

Better  
Housing  
Briefing

20

**Tackling the  
prevalence of  
Tuberculosis  
amongst  
poorly housed  
minority ethnic  
communities  
in London**



**archive**<sup>+</sup>  
architecture for health  
in vulnerable environments  
UNITED KINGDOM

A Race Equality Foundation  
Briefing Paper

Heenali Patel  
Kiran Sharma

[www.better-housing.org.uk](http://www.better-housing.org.uk)

## Key messages

- 1 Tuberculosis (TB) is not a thing of the past, and must be recognised as a major public health problem in today's capital.
- 2 The risk factors for TB are exacerbated by poor living conditions
- 3 The growing prevalence of TB amongst minority ethnic communities in London is linked to treatment-based factors, lack of adequate housing conditions and socio-cultural factors.
- 4 Tackling TB must go hand in hand with raising awareness and tackling poor housing.

## Introduction

*"Crucially, both the public and health care professionals need to be aware that TB is back, and growing fast."*

Dr John Moore-Gillon, Vice President at the British Lung Foundation and TB specialist, (European Lung Foundation, 2011)

2012 is, undoubtedly, a landmark year for London. As the countdown clock in Trafalgar Square ticks away, London's East End is undergoing huge physical transformation. The Olympic Park is making its mark on the capital with the promise of local job creation, better social inclusion, and cleaner, healthier living. Yet there is also a dark side that is difficult to ignore. At the mention of tuberculosis, many might imagine a Dickensian London, mired in grime and slum poverty, but this quaint image of TB as 'a thing of the past' could not be further from the truth.

Tuberculosis has seen a significant comeback in Britain in recent years, most notably across the capital. According to London Health Programmes, infection cases in London increased by 50% between 1999 and 2009, resulting in a rate 20 times higher than the rest of the country. By 2010, 40% of all tuberculosis notifications were concentrated in London (Lynn, W. and Relph, N., 2011). Although there has been some decline of tuberculosis in the UK since 2010 (HPA, 2011), numerous London boroughs still harbour a rate double of that defined as high risk by the World Health Organisation. Black and minority ethnic groups account for the majority of these high risk communities (Lynn, W. and Relph, N., 2011).

In this briefing, charity Architecture for Health in Vulnerable Environments (ARCHIVE UK) argues that the spread of TB is exacerbated in urban communities where overcrowding, inadequate ventilation, and the presence of mould and smoke in the home are rife. Focussing on the transmission of TB among migrant groups, this paper explores the need to address factors that make black and ethnic minority communities particularly vulnerable to infection, and discusses measures to improve the provision of housing services targetted specifically at these groups.

## 1 TB is not 'a thing of the past'

Tuberculosis is a bacterial infection caused by *Mycobacterium tuberculosis*. The most common type of TB, known as pulmonary TB, is spread via coughs and sneezes. Only a single organism is needed to cause disease, and as many as 3000 organisms can be produced by a cough or talking for 5 minutes, whilst sneezing produces many more. Common symptoms include chronic cough, weight loss, intermittent fever, night sweats and coughing blood (Manchester City Council and NHS Manchester, 2011).

The vast majority of people - around 90% - who become infected with TB bacteria experience no symptoms and are not infectious; they are known as latent TB carriers. Current projections state that a third of the world's population has latent TB (WHO, 2012). The National Institute for Health and Clinical Excellence (NICE) estimates that approximately 10% of these carriers will develop symptomatic active TB as a result of immunodeficiency caused by age or HIV (National Collaborating Centre for Chronic Conditions, 2006).

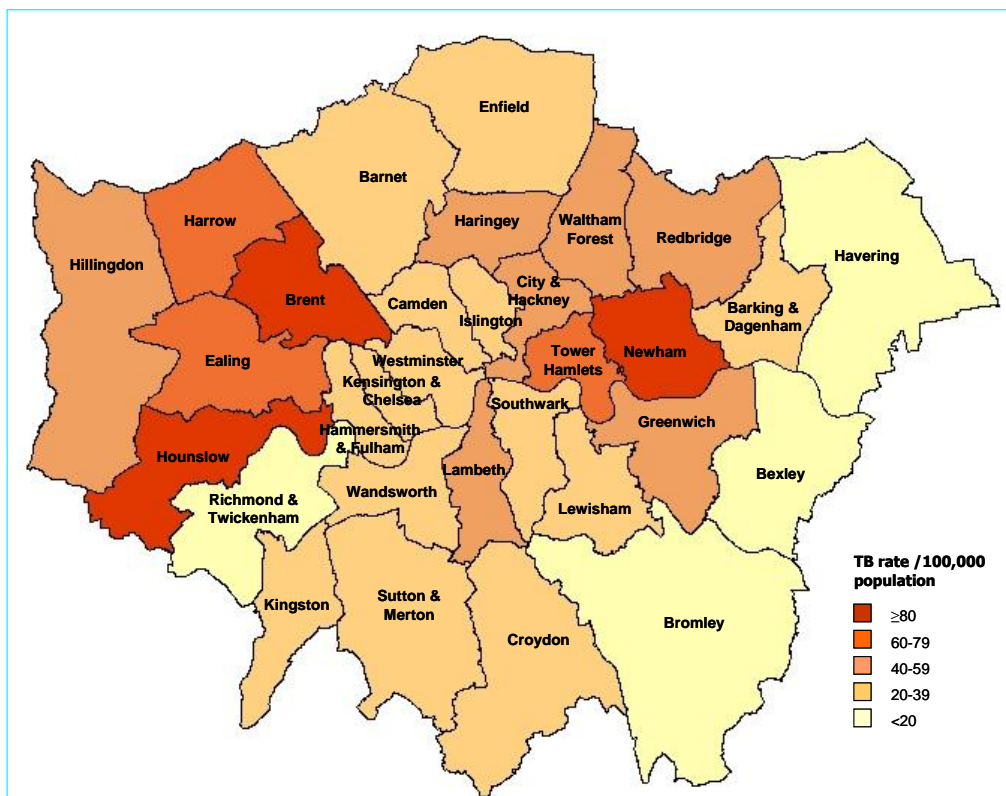


Figure 1: *TB Rates in London*

Source: London Regional Epidemiologist, HPA, 2011.

It is commonly acknowledged that active TB transmission in London sharply declined until the 1980's as a direct result of better housing and healthcare, in particular, due to widespread immunisation among the UK-born population (Chief Medical Officer, 2004). London Tuberculosis Statistics show however, that there were 3,415 new cases of TB in 2008, with the overall TB incidence rate for North West London in 2008 rising to 60.7 per 100,000 people - the highest of any city in Western Europe. London has become the new 'TB capital of Europe', with some boroughs gaining TB rates greater than those of Brazil and India, and an average of 50 people developing the disease every week. In England, the disease claims around 350 lives a year, and causes permanent disability in more still (Chief Medical Officer 2004; Lynn, W. and Relph, N. 2011).

Although active TB, when identified early, is relatively inexpensive and straightforward to treat and cure with a six-month course of drugs (Lynn, W., and Relph, N., 2011), the NHS has highlighted a need to improve early diagnosis and provide adequate 'patient-centred' support throughout treatment (NICE, 2011).

### *What are the risk factors of TB?*

*'Poor housing, inadequate ventilation and overcrowding – conditions prevalent in Victorian Britain – are causes of the higher tuberculosis incidence rates in certain London boroughs.'*

Dr Alimuddin Zumla, Professor of Infectious Diseases and International Health, University College London

Overcrowding and poor housing conditions are a proven risk factor for TB transmission. On a national scale, adverse housing conditions (such as dampness and mould), cost the NHS up to £600 million every year, and the Department of Work and Pensions (DWP) has proven that ill-health is concentrated among out-of work /low income families (ARCHIVE UK, 2010).

### *The relationship between Tuberculosis incidence and poor housing:*

- Aerosolized droplets (small droplets and particles in the air) settle very slowly and can remain suspended in the air for many hours. TB transmission is therefore more prevalent in poorly ventilated and crowded spaces.
- Occupancy density, room volume and air change rate are directly correlated with number of new TB infections among persons who share airspace.
- Presence of mould and fungi in homes is associated with suppressed T-cell production, which has been linked to slower recovery from TB.
- Poor/inadequate ventilation has been shown to be one of factors responsible for emergence of multidrug-resistant TB (MDR-TB).
- The threat of tuberculosis (TB) infections can be reduced by 75% by controlling the airborne capacity of *mycobacterium tuberculosis* infected aerosol, through adjustments of relative indoor humidity and ventilation flow rates.

Source: ARCHIVE UK, 2012

## **2 Why is TB more prevalent among minority ethnic groups?**

The proportion of the English population from minority ethnic backgrounds is steadily increasing, rising from 9% in the 2001 census, to an estimate of approximately 17% in 2009. Minority ethnic populations have traditionally concentrated in large urban centres, and in inner London approximately 45% of the population is from a minority group (Rogers, S., 2011). Furthermore, since 2001, more than 144,000 individuals have been granted refugee status, and despite Government's dispersal policy, many refugees/asylum seekers continue to settle in London (London Refugee Economic Action, 2006).

In a 2004 report entitled *Stopping Tuberculosis in England*, the Chief Medical Officer argued that TB cases began to rise during the early 1990s mainly as a result of increased migration of people from countries where there is an increased risk of TB transmission. As a result he believed that 'the main focus' of anti-TB strategies should be on 'the increasing proportion of TB cases in ethnic minority groups.' (Chief Medical Officer, 2004). Indeed in 2010, the rate of TB cases per 100,000 people was over 10 times as high amongst non-UK born residents compared to UK-born residents, with the majority of cases originating from South Asia (55%) and sub-Saharan Africa (26%) (HPA, 2011).

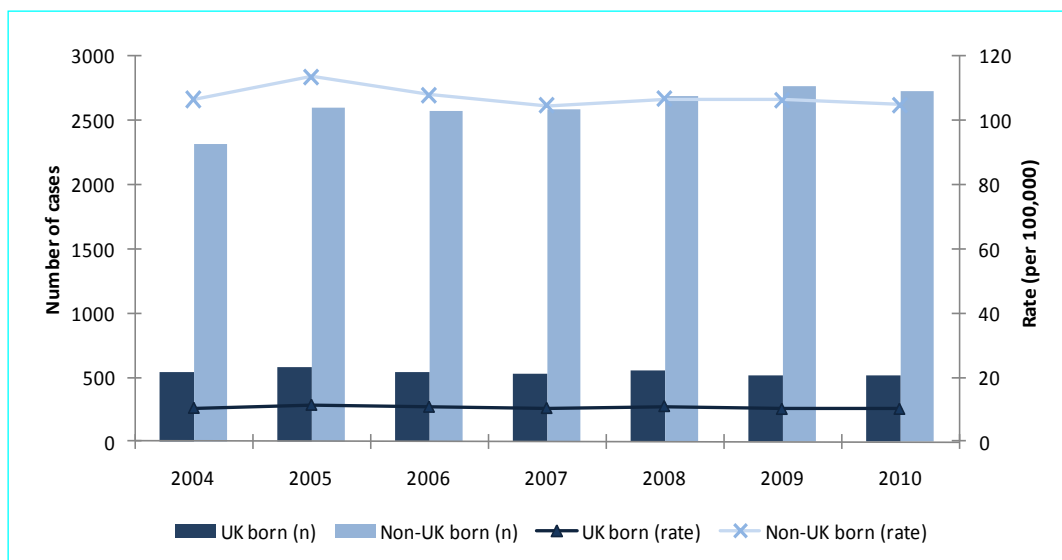


Figure 2: TB notifications and rates by place of birth, London, 2004–2010

Source: Case for Change, HPA

Likewise, findings from the Department of Health (Chief Medical Officer, 2004) found that:

- in England, around seven out of every ten people with TB come from an ethnic minority population group
- nearly two thirds of TB patients were born abroad
- about half of the TB patients who were born abroad are diagnosed with the disease within five years of first entering England

#### Treatment-based factors

Although registration with GPs is reasonably high among refugees (after a period of time), there are still many reports of problems in accessing the right type of NHS service. Barriers to the use of NHS services include:

- the response of primary care;
- language and cultural differences;
- a lack of information about the NHS;
- poor awareness of refugee issues and entitlements among health professionals

Steps to treat and prevent the spread of TB in the UK include prompt recognition and treatment of infected persons; successful completion of drug course- using directly observed treatment where necessary; and part-prevention through BCG immunisation (DH, 2004).



Additionally, the NHS notes that it is particularly important to create informative materials for non-English speakers and to develop new entrant screening, whereby migrants are identified for TB screening via Port of Arrival reports, new registrations with primary care, entry to education (including universities), and links with statutory and voluntary groups working with new entrants (NICE, 2011).

### *Economic and housing-based factors*

With a well-established link between poor health and poor housing (see, for example, de Lima, 2008) it is not unreasonable to suggest that high-rates of TB transmission amongst minority ethnic groups are strongly linked to problems of poverty and overcrowding amongst these communities. Around two-fifths of people from ethnic minorities in the UK live in low-income households (National Statistics 2002), and Bangladeshi and Black African are seven times as likely as White British households to live in overcrowded homes at 44 and 42 per cent respectively (Jones, 2010). The 2001 DTLR Housing Directorate also shows that black and Bangladeshi people are the most likely to rent from the social rented housing sectors rather than owning a home. This means that their scope for improving their living conditions can be lessened due to a lack of ownership, social constraints, and a lack of awareness of their rights as a tenant.

For example, in Brent, a London Borough with one of the highest TB incidence rates in the city, overcrowding and poor housing standards are particularly prominent issues. Findings from a qualitative research study carried out amongst refugee communities, homeless people and asylum seekers in Brent (2004-2006) found that:

- 22% of participants lived in poor quality accommodation
- 19% claimed that they lived in overcrowded accommodation
- 22% shared accommodation with non-immediate family members
- and 17% claimed they were homeless.

With 101.12 new TB cases per 100,000 of population, and a total of 299 new cases in 2009, this is London's second highest TB incidence rate (HPA, 2011).

Therefore, it appears that tackling poverty and improving housing conditions are of immense importance to tackling the spread of TB.

### *Socio-cultural factors*

*'Anyone who has TB will be (socially) isolated not only him, but his family will be stigmatised and that's why they don't tell anyone because they don't want to be isolated.'*

Somalian interviewee, Gerrish et al. 2010

There is a strong stigma attached to the TB in many ethnic minority groups (HPA, 2011). While communities may understand the risk of developing TB, a failure to undertake treatment or to complete courses of drugs can lead to further spread of the disease and the development of multi-drug resistant strains.

HPA (2011) states that common perceptions among minority ethnics which contribute to stigma include:

- Belief that TB infection also means co-infection with HIV.
- Fear that one's relatives will be 'marginalised'.
- Belief that TB reflects poor living conditions.
- Belief that TB results from poor hygiene.

Clarity about the risk, causes and treatment of TB can help tackle low awareness of TB, inadequate information on how to access health services and negative perceptions surrounding the disease.

### 3 What can be done?

The need to focus upon tackling TB amongst minority ethnic groups stems in part from research by The Health of Londoners project. It notes that:

- i) Services catering for refugees need to work across sectors and in particular link to housing, social services, education and the voluntary sector;
- ii) Approaches that emphasise work with refugee community groups are felt to be particularly important. The ability to link new arrivals with the appropriate existing social networks and communities is felt to be beneficial to health

London's Directors of Public Health, 1999

#### *Raising awareness of TB and its treatment*

Treatment of the infection is unquestionably important, however, so are the conditions which contribute to the spread of infection. Ethnic groups have predominantly settled in clusters concentrated in poor urban locations, which are also frequently segregated from the wider community. Whilst this may foster support through local community infrastructures, better cohesion into the wider national identity can be a key vehicle for influencing change. According to Shandana Khisro, Project Co-ordinator at Brent ARCHIVE UK, 'ignorance is the most important factor for TB spread and many patients do not seek treatment because of the lack of information and the stigma attached to the disease....The social model of health is underpinned by the fact that expertise does not lie solely with medical professionals, but in fact all those who are involved and affected can contribute to its success.' (ARCHIVE UK, 2012). Creating local awareness within black minority ethnic population must therefore be one of the first steps in reducing the spread of TB, by building competency, initiating social accountability and giving confidence to TB patients to dispel the myths related to the disease.

Furthermore, involving the community can reach out to populations who often have infrequent contact with health care authorities and help overcome widely perceived barriers in TB control. During the course of TB treatment, a patient spends little time with health care professionals and a significant portion of time with family and community members. Their surroundings need to be well informed about the illness and the importance of treatment completion to overcome patient fear, anxiety and stress. This community-centred approach has the potential to increase the referral of TB patients to health care providers, stopping the vicious cycle of infection and improving the outcome of treatment.

### *Tackling poor housing*

*'The evidence suggests that black minority ethnic tenants of councils and housing associations have been excluded rather than fully involved, while households may not even be aware of tenants' associations, let alone members of them.'*

Office of the Deputy Prime Minister, 2003

The spread of TB suggests that there is a growing need for better standards of housing, and scope for providing a wider range of housing types. Several London boroughs have conducted research and taken remedial measures to tackle borough related problems. The City of Westminster, for example, has prioritised the rehousing of overcrowded households into larger accommodation (Cookson and Sillet, 2009). Unfortunately, due to increasing immigration rates, a large percentage of occupants will remain in poor standards of living for some time before being rehoused.

The Mayor of London, in conjunction with the London Development Agency, set out new housing design standards, including minimum space standards to address overcrowding and poor living conditions, in the London Housing Design Guide, which came into force in April 2011. Most London boroughs have adopted this guidance to assess planning applications for new homes in London (Mayor of London, 2010).

Likewise, the Government-sanctioned 'Decent Homes Programme' (2004, amended 2006) sought to ensure improvements of housing standards for tenants and the transformation of the poorest neighbourhoods into sustainable communities. Their guidance outlined the following approach to a 'Decent Home' -

- does not contain a category 1 hazard;
- is in a reasonable state of repair;
- has reasonably modern facilities and services;
- provides a reasonable degree of thermal comfort.

Under this definition, inadequate ventilation and the presence of mould and smoke are categorized as identifiable hazards, and it is the landlord's responsibility to ensure upkeep of the inside facilities, exterior, and structural elements of the dwelling. If these are neglected, the local authority must assess the specified hazards, weigh up the potential risk to the occupier, and then provide appropriate enforcement service/method to take action on behalf of the tenants. (Department of Communities and Local Government, 2006)

However, a common problem is that the Enforcement service is only available once a complaint has been lodged and if a tenant is unaware that the service exists they will not report it. In addition, some local boroughs such as The London Borough of Brent are establishing their own 'Resident Associations' that are made up of local residents who raise issues on behalf of their community. A detailed description of these services is available on the London Borough of Brent website.

## Resources

**London Borough of Brent:** [www.brent.gov.uk/PHousing.nsf/Residents%20Associations/LBB-34](http://www.brent.gov.uk/PHousing.nsf/Residents%20Associations/LBB-34)

**Brent Private Tenants Rights Group:** [www.bptrg.org](http://www.bptrg.org)



#### 4 Who is carrying out good practice?

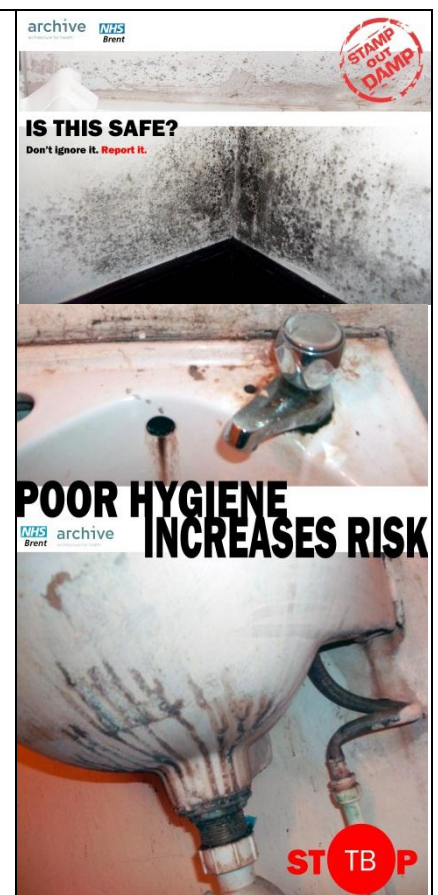
There are a number of good practice examples with relation to tackling the spread of TB in London. Local public health services including DH and NICE have worked alongside commissioners, service providers and the Health Protection Agency to implement more robust preventative and treatment procedures and reduce the growing numbers of TB incidences in England (London Health Programmes and NHS September 2011). These policies have not only helped to raise awareness within communities but also to educate health care professionals to detect the illness at an early stage. Furthermore, public health teams also play a key role in providing the funds to help support TB treatment such as screening and vaccination activities. The role of third sector organisations, primarily charities and voluntary organisations, was also highlighted, supporting patients through treatment and initiating community awareness and outreach programs to identify the potential risks of TB.

## Resources

### ARCHIVE UK [www.archiveuk.org](http://www.archiveuk.org)

ARCHIVE UK has been involved in TB raising awareness initiatives in the London borough of Brent since 2010. Brent has the second highest incidence of TB in London, and almost 90% of these cases occur among black, Asian and minority ethnic groups (HPA, 2011). Working with NHS, the Brent Refugees and Migrants Forum, Brent Council, Latitude Care Network and Somali Women's Enterprise and Employment Project, ARCHIVE has provided a series of community workshops under the "Happy, Healthy Households" project

Amongst its various strategies, Happy Healthy Households has also implemented a Health Trainers Programme, targeted specifically at the migrant and refugee locale. The workshops, led by community health trainers, disseminate culturally appropriate information on actions that households can take to reduce the risk of TB infection. A photography initiative was set up alongside this as a creative method of engaging the community. Community members took pictures of poor housing conditions around their houses and the resulting photographs were formatted into posters and exhibited during World TB Day 2012 at Brent Town Hall.



## Resources

### **TB Alert** [www.tbalert.org](http://www.tbalert.org)

TB Alert is an organisation that seeks to raise awareness of TB among black and minority ethnic groups. They have produced a number of different leaflets as part of their campaign, The Truth About TB ([www.thetruthabouttb.org/](http://www.thetruthabouttb.org/)). Focussing on different groups that may be affected by TB, including African communities (with a specific leaflet for Somali communities) and those abusing drugs or alcohol, the leaflets explain what TB is, how it is transmitted, risk factors, common symptoms and what action people should take if they are concerned they may be affected. It also signposts to sources of advice and information.

### **Community Health Action Trust** [www.chatrust.com/](http://www.chatrust.com/)

Community Health Action Trust is a charity based in Brent, focussing on HIV prevention amongst African groups in London. Due to the frequent correlation between TB and HIV/AIDs, they have carried out outreach work relating to TB, highlighting risk factors for infection with TB.

Likewise, the Government and Local Authorities have recognised links between housing and tuberculosis, developing regulations to address problems such as overcrowding, and putting into place policies to improve housing design to avoid problems such as poor ventilation and dampness (Department of Communities and Local Government, 2006).

However, in spite of these strategic developments in service provision, partnership working has not been a success across the board. In 'TB Case for Change', the London Health Programmes and NHS state that: 'Although there are some individual examples of good joint working between TB services, commissioners and local authorities, this does not appear to be the norm. Housing departments, in particular, are not well engaged in TB control activities and could play a more substantial role...' (London Health Programmes and NHS, 2011).

Limited funding to advertise housing regulations and for random inspections of landlords means that many potential cases fall through the cracks. A lack of communication between the services available to black and ethnic minority groups needs to be addressed or in some cases, established from scratch, to ensure that communities have the means to improve their living standards. The 'TB Case for change' report describes how housing associations and environmental health services could be more involved in TB control activities, and how direct engagement through minority ethnic group-led regeneration schemes could help local authorities address key issues.

## Conclusion

Best practice has shown that a more collaborative approach is required between Local Government, Public Health Services and third sector organisations. It should focus not only on the implementation of policy directives but also on public awareness and integrated strategies with local residents. There are currently huge economic constraints with widespread budget cuts. However, it is economically viable in the long term to encourage local boroughs to implement community outreach programmes which focus on increasing the dialogue between the local authorities and their residents, to increase knowledge and awareness of TB risk factors and help to reduce its spread within London.

# References

- ARCHIVE UK (2012), Community Participation, [www.archiveuk.org/uk-mission/community-participation/](http://www.archiveuk.org/uk-mission/community-participation/)
- ARCHIVE UK (2010), Happy Healthy Households Proposal, unpublished.
- Bignall, T., and Jones, A. (2011) *Meeting the supported housing needs of Black and Minority Ethnic Communities*, Better Housing Briefing 19, [www.better-housing.org.uk/briefings/meeting-supported-housing-needs-black-and-minority-ethnic-communities](http://www.better-housing.org.uk/briefings/meeting-supported-housing-needs-black-and-minority-ethnic-communities)
- Chief Medical Officer (2004) *Stopping Tuberculosis in England*, [www.dh.gov.uk/prod\\_consum\\_dh/groups/dh\\_digitalassets/@dh/@en/documents/digitalasset/dh\\_4100860.pdf](http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4100860.pdf)
- Cookson, A. and Sillet, J. (2009) *Room to Move*, London: Local Government Information Unit.
- De Lima, P. (2008) *Rural minority ethnic experiences: housing and health*, Better Housing Briefing 7, [www.better-housing.org.uk/briefings/rural-minority-ethnic-experiences-housing-and-health](http://www.better-housing.org.uk/briefings/rural-minority-ethnic-experiences-housing-and-health)
- Department for Communities and Local Government (2006) *A Decent Home: Definition and Guidance for Implementation*, [www.communities.gov.uk/documents/housing/pdf/138355.pdf](http://www.communities.gov.uk/documents/housing/pdf/138355.pdf)
- Department for Communities and Local Government (2006) *Housing Health and Safety Rating System – Guidance for Landlords and Property Related Professionals*, [www.communities.gov.uk/documents/housing/pdf/150940.pdf](http://www.communities.gov.uk/documents/housing/pdf/150940.pdf)
- Department for Communities and Local Government (2001) The 2001 DTLR Housing Directorate: Addressing the needs of Black and Minority Ethnic people: action plan, [www.communities.gov.uk/documents/housing/pdf/156429.pdf](http://www.communities.gov.uk/documents/housing/pdf/156429.pdf)
- Disabled Living Foundation (2006) *Disability Awareness DLF Factsheet*, [www.dlf.org.uk/factsheets/Disability\\_awareness.pdf](http://www.dlf.org.uk/factsheets/Disability_awareness.pdf)
- European Lung Foundation (2011), 'New proposals to reduce spread of TB in London' [www.european-lung-foundation.org/16515-new-proposals-to-reduce-spread-of-tb-in-london.htm](http://www.european-lung-foundation.org/16515-new-proposals-to-reduce-spread-of-tb-in-london.htm)
- Gerrish, K., Ismail, M., and Naisby, A. (2010) *Tackling TB together: a community participatory study of the socio-cultural factors influencing an understanding of TB within the Somali community in Sheffield*, [shura.shu.ac.uk/3072/1/Somali\\_TB\\_report\\_final\\_14-08-10.pdf](http://shura.shu.ac.uk/3072/1/Somali_TB_report_final_14-08-10.pdf)
- Health Protection Agency (2011) *Tuberculosis in the UK: 2011 Report*, Health Protection Agency: London, [www.hpa.org.uk/Publications/InfectiousDiseases/Tuberculosis/1112TuberculosisintheUK2011report](http://www.hpa.org.uk/Publications/InfectiousDiseases/Tuberculosis/1112TuberculosisintheUK2011report)
- Housing Services (2012) *Black and Minority Ethnic Housing Strategy 2007-2012*, [www.cambridge.gov.uk/public/docs/BME%20housing%20strategy.pdf](http://www.cambridge.gov.uk/public/docs/BME%20housing%20strategy.pdf)
- Johnson, A. (2006) *Beliefs and barriers related to understanding TB amongst vulnerable groups in South East London*, [www.hpa.org.uk/webc/HPAwebFile/HPAweb\\_C/1208935294877](http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1208935294877)
- Jones, A. (2010) *Black and Minority Ethnic communities' experience of overcrowding*, [www.better-housing.org.uk/sites/default/files/briefings/downloads/housing-brief16.pdf](http://www.better-housing.org.uk/sites/default/files/briefings/downloads/housing-brief16.pdf)
- Jones, P. A., and Mullins, D. (2009) *Refugee community organisations: working in partnership to improve access to housing services*, Better Housing Briefing 12 [www.better-housing.org.uk/briefings/refugee-community-organisations-working-partnership-improve-access-housing-services](http://www.better-housing.org.uk/briefings/refugee-community-organisations-working-partnership-improve-access-housing-services)
- London Health Programmes and NHS (2011) *TB Case for change: TB services in London* [www.migranthealthse.co.uk/sites/default/files/TB-Case-for-change.pdf](http://www.migranthealthse.co.uk/sites/default/files/TB-Case-for-change.pdf)
- London's Directors of Public Health (1999) *The Health of Londoners*, [www.lho.org.uk/Download/Public/8015/1/phsum13\\_3.pdf](http://www.lho.org.uk/Download/Public/8015/1/phsum13_3.pdf)
- London Refugee Economic Action (2006), *Research into employability issues facing refugees in East*

## Authors

Heenali has a special interest in the links between grassroots community work, slum development and urbanisation. She has a BA in Architecture and has worked for charities in Nepal, Brazil and the UK.

Kiran Sharma is currently completing her professional qualifications to register as a British architect. She has been working for an architectural practice in East London for the last 4 years and has special interest in regeneration, conservation and re-use developments.

## Readers

Kat Nower

Tracey Bignall

We welcome feedback on this paper and on all aspects of our work. Please email [briefings@racefound.org.uk](mailto:briefings@racefound.org.uk)

Copyright  
© Race Equality Foundation  
June 2012  
Copy-edited by Kat Nower  
ISBN 978 1 873912 88 9

View this and all of the  
Race Equality  
Foundation's rapidly  
expanding collection of  
free-to-view  
housing briefing papers,  
resources  
and weblinks at  
[www.better-housing.org.uk](http://www.better-housing.org.uk)

London, [www.loreca.org.uk/downloads/Refugee\\_Employability\\_East\\_London.pdf](http://www.loreca.org.uk/downloads/Refugee_Employability_East_London.pdf)

- Lynn, W., and Relph, N. (2011) *Case for Change- TB Services in London*, [www.migranthealthse.co.uk/sites/default/files/TB-Case-for-change.pdf](http://www.migranthealthse.co.uk/sites/default/files/TB-Case-for-change.pdf)
- Manchester City Council and NHS Manchester (2011), *2011 Public Health Annual Report: Protecting the health of the people of Manchester*, [www.manchester.nhs.uk/document\\_uploads/Public%20health/PublicHealthAnnualReport2011.pdf](http://www.manchester.nhs.uk/document_uploads/Public%20health/PublicHealthAnnualReport2011.pdf)
- Mayor of London (2010) *London Housing Design Guide*, [www.london.gov.uk/archive/mayor/publications/2009/docs/housing-design.pdf](http://www.london.gov.uk/archive/mayor/publications/2009/docs/housing-design.pdf)
- National Collaborating Centre for Chronic Conditions (2006) *Tuberculosis: clinical diagnosis and management of tuberculosis, and measures for its prevention and control*, [www.nice.org.uk/nicemedia/pdf/CG33quickrefguide.pdf](http://www.nice.org.uk/nicemedia/pdf/CG33quickrefguide.pdf)
- National Housing Federation (2011) *Invest in Housing, Invest in Health*, [www.housing.org.uk/publications/find\\_a\\_publication/care\\_and\\_support/invest\\_in\\_housing\\_invest\\_in\\_h.aspx](http://www.housing.org.uk/publications/find_a_publication/care_and_support/invest_in_housing_invest_in_h.aspx)
- National Institute for Health and Clinical Excellence (2011) *Tuberculosis: clinical diagnosis and management of tuberculosis, and measures for its prevention and control*,
- Office of the Deputy Prime Minister (2004) *Housing Health and Safety Rating System - Enforcement Guidance*, [www.communities.gov.uk/documents/housing/pdf/safetyratingsystem.pdf](http://www.communities.gov.uk/documents/housing/pdf/safetyratingsystem.pdf)
- Office of the Deputy Prime Minister (2004) *The Impact of Overcrowding on Health and Education*, [www.communities.gov.uk/documents/housing/pdf/138631.pdf](http://www.communities.gov.uk/documents/housing/pdf/138631.pdf)
- Office of the Deputy Prime Minister (2003) *Housing and Black and Minority Ethnic Communities*, [www.communities.gov.uk/documents/housing/pdf/138814.pdf](http://www.communities.gov.uk/documents/housing/pdf/138814.pdf)
- Office of the Deputy Prime Minister (2006) *Housing Health and Safety Rating System - Operating Guidance*, [www.communities.gov.uk/documents/housing/pdf/142631.pdf](http://www.communities.gov.uk/documents/housing/pdf/142631.pdf)
- Phillips, D. (2008) *Black and Minority Ethnic Young People and Housing*, Better Housing Briefing 8, [www.better-housing.org.uk/briefings/black-and-minority-ethnic-young-people-and-housing](http://www.better-housing.org.uk/briefings/black-and-minority-ethnic-young-people-and-housing)
- Reynolds, L., and Robinson, N. (2005) *Full House? How Overcrowded Housing Affects Families*, [england.shelter.org.uk/\\_data/assets/pdf\\_file/0004/39532/Full\\_house\\_overcrowding\\_effects.pdf](http://england.shelter.org.uk/_data/assets/pdf_file/0004/39532/Full_house_overcrowding_effects.pdf)
- Rogers, S. (2011) *The ethnic population of England and Wales broken down by local authority*, *Datablog, Guardian*, [www.guardian.co.uk/news/datablog/2011/may/18/ethnic-population-england-wales](http://www.guardian.co.uk/news/datablog/2011/may/18/ethnic-population-england-wales)
- White, A. (2002) *Social Focus in Brief: Ethnicity in 2002*, [www.ons.gov.uk/ons/rel/ethnicity/social-focus-in-brief-ethnicity/full-report/index.html](http://www.ons.gov.uk/ons/rel/ethnicity/social-focus-in-brief-ethnicity/full-report/index.html)
- World Health Organisation (2012) United Kingdom of Great Britain and Northern Ireland: Tuberculosis Profile, [extranet.who.int/sree/Reports?op=Replet&name=/WHO\\_HQ\\_Reports/G2/PROD/EXT/TBCountryProfile&ISO2=gb&outtype=pdf](http://extranet.who.int/sree/Reports?op=Replet&name=/WHO_HQ_Reports/G2/PROD/EXT/TBCountryProfile&ISO2=gb&outtype=pdf)

All references checked June 2012

22 Deane House Studios  
27 Greenwood Place  
London  
NW5 1LB

