a healthcare professional and diagnosis to be no more than two weeks

A delays-in-diagnosis audit was undertaken in the third quarter of 2004, involving all new notifications in the sector in this period. Of the 90 patients where dates were available, only 48 patients (54%) were referred to the chest clinic within one month of first contact with a healthcare professional, of which 28 (31%) were referred within the two week target period. In the remaining patients, delays in referral ranged from 2 – 8 months, with two cases with reported delays of up to 20 and 29 months. Four patients were first seen by a healthcare professional at the chest clinic.

Amongst these 90 patients, 41% (n=37) of referrals were from hospital physicians, with a further 8% (n=7) coming via A&E. GP referrals accounted for 32% (n=27) of referrals. Ten per cent (n=9) of these patients were identified through contact tracing.

Further analysis will be undertaken in 2005, to identify possible reasons behind these delays in diagnoses locally, with a view to promoting awareness about TB amongst patients, the public and healthcare professionals, and developing needs based training and education resources to address these issues.

(vi) TB to be included in all Health Protection Plans

TB continues to be included in local health protection planning, including both local (SE London) and regional (London) HPA annual business plans.

(vii) All sectors to have reviewed their negative pressure facilities and to have an action plan to upgrade them developed in partnership with patients and their representatives as well as expert advisers by April 2004

A review of negative pressure facilities within SE London was undertaken in November 2004, as previously reported, and showed that the sector is well served for negative pressure and isolation facilities across the board (NB: these rooms are not exclusively available for TB patients).

In total, 18 negative pressure rooms (with lobbies and en suite facilities) were available on general medical and respiratory wards across the sector by the beginning of 2004, along with an additional 8 negative pressure rooms on maturity, renal and ITU wards. A further 4 negative pressure rooms have been commissioned, and/or are due to be completed by November 2006. Three interchangeable positive/negative pressure rooms are also available within the sector.

10. TB incidents

The SE London Health Protection Unit (SELHPU), together with sector TB nurses and physicians, responded to an increasing number of increasingly complex incidents in 2004, in a variety of settings including schools, further education colleges, nurseries, prisons and community groups. Several of these are highlighted below.

(i) TB in a playgroup and youth group volunteer:

The SELHPU was notified of a case of sputum smear positive pulmonary TB in mid July 2004. The case had a 5 month history of cough, with no history of foreign travel.

Household contacts were screened and given chemoprophylaxis. A further 7 family contacts were identified for screening, who were resident outside of the sector. The case had volunteered at a local playgroup and youth group throughout the symptomatic period, and it was therefore agreed that all children in these groups should be offered screening. Letters were drafted to parents and a briefing meeting was organised. In total approximately 50 children were screened, and they all tested negative. Additionally, nothing was picked up on the screening of other contacts.

While this incident was fairly straight forward in its approach, particular concerns were highlighted around the delay in referral to the local chest clinic for diagnosis and treatment.

(ii) TB in a nursery worker:

The SELHPU was notified on Christmas Eve 2004 of a case of open TB in a nursery. The case had been symptomatic for approximately one month, although the date of onset was unclear. One household contact was identified, who was negative on contact screening.

The nursery was in a large building with over 115 children aged between 3 months and 5 years. There were around 25 staff. The case had worked in all parts of the nursery. It was therefore decided to offer screening to all children and staff at the nursery for the three months before diagnosis. Heaf tests were offered to the children and chest x-rays to staff.

Not all children attended for screening, although further appointments and reminders were sent. All staff screens were negative. Three children needing paediatric follow up were identified after the first round of screening; two children with positive Heaf tests and one with a negative Heaf but abnormal chest x-ray performed by their GP for another reason. All the children were in the same area of the nursery where children aged between 18 and 36 months were cared for. It was decided to offer further screening to those children in the affected part of the nursery (CXR, quantiferon gold (gamma interferon) blood test), and to younger children (CXR).

A special session was offered on one day at the nursery, where blood samples were taken from the children for interferon-gamma testing. This required a considerable amount of organisation. Three adults per child, plus the parents and paediatric phlebotomists were needed. It was also necessary to obtain specific equipment not available at the nursery including adult chairs with arms, plus sample bottles, and to arrange transport to the laboratory. Staff from the HPA Mycobacterium Reference Unit attended the session to facilitate this.

Forty blood tests were taken on the day and at a subsequent additional session organised at the local hospital. All blood test results were negative, as were those x-rays performed. Subsequently one additional child was identified who required paediatric follow-up.

Despite several reminders, a significant proportion of children did not attend for screening at all, or their screening was incomplete. The initial screening offered to children at the nursery consisted of a Heaf test. No chemoprophylaxis was given. This was based on the incident team's judgement of the length of time between last exposure (around 6-8 weeks) and interpretation of the British Thoracic Society guidelines. Results of the initial screening showed three children in whom paediatric follow up was indicated. A second round of screening was offered in view of the results and the concern that one of these children had been 'missed' on Heaf testing

and only picked up on chest X-ray (CXR). There had been debate in the incident team about whether a chest X-ray was needed in the initial round of screening. Tuberculin skin testing is a main element in the screening for TB, but has problems of specificity and sensitivity. The gamma interferon assay may have better accuracy, however has practical difficulties, and costs are greater. Its place in routine screening is not yet defined.

(iii) TB at a local further education college:

A case of smear positive pulmonary TB was notified to the SELHPU in mid November 2004 by a chest clinic in South West London. The 16 year old patient had arrived in the UK from Guinea 4 months previously, and was studying at a further education college in SE London. The patient had an 8 week history of coughing and night sweats, and was admitted to hospital over the weekend with haemoptysis. Five household contacts were identified for screening by the SW London clinic.

Some difficulty was encountered in communicating with the college to arrange an incident meeting.

A second case was notified to the SELHPU two months later in an 18 year old also attending the same college. This case presented with shortness of breath and haemoptysis. The cases did not appear to be linked, as they were studying on different courses and lived in different areas.

An incident meeting to discuss both cases was finally arranged in January 2005, and in total 69 contacts were identified for screening (based on at least 8 hours cumulative contact). For those with no prior history of BCG, Heaf testing was arranged, and the remainder were offered CXR appointments at the local hospital, in special block sessions.

In total 42 CXRs were done (all normal) and 1 paediatric referral was made on the basis of a grade 2 Heaf reaction.

Subsequently, two further cases have been notified to the SELHPU from students attending this college in 2005, in one case in a patient who had been screened as a contact of one of the previous cases three months before, and had then had a normal CXR. Good communication links have now been established with the college, and TB awareness sessions are planned for staff and students. Issues were also raised about the logistics of chest x-raying large numbers of contacts locally.

11. National TB Action Plan

The Chief Medical Officer published a National TB Action Plan in October 2004, with the aims of reducing the risk of people being newly infected with TB, providing high quality treatment and care for people with TB, and maintaining low levels of drug resistance, particularly multi-drug resistant TB (MDR TB).

This Action Plan set out the following ten recommended actions for controlling TB:

- increased awareness
- strong commitment and leadership
- high quality surveillance
- excellence in clinical care

- well organised and co-ordinated patient services
- first class laboratory services
- highly effective disease control at population level
- an expert workforce
- leading edge research
- international partnership

The South East London TB Sector Group has prioritised a number of activities for local implementation of the Action Plan, including:

- development and implementation of ongoing TB training, education and awareness raising for frontline healthcare professionals (eg: GPs and A&E personnel), voluntary sector staff and others working with TB patients, and patients and their families and friends – including through training courses, one-day TB conferences, and workshop sessions
- further development of the South East London TB network, including representation from PCT and acute trusts
- development of community based TB screening, as part of wider new entrant primary healthcare provision
- strengthening of laboratory TB diagnostics within the sector – including a local evaluation of the new generation interferon-gamma blood tests for detecting latent TB infection (as mentioned in the draft NICE TB guidelines in 2005 – due to be published in Spring 2006)

To assist in the development and implementation of these activities locally, a bid was successfully submitted to the Department of Health in March 2005, and a grant of £40,000 was received to take forward these initiatives – to be reported on in the 2005 Annual TB Report for South East London.

12. Conclusions and activities in 2005

TB notifications increased by 6% overall in South East London in 2004, with an increase in paediatric cases of 41% from 2003. Chest clinics locally continued to meet national treatment completion rates as set out in the National TB Action Plan (84.8% in the first half of 2004), and while numbers of notifications have continued to increase, and there has been an increasing complexity of both cases and incidents, TB services have continued to develop in partnership with local stakeholders throughout this period.

TB in Black Africans made up more than half of all notifications in SE London in 2004. Further work is needed to address the needs of all ethnic groups in the sector to ensure access to services, a reduction in inequalities in healthcare, and robust TB prevention and control.

2004 saw the launch of the National TB Action Plan, and a number of other important national policies and guidelines have followed on from this in 2005, including the introduction of the revised National BCG Programme, and wide consultation on the 1st and 2nd drafts of the NICE guidance (*“Tuberculosis: clinical diagnosis and management of tuberculosis, and measures for its prevention and control”* - available at www.nice.org.uk) due to be published in spring 2006.

Work has continued in 2005 to implement these national guidelines locally, with the development of a number of important activities, including:

- funding received from the Department of Health for 2005-2006 for the local implementation of the National TB Action Plan. Local priorities include:
 - improving access and reducing delays in diagnosis through needs based training, education and awareness raising for key groups locally. This work is being undertaken by the SE London TB Project Officer in consultation with PCTs, acute trusts, and local community and voluntary groups
 - support to local diagnostic laboratory services, and assessment of the new generation interferon-gamma blood tests as a screening and diagnostic tool (as highlighted in the draft NICE guidelines)
 - ongoing support to patients with complex needs, including the provision of treatment incentives (eg: luncheon vouchers and bus passes), and support for specialist TB training for the TB caseworker at St. Thomas' Hospital
- review of and feedback on the 1st and 2nd drafts of the NICE guidelines for TB management, prevention and control by the SE London TB Sector Group and PCTs locally
- support to PCTs and local service providers in the implementation of the revised National BCG Programme, launched by the CMO in July 2005. Local priorities include:
 - provision of a universal neonatal BCG programme in Greenwich, Lambeth, Lewisham and Southwark
 - identification of at-risk groups (including individuals entering the UK from high incidence countries, and the children with parents or grandparents who were born in high incidence countries), and provision of BCG for these groups at appropriate opportunities (eg: at school, or as part of wider new entrant screening)
 - ongoing training and support to key staff who are identified to implement this programme locally
 - high uptake of neonatal BCG services will be important, particularly given the increasing numbers of paediatric TB locally in 2002-2004

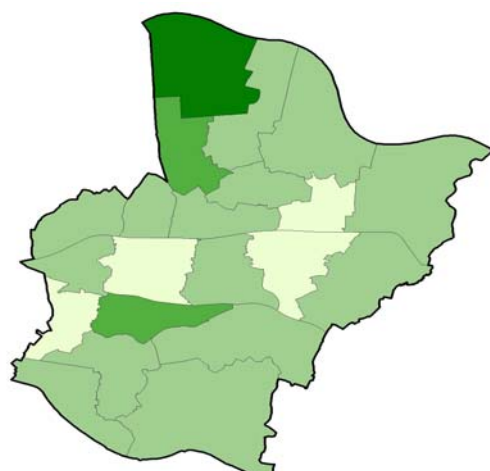
Acknowledgements

Thanks to the South East London TB Sector Group, and particularly to colleagues in the TB clinics within the sector for their ongoing assistance, not least in data collection and entry. Thanks also to the LTBR Support Team at HPA London, and to colleagues in the local Prison Service, local authorities and voluntary sectors for their ongoing commitment and support to TB control locally.

Particular thanks to Mike King, Penny Neave and Uche Osuagwu from the SE London Health Protection Unit for assistance with the LTBR, data cleaning, and for providing the maps using Map Info software.

Annex 1: PCT snapshots

(i) Bexley PCT



Number of TB notifications by Ward 2004

5 to 6	(1)
3 to 5	(2)
1 to 3	(14)
No notifications	(4)

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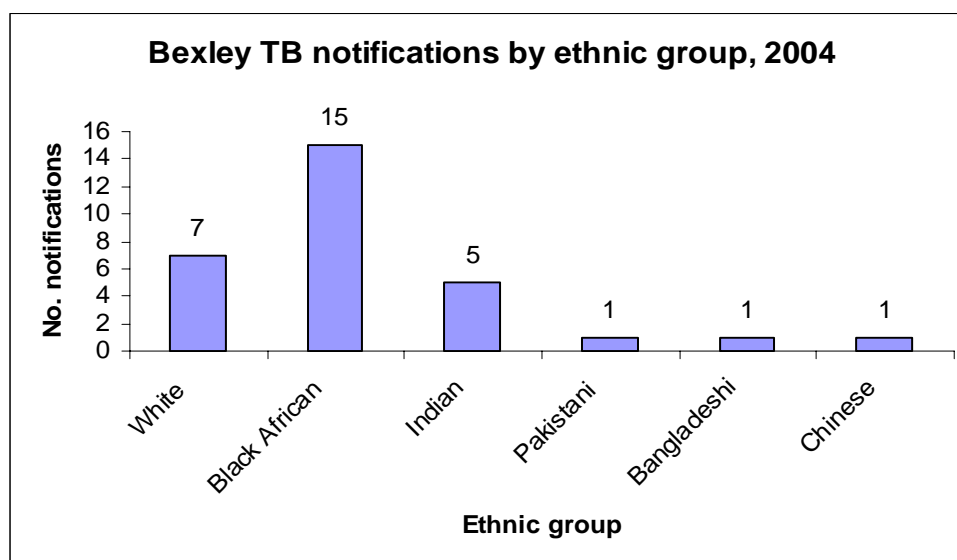
(c) Boundary Files Copyright
Source: London TB Register

2004 data:

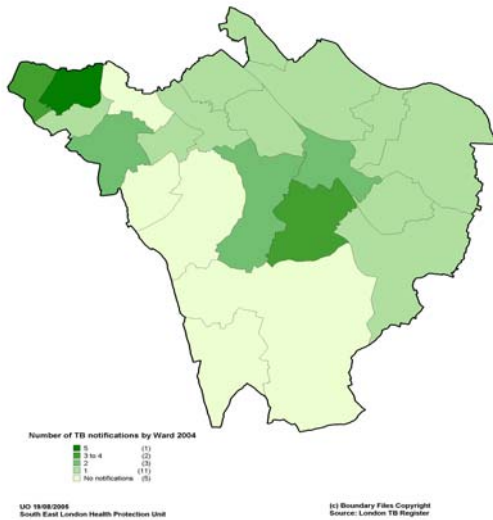
- 30 notifications – an increase of 3% (n=1) from 2003
- incidence rate = 13.7 per 100,000
- 5 paediatric cases – an increase of 67% (n=2) from 2003
- 2 drug resistant cases, including 1 isoniazid mono-resistant case

TB notifications in Bexley by clinic, 2004:

Clinic	No. notifications
Great Ormond Street Hospital	1
London Chest Hospital	2
Non-London clinics	2
Queen Elizabeth Hospital	10
Queen Mary's Hospital	12
St. Thomas' Hospital	1
UCL Middlesex	1
University Hospital Lewisham	1
Total	30



(ii) Bromley PCT

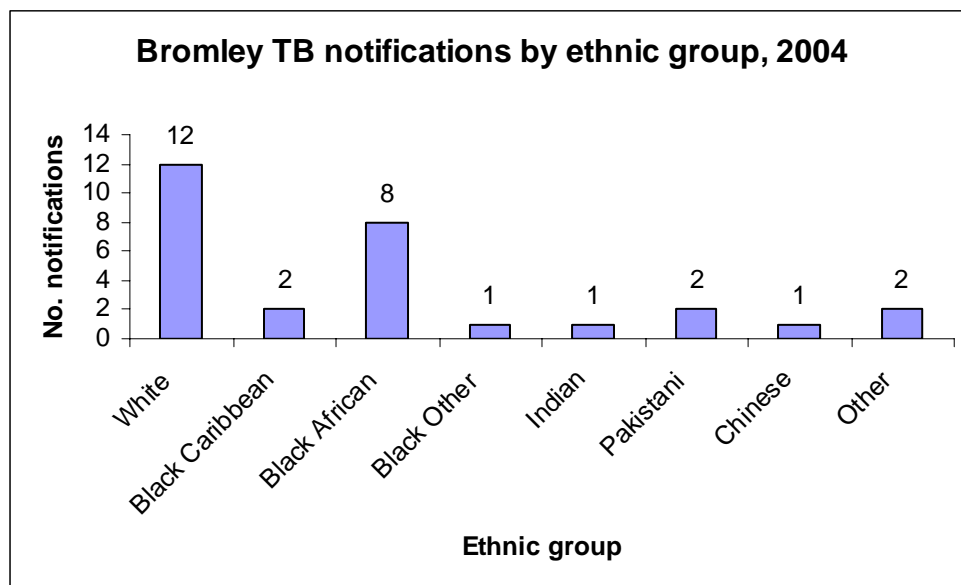


2004 data:

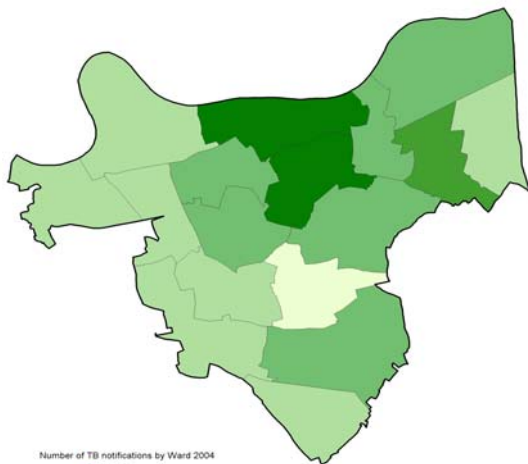
- 29 notifications – a decrease of 9% (n=3) from 2003
- incidence rate = 9.8 per 100,000
- 4 paediatric cases – compared with no paediatric cases in 2003
- 2 drug resistant cases, including 1 isoniazid mono-resistant case

TB notifications in Bromley by clinic, 2004:

Clinic	No. notifications
Guys Hospital	1
Kings College Hospital	4
Mayday Hospital	1
Princess Royal University Hospital	21
Queen Mary's Hospital	1
University Hospital Lewisham	1
Total	29



(iii) Greenwich PCT



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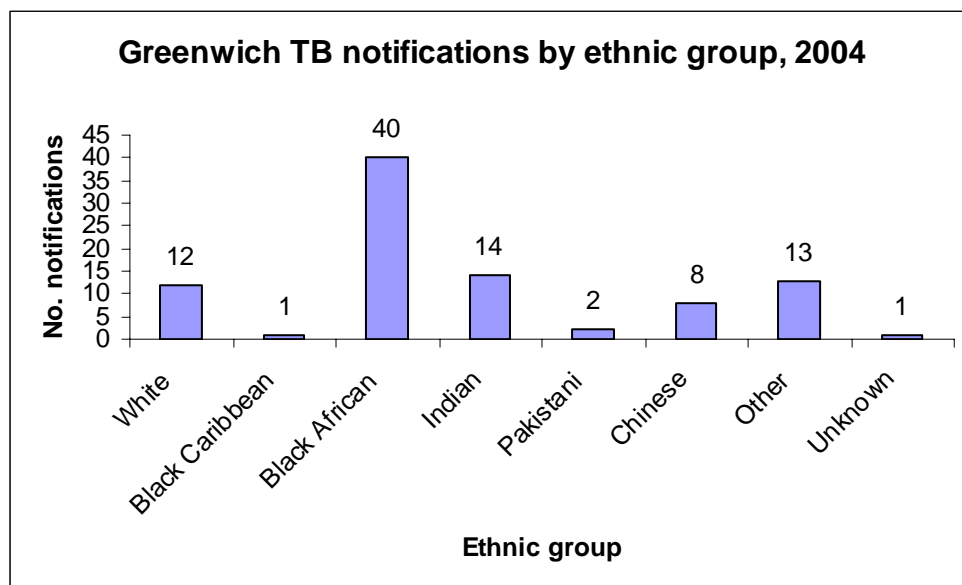
(c) Boundary Files Copyright
Source: London TB Register

2004 data:

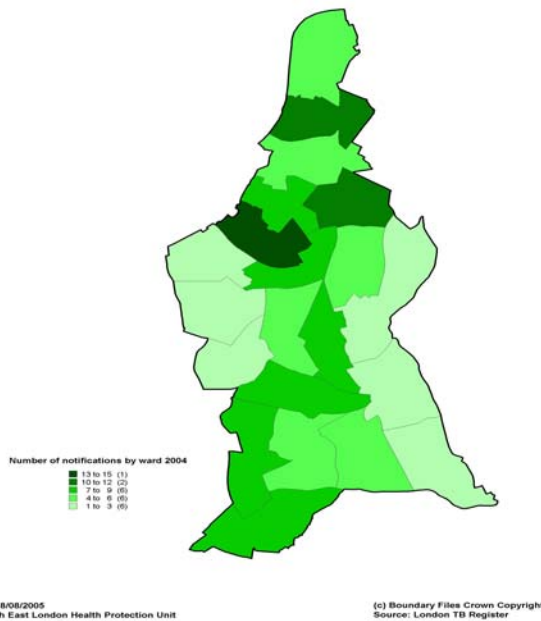
- 91 notifications – an increase of 25% (n=18) from 2003
- incidence rate = 42.4 per 100,000
- 4 paediatric cases – the same as for 2003
- 3 drug resistant cases, including 1 isoniazid mono-resistant case

TB notifications in Greenwich by clinic, 2004:

Clinic	No. notifications
Guys Hospital	1
Kings College Hospital	1
Queen Elizabeth Hospital	77
Royal Free Hospital	2
St. Mary's Hospital	1
St. Thomas' Hospital	3
UCL Middlesex	1
University Hospital Lewisham	5
Total	91



(iv) Lambeth PCT

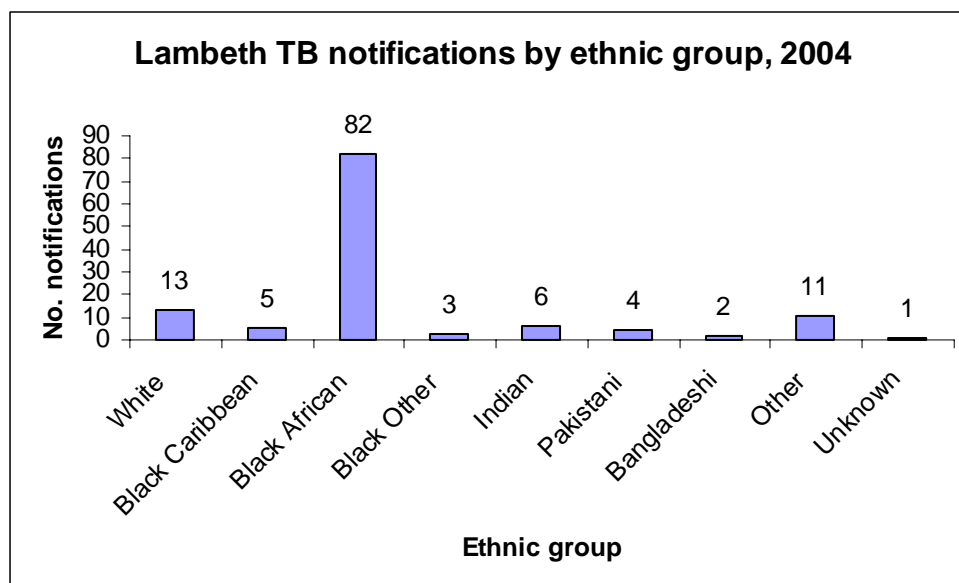


2004 data:

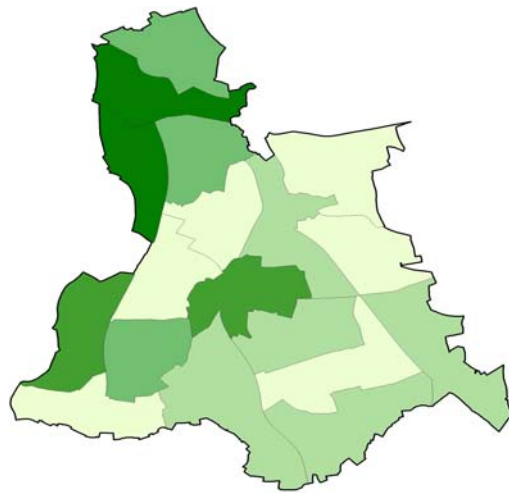
- 127 notifications – a decrease of 16% (n=24) from 2003
- incidence rate = 47.7 per 100,000
- 19 paediatric cases – the same as for 2003
- 10 drug resistant cases, including 1 MDR TB case and 3 isoniazid mono-resistant cases

TB notifications in Lambeth by clinic, 2004:

Clinic	No. notifications
Chelsea & Westminster Hospital	1
Guys Hospital	11
Kings College Hospital	39
Mayday Hospital	3
Northwick Park Hospital	1
St. Georges Hospital	15
St. Helier Hospital	1
St. Thomas' Hospital	54
UCL Middlesex	2
Total	127



(v) Lewisham PCT



Number of TB Notifications by ward 2004

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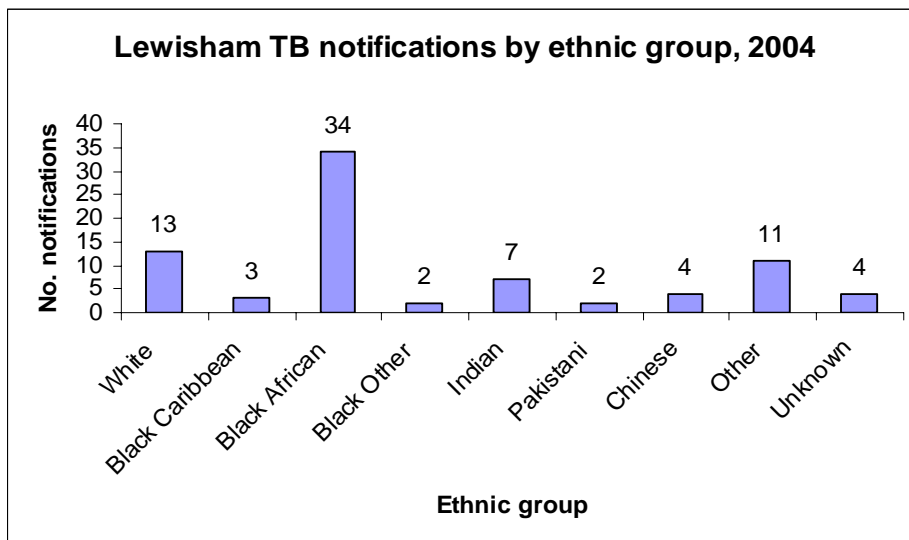
(c) Boundary Files Crown Copyright
Source: London TB Register

2004 data:

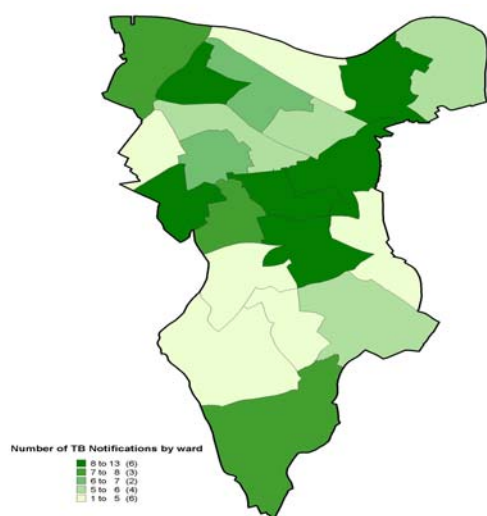
- 80 notifications – an increase of 3% (n=2) from 2003
- incidence rate = 32.1 per 100,000
- 10 paediatric cases – a decrease of 17% (n=2) from 2003
- 4 drug resistant cases

TB notifications in Lewisham by clinic, 2004:

Clinic	No. notifications
Chelsea & Westminster Hospital	1
Guys Hospital	4
Homerton Hospital	1
Kings College Hospital	9
London Chest Hospital	2
Princess Royal University Hospital	1
St. Mary's Hospital	1
St. Thomas' Hospital	3
University Hospital Lewisham	58
Total	80



(vi) Southwark PCT



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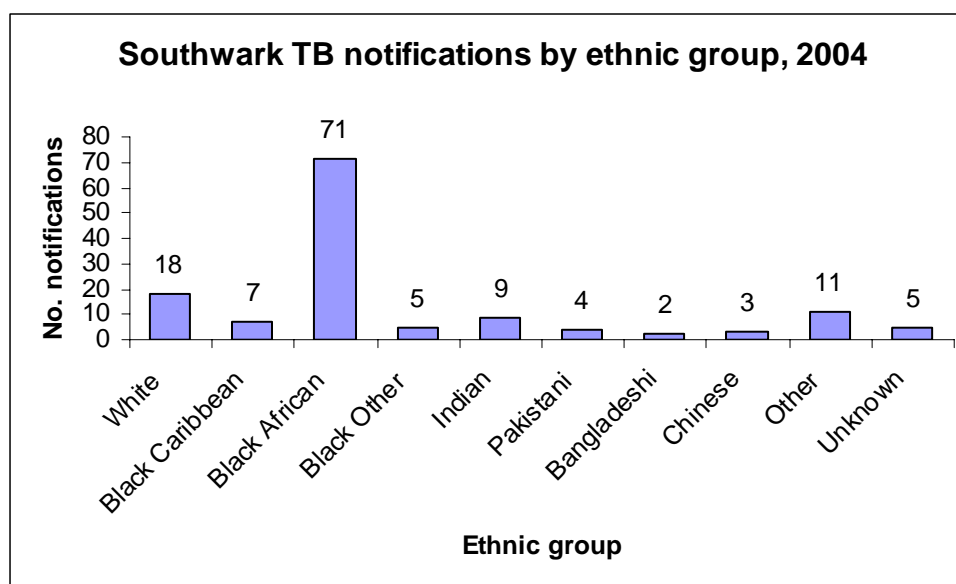
(c) Boundary Files Crown Copyright
Source: London TB Register

2004 data:

- 135 notifications – an increase of 34% (n=34) from 2003
- incidence rate = 55.1 per 100,000
- 16 paediatric cases – an increase of 433% (n=13) from 2003
- 12 drug resistant cases, including 1 isoniazid mono-resistant case and 1 rifampicin mon-resistant case

TB notifications in Southwark by clinic, 2004:

Clinic	No. notifications
Chelsea & Westminster	2
Guys Hospital	12
King George Hospital	1
Kings College Hospital	69
London Chest Hospital	1
Mayday Hospital	1
Queen Elizabeth Hospital	1
St. Georges Hospital	2
St. Mary's Hospital	2
St. Thomas' Hospital	35
UCL Middlesex	2
University Hospital Lewisham	7
Total	135



Annex 2: Additional information

Table 3: TB notifications by clinics outside the South East London sector, 2004

Clinic	Number of notifications
Chelsea & Westminster	4
Great Ormond Street TB Clinic	1
Homerton Hospital	1
King George Hospital	1
London Chest Hospital	5
Mayday Hospital	5
Non-London clinics	2
Northwick Park Hospital	1
Royal Free Hospital	2
St Georges Hospital	17
St Helier Hospital	1
St Mary's Hospital	4
UCL Middlesex	6
TOTAL	50

Table 4: TB notifications and rates by London sector, 2002-2004

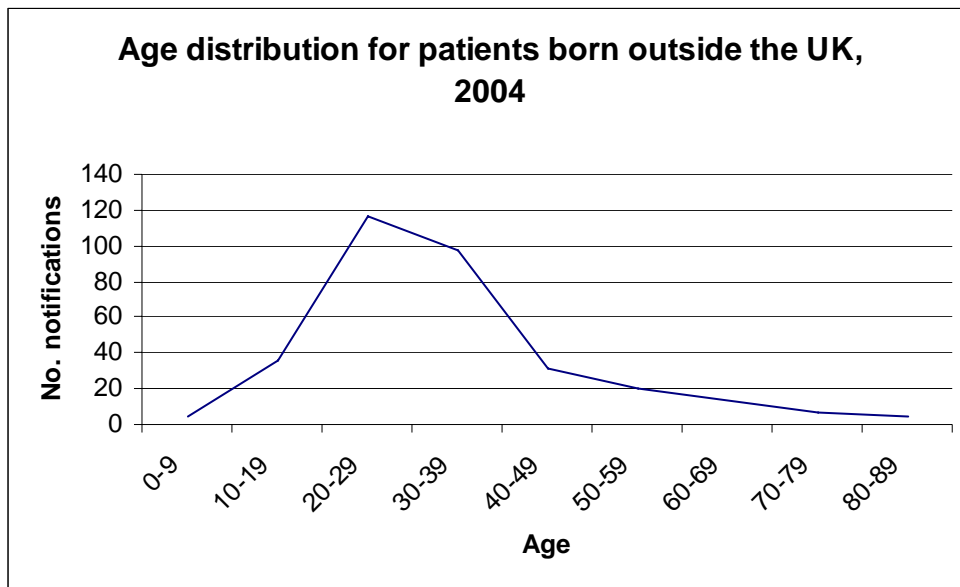
	2002	2003	2004
North West	52.4 (946)	52 (943)	57.1 (1036)
North East	49.2 (751)	53.5 (817)	52.4 (800)
North Central	45.4 (551)	43.4 (529)	42.1 (514)
South East	32.5 (492)	30.8 (465)	32.4 (490)
South West	25.7 (336)	23.8 (312)	25.9 (340)
London	41.7 (3076)	41.5 (3066)	43.0 (3180)

Source: LTBR and enhanced TB surveillance
Rates calculated using mid-year estimates

This information was provided by HPA London. All figures and rates are based on data received from the LTBR and enhanced TB surveillance, and all rates have been calculated using mid-year estimates.

As previously mentioned, all LTBR data are provisional – which may account for the slight discrepancy in numbers of cases in SE London in 2004. At the time of writing this report, 492 patients were found to be notified on the LTBR.

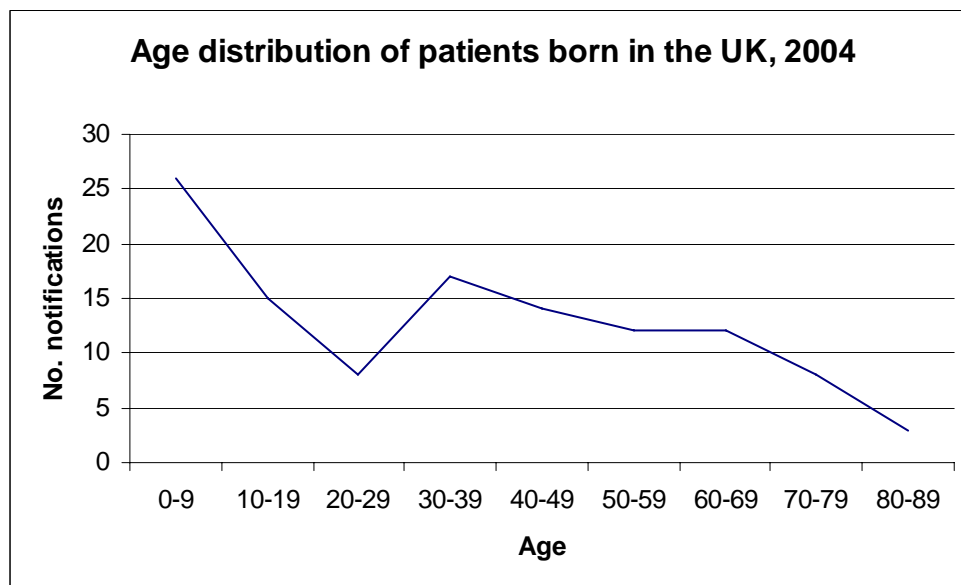
Figure 11: Age distribution of patients born outside the UK, 2004



This graph represents the age distribution of TB notifications in 2004 who were born outside the UK. Peak notifications are seen in the 20-29 year age group, which mirrors the overall age distribution in all cases in the sector (see figure 4: TB notifications by age, 2003 and 2004), and also appears to be following national trends – see the HPA website for further details:

http://www.hpa.org.uk/infections/topics_az/tb/epidemiology/figures/figure8.htm)

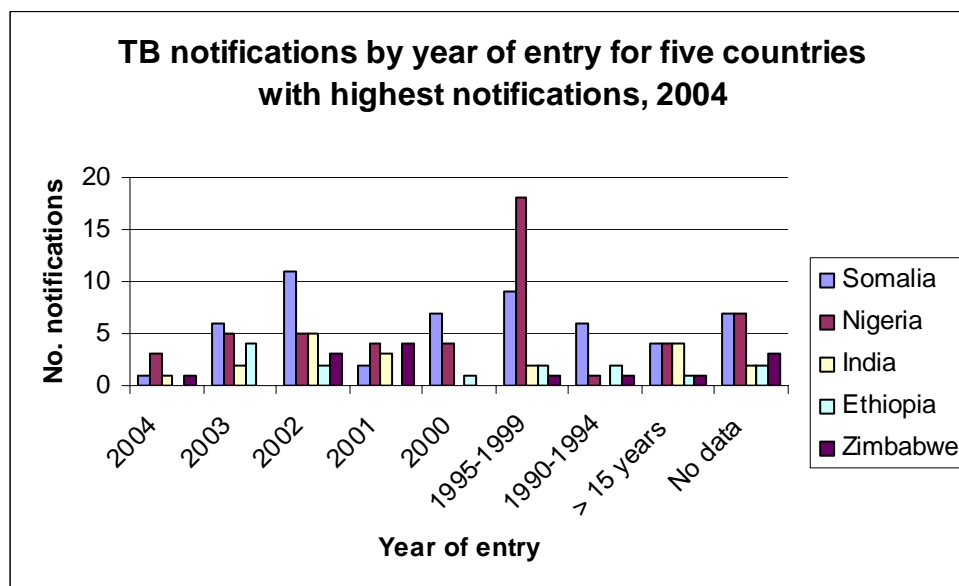
Figure 12: Age distribution of patients born in the UK, 2004



The peak age for notifications in UK born patients is in the 0-9 age group, and indicates ongoing transmission from adults to children in the community. It is noteworthy that 72% (n=42) of all paediatric cases were in ethnic groups other than

white or unknown, indicating that in a significant proportion of these cases, TB may have been acquired by a parent or grandparent who was born overseas – see also figure 14: paediatric cases by ethnic group, 2004.

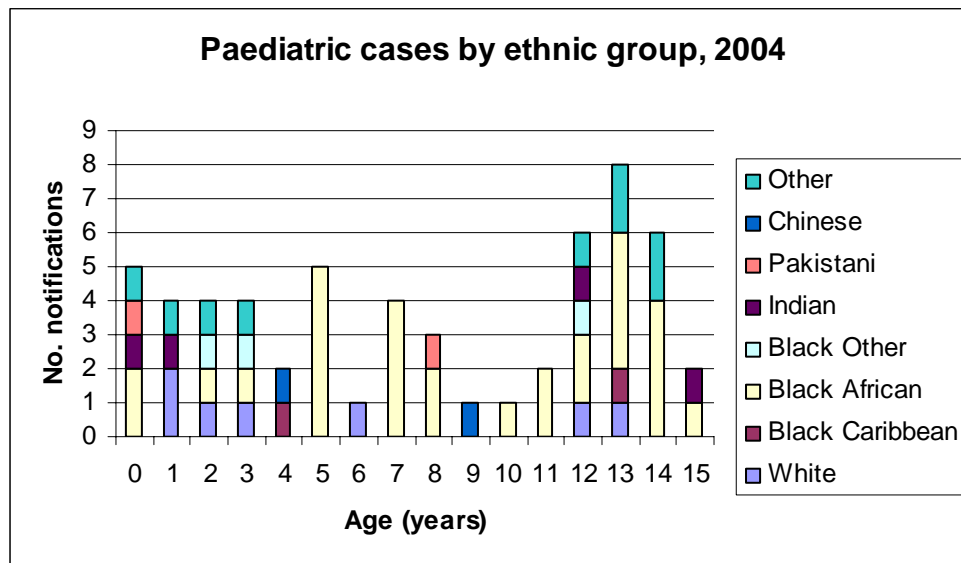
Figure 13: TB notifications by year of entry for the five countries with the highest numbers of notifications, 2004



Year of entry to the UK was established from the LTBR for patients originating from Somalia, Nigeria, India, Ethiopia and Zimbabwe.

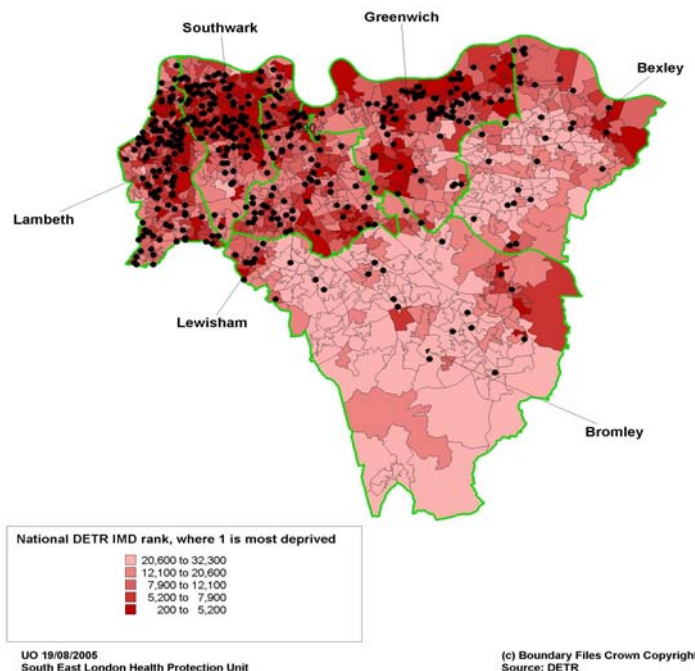
Somali and Nigerian born patients had the second and third highest numbers of notifications after UK born patients in 2004 – see figure 6: TB notifications by country of birth (with more than 10 notifications), 2004. It is interesting to note that for Somalis the peak time interval between arriving in the UK and being notified with TB is 2 years, whereas for Nigerian born patients this peak is seen between 5 and 10 years after entry. Further analysis is needed to ascertain the reasons for these differences, although differences in socio-economic status (eg: Nigerians entering the UK to study and as economic migrants, versus Somalis entering as refugees and asylum seekers) may play a role.

Figure 14: Paediatric cases by ethnic group, 2004



As previously mentioned, 50% of all paediatric cases in 2004 were in the Black African community, which mirrors trends across the sector, and indicates ongoing transmission from adults, possibly in some cases as a result of delayed diagnosis in adult family and other household contacts.

Figure 15: South East London TB notifications by DETR Indices of Multiple Deprivation rankings (super output areas), 2004



As in previous years, notifications of TB are closely linked to indices of multiple deprivation, as calculated by the Department for the Environment, Transport and the Regions