



# Annual TB update 2015

March 2015

**World TB Day on 24 March commemorates the discovery of the causative agent of tuberculosis (TB) by Robert Koch in 1882 and aims to raise global public awareness of TB. The Stop TB Partnership's theme for this year's World TB Day campaign is: "Reach the 3 Million: Reach, Treat, Cure Everyone".**

More than 2 billion people, equal to one-third of the world's population, are estimated to be infected with TB and 1 in 10 of these will go on to develop TB disease during their lifetime. Each year, TB kills about one and a half million people globally and consistently 3 million people were either: not diagnosed, not treated, or officially not registered by national TB programmes. Many of those missed will continue to infect others and therefore major action is needed to close this gap as, despite our best efforts, the proportion of missed cases worldwide has not changed significantly over the last seven years.

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## View from Public Health Minister – Jane Ellison



I am very pleased to contribute to Public Health England's newsletter on TB. Many of you will know that fighting TB is one of my priorities and I am delighted that we have made important progress this year. Most importantly, the launch of the joint PHE and NHS England 'Collaborative TB Strategy for England 2015-2020' in January marked the start of an ambitious plan to bend down the curve on new infections, and to treat existing ones. I am delighted that this comprehensive action plan is backed by £11.5m funding and aims to achieve a year-on-year reduction of TB cases.

Innovative services such as the London-based 'Find & Treat' out-reach vans target the most vulnerable members of society directly, and improve their chances of receiving a diagnosis and treatment. The service screens almost 10,000 homeless people and drug users a year for active TB and supports treatment compliance in those groups. A second screening van will test for Hepatitis B and C and HIV and commissioners are exploring ways to further expand the services offered.

These are encouraging steps in the right direction but there is still a long road ahead of us. We need more targeted interventions to meet those who don't come forward. We need bolder commitments to working together, talking about TB and ending the stigma. And we need stronger local leadership to prioritise TB services amongst competing priorities in high-incidence areas.

To mark World TB Day 2015, I will be visiting the 'Find & Treat' service, to see and support this successful initiative. I urge everyone to take a stand, speak up and to raise awareness. TB should have no place in our country's present and with concerted action we can make it an infection of the past.

Jane Ellison  
Public Health Minister

## View from our Chief Medical Officer – Professor Dame Sally Davies



I am delighted to introduce this year's World TB Day newsletter, which provides an update on the activities of the last year to improve TB control in England and abroad to support our long-term goal to reduce and eliminate TB. TB remains one of the world's top health challenges with 9 million new cases and nearly 1.5 million deaths each year. 2014

saw the WHO launch its *End TB Strategy* and it is very pleasing to see England at the forefront of supporting this by launching its own 'Collaborative TB Strategy for England' in January 2015, which promotes a locally led, nationally coordinated approach to TB control.

This newsletter provides an overview of the Collaborative TB Strategy for England and outlines some of the early work to support its implementation. It provides a series of short summaries covering the appointment of Emma Thompson as TB Ambassador for London, a joint Local Government Association / PHE document on how local authorities can tackle TB, information on successful local authority projects, a summary of the LTBE Service that supports large TB incident screenings in London and a summary of a recently initiated latent TB screening programme.

In addition, the newsletter introduces us to the new TB monitoring indicators released by PHE on the Fingertips tool today, updated content of the National Knowledge Service and also provides examples of TB research activities and the recently created Health Protection Research Units that are supporting TB research.

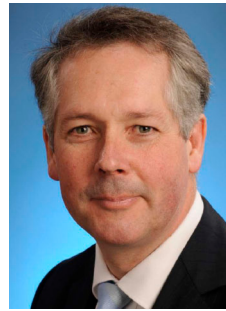
The content outlined in this newsletter reflects the strong commitment of individuals and organisations to work together to tackle TB. If we are to achieve our long-term goal of reducing and eliminating TB, collaborative working and efforts to prevent, diagnose and treat TB must continue now more than ever.

I hope you find this update interesting and useful. Please feed back any comments to: [tbsection@phe.gov.uk](mailto:tbsection@phe.gov.uk)

A handwritten signature in black ink that reads "Sally Davies".

Professor Dame Sally Davies  
Chief Medical Officer for England, Department of Health

## Professor Paul Cosford, Director for Health Protection, PHE



In January 2015, I was pleased to announce the launch of the Collaborative TB Strategy for England, 2015-2020. This joint PHE and NHS England strategy, developed in collaboration with partners from the NHS, local government, and the third sector, provides a clear blueprint of the steps we need to

take to tackle TB in England. We have the evidence of what works in treatment and prevention, and need to make sure it is provided everywhere all of the time if we are to see the sustained reductions in TB that are achievable in England.

The strategy brings together best practice in clinical care, social support and public health to strengthen TB control, and to achieve year-on-year decreases in incidence, a reduction in health inequalities and, ultimately, the elimination of TB as a public health problem in England. Since the launch of the strategy in January 2015, work has started to support the setting up of 9 TB control boards and a national TB programme, a guide for LTBI screening has been written and workshops organised.

The strategy can only be successfully achieved through active participation and commitment of a wide range of stakeholders and partners across the NHS, local government, PHE and the third sector. I hope very much that you will want to be part of this exciting future for improved TB control.

A handwritten signature in black ink that reads "Paul Cosford".

Professor Paul Cosford  
Director for Health Protection, PHE

# At the Front line

## TB and homelessness in City and Hackney

Homelessness is a risk factor for TB, but it is also a risk factor for failure to treat and cure TB leading to an increase in suffering and expense, reduced accessibility to services, and a higher risk of community transmission. Since 2009, Homerton Hospital TB team has worked in partnership with the local authority housing department to reduce these inequities by housing homeless people with no recourse to public funds (NRPF) in local temporary accommodation, by establishing a service level agreement (SLA) set up and funded during the lifetime of the PCT, which is now paid for by City of London and Hackney local authorities. Since its inception, the SLA has housed 33 patients from 19 different countries, as well as their partners and children when necessary. All patients are on Directly Observed Therapy (DOT), and are given monthly bus passes and food, as well as receiving help with health, psychological and social problems, benefit and asylum applications, and other miscellaneous needs. The team have not lost the opportunity to follow up any homeless patient since the scheme started, and 100% of these patients have completed treatment. Housing a homeless person for the duration of their TB treatment is an extremely fair strategy as it gives that individual the same chance of cure as someone who is already housed and it prevents the spread of TB to others as well as giving dignity to the patient.

Sue Collinson, [Sue.Collinson@homerton.nhs.uk](mailto:Sue.Collinson@homerton.nhs.uk)



**Homeless Camp found by Homerton Hospital TB team on Hackney Marshes**

Image courtesy of Homerton Hospital TB team.

In recognition of their ground breaking work, Homerton Hospital TB team were the winners of the 2015 Sir John Crofton Prize for TB Nursing

## Innovation in Newham – making a difference through CCG initiated primary care based latent TB screening

Newham has the highest TB rate and TB case load of any CCG in England (2013 – 107/100,000 population, 335 TB cases). Newham CCG, working with all GP practices and local health services, developed a pioneering approach in the implementation of primary care based latent TB screening in 2014 to identify and treat people with latent TB infection. This approach aims to reduce the number of people developing active TB disease and decrease the spread of TB.

How do they do it? When a resident from a country where TB is common registers with a Newham GP they are offered a blood test to check for latent TB infection. If latent TB is detected they are offered a chest X-ray and a three-month course of treatment. The majority of treatment for latent TB infection is provided through local pharmacies that are easy for patients to access. Patients and staff are optimistic about the programme and to date (July 2014 – January 2015) over 2,300 tests have been carried out with nearly 600 (25%) people being diagnosed with latent TB.

For more information please go to:

[www.newham.gov.uk/Documents/TheMagArchive/Newham-Mag-issue-306.doc](http://www.newham.gov.uk/Documents/TheMagArchive/Newham-Mag-issue-306.doc)

Lynn Altass, [L.Altass@nhs.net](mailto:L.Altass@nhs.net)

## TB in Bradford

The incidence of TB in Bradford district peaked in 2005 at just over 40/100,000, and although it has declined slightly from the peak, it remains over twice the national average at 33.5 per 100,000. Key issues of concern in Bradford are:

- the high numbers of TB cases occurring in settled migrants who have been resident in the UK for over 5 years
- the high proportion of TB cases who are UK-born descendants of migrants from high-burden countries
- the very high proportion of TB cases in Bradford who are children, the majority of whom are UK born
- an increasing number of TB patients with complex health needs including substance misuse

In response to these challenges, Bradford Council, working with partners in Kirklees Council (another high burden area for TB) and PHE Yorkshire and the Humber, jointly funded a pilot study to explore new approaches to screening for latent TB infection in new and settled migrants working with the local migrant health service and local City Clinical Commissioning Groups. This pilot study explored different approaches to improve uptake of TB screening in primary care and lessons learned from the pilot will contribute to the rollout of LTBI screening as part of implementation of the Collaborative TB Strategy for England 2015-2020.

PHE Yorkshire and the Humber and Bradford Council have also carried out a health needs assessment for TB in children and PHE Yorkshire and the Humber is developing a tool for root cause analysis of TB in children to identify opportunities for prevention.

Ebere Okereke, [Ebere.Okereke@phe.gov.uk](mailto:Ebere.Okereke@phe.gov.uk)

## London TB Extended Contact Tracing Project – enhancing and improving TB incident investigations and management in London

The London TB Extended Contact Tracing Project (LTBEx) is a PHE-funded multi-disciplinary team working with health protection teams and TB services across London to enhance and improve TB incident management.



### LTBEx Team

Image courtesy of LTBEx

Since January 2013, LTBEx has been involved in 81 TB incidents across London, and has screened 3,098 contacts. Onsite screening has been provided for 37% of these incidents,

and our stakeholders see this as a particular strength of the project. Project outputs to date have included:

- providing additional capacity to TB clinics and health protection teams to undertake large scale screening exercises, particularly onsite
- strengthening the public health / clinical interface
- overcoming cross boundary issues and streamlining the referral process for contacts requiring further clinical assessment
- systematically collecting and collating screening outcomes
- enhancing partnership working amongst stakeholders
- promoting a consistent and standardised approach to incident management

As a pan-London service, LTBEx is uniquely placed to develop and implement agreed standards for TB risk assessment and evidence-based incident management, which can be applied elsewhere.

Sam Perkins, [Sam.Perkins@phe.gov.uk](mailto:Sam.Perkins@phe.gov.uk)

## West Midlands

### Reaching out to risk groups

The West Midlands is exploring different approaches to reaching out to risk groups, providing TB screening, referral and treatment to under-served at risk populations. One recent example of a local initiative is a latent TB screening programme at a community college offering English language training for non-UK born students and recent migrants. The college has a predominance of students from high incidence regions – particularly sub-Saharan Africa and India. A partnership between the Birmingham Chest Clinic, PHE West Midlands and Birmingham City Council was established. Six hundred students were given information, counselling and then offered IGRA testing. Those with positive results (20%) were referred directly to the Chest Clinic for assessment and treatment. Compliance with treatment exceeded expectations. Funding is being sought to establish this as an on-going service.

Nic Coetzee, [Nic.Coetzee@phe.gov.uk](mailto:Nic.Coetzee@phe.gov.uk)

### Wolverhampton Refugee and Migrant Centre latent TB project – innovative partnership working to identify and treat LTBI in new migrants

Wolverhampton is a multi-cultural City of high deprivation. Its incidence levels of TB are 33.1/100,000 population, more than twice the national average. Public health workers, staff at the Wolverhampton Refugee and Migrant Centre (RMC), local TB teams and private enterprise have co-ordinated a pilot scheme to proactively identify individuals with LTBI. New entrants from countries of high incidence are being screened for both active and latent TB at the RMC, as they have established links with the local NHS trust and target population. Clients who have tested positive for LTBI have been offered follow up appointments to ensure treatment completion. This pilot is an excellent example of a multiagency approach towards controlling TB.

Steve Barlow, [Steve.Barlow@wolverhampton.gov.uk](mailto:Steve.Barlow@wolverhampton.gov.uk)

## Launch of the Collaborative TB Strategy for England 2015-2020

The strategy was developed following a three month public consultation phase in June 2014. During the consultation, the strategy received several hundred comments from different stakeholders and a consultation response document was drafted alongside making amendments to the strategy to meet the needs of these stakeholders. The final strategy was launched on 19 January 2015 at Portcullis House in London.

The published strategy is available for download via the link below:

[www.gov.uk/government/publications/collaborative-tuberculosis-strategy-for-england](http://www.gov.uk/government/publications/collaborative-tuberculosis-strategy-for-england)

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## Launch of the online PHE TB Strategy Monitoring Indicators tool

The new online tool allows local information about the key TB monitoring indicators to be easily accessed, and will enable users to see how their areas are performing against other localities and to track their performance over time. The interactive maps, graphs and tables can be used to support local areas in assessing their local TB service needs, developing their local TB action plans and monitoring their progress in achieving the ambitions of these and the Strategy. The tool presents data up to 2013, and will be updated with 2014 data from September 2015. For local authorities with small numbers of cases, data on some of the indicators will be suppressed to avoid deductive disclosure.

The tool can be accessed via the link:

<http://fingertips.phe.org.uk/profile/tb-monitoring>

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## Tackling TB: Local Government's Public Health role

The Local Government Association (LGA) and Public Health England published in July 2014 a frequently asked questions document for councillors and officers in local government to address questions that they may have on TB and its burden in the UK.

The published document entitled 'Tackling tuberculosis Local government's public health role' is available for download via the website [www.local.gov.uk](http://www.local.gov.uk).

## A sprinkle of celebrity stardust – Emma Thompson agrees to be the Mayor of London's TB Ambassador

Emma Thompson and her son Tindy Agaba officially opened the new TB service in North Central London - South Hub based at the Whittington Hospital in October 2014. Tindy had been treated by University College London Hospital for TB and this personal connection prompted Emma Thompson to write to the Prime Minister and the Mayor of London, about the problem of TB in London and to offer support in the fight against TB. This offer has culminated in Emma Thompson becoming London's TB Ambassador lending her support, with Tindy, to events such as the launch of the Collaborative TB Strategy and the London Find and Treat service.



**Cutting the ribbon to open the new TB service with a sprinkle of celebrity stardust**

The Mayor of London, Boris Johnson, said: "I am thrilled that Emma Thompson has agreed to become a TB Ambassador for London, lending her immense talent and enthusiasm to help raise awareness of this disease. Emma is passionate about taking action against TB following the experience of supporting her son through the diagnosis and treatment of this illness. I look forward to working closely with Emma to support vital projects that work to help Londoners with this debilitating condition."

Emma Thompson said: "I am delighted that my involvement in this fight will be ongoing, as the Mayor of London has invited me to be his TB Ambassador to highlight the action we need to take to fight this disease, a disease of which I have personal experience."

Lynn Altass, [L.Altass@nhs.net](mailto:L.Altass@nhs.net)

## National Knowledge Service – TB update 2015

The PHE National Knowledge Service – TB (NKS – TB) contributes to the prevention and control of TB by increasing awareness, providing context-specific information for professionals and patients on the prevention and management of TB. Recent initiatives include the development of a resource for occupational health staff and an online molecular diagnostic CPD tool ‘TB in the workplace: Information for all employers’ developed in collaboration with: The Association of Local Authority Medical Advisors (ALAMA); Association of National Health Occupational Physicians (ANHOPS); NHS England; the Society of Occupational Medicine and NHS Health Work network. The document contains information for the employer on risk assessment, symptoms of TB, a referral pathway for TB in the workplace, screening for TB in employment, supporting staff with active TB at work and contact tracing at work. This resource can be accessed via [www.gov.uk/government/publications/tuberculosis-tb-in-the-workplace](http://www.gov.uk/government/publications/tuberculosis-tb-in-the-workplace)

The online resource for nurses on ‘Molecular Diagnosis of TB’ is now live. The module has been accredited by the [Royal College of Nursing](#), designed for any nurse with an interest in TB. The module is intended to inform

nurses about microbiological tests for TB diagnosis, how these tests can be used in managing patients and their cost implications. On completion of the module the nurses receive a CPD certificate from the RCN. Please note that you will need to register to complete the module, which is [free and open access](#).

Access to a suitable home environment plays a key role in the diagnosis, treatment and prevention of TB. In collaboration with ‘PHE Health Equity & Place’ and ‘Our Life’ (a social enterprise) we are currently in the process of developing practical resources to help access appropriate housing for TB patients. It is hoped that this is likely to lead to more TB patients successfully completing their treatment as recommended by NICE. A national survey is underway to identify existing local TB housing policies and examples of good practice. If you are a TB professional or in the housing sector or local government please participate in this survey via the link below:

<https://surveys.phe.org.uk/TakeSurvey.aspx?PageNumber=1&SurveyID=820Kmm8K&Preview=true>

Anjana Roy, [Anjana.Roy@phe.gov.uk](mailto:Anjana.Roy@phe.gov.uk)

# The Collaborative TB Strategy for England 2015-2020

## Strategy summary

The ‘Collaborative TB Strategy for England 2015-2020’ aims to achieve a year-on-year decrease in incidence of TB, a reduction in health inequalities, and ultimately the elimination of TB as a public health problem in England. To achieve these ambitions and deliver significant improvements in TB control, the strategy sets out the improvements and actions that need to be made in 10 key areas. The key areas of action are: improving access to services and ensuring early diagnosis, providing universal access to high quality diagnostics, improving treatment and care services, ensuring comprehensive contact tracing, improving BCG vaccination uptake, reducing drug-resistant

TB, tackling TB in under-served populations, systematically implementing new entrant latent TB screening, strengthening surveillance monitoring and ensuring an appropriate workforce to deliver TB control.

Since January 2015, when the strategy was launched, an interim implementation team has been formed and is progressing key parts of the strategy such as the writing of a GP and commissioner guide for latent TB infection screening, organising workshops and supporting the setting up of 9 TB control boards and a national TB programme,

TBStrategy, [TBStrategy@phe.gov.uk](mailto:TBStrategy@phe.gov.uk)

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Initial work is underway to implement some of the 10 ‘areas for action’, including:

### ***TB workforce in England***

In order to establish effective and efficient TB identification and control, not only nurses and doctors but the wider TB workforce such as case management support staff, the third sector, epidemiologists and bio-medical scientists are needed. An integral part of the TB strategy concerns the scoping of the current TB workforce and so PHE and NHS England will be working with Health Education

England during 2015/2016 to co-ordinate a national TB workforce scoping exercise. This will enable us to not only look holistically at the needs of a future workforce but also the current workforce developmental needs, ensuring we have an expert, progressive and resilient multi-disciplinary TB workforce in England capable of delivering high-quality clinical and public health TB services with the best possible outcomes for patients.

Joanne Bosanquet, [Joanne.Bosanquet@phe.gov.uk](mailto:Joanne.Bosanquet@phe.gov.uk)

## **An update on the new national LTBI screening programme**

Latent TB infection (LTBI) screening is a key intervention area of the recently launched TB strategy for England. The TB screening unit supported the strategy development and consultation phase and worked closely with NHS England to identify and address operational and resource aspects of a national LTBI screening programme. In addition, the PHE TB Screening Unit works closely with local stakeholders to learn from, and build upon, the knowledge gained through local LTBI screening initiatives.

The new national LTBI screening programme will be aimed at all migrants aged 16-35 years and who entered the UK from a TB high incidence country (150 per 100,000 and over or from sub-Saharan Africa) within the last five years. Interferon Gamma Release Assay (IGRA) based screening will be carried out in primary care with referral to secondary care for individuals who test positive. The programme may also provide opportunities for other health check initiatives.

The launch of the strategy along with a clear vision and identified resources for a national LTBI screening programme would ensure that this intervention is properly implemented. The identification of £10 million by NHS England for systematically implementing new entrant latent TB screening was an important first step, but much remains to be done to roll out such a programme in England. The required work ranges from mapping out stakeholders and accountabilities, ensuring appropriate budget allocations and contractual arrangements, to the development of indicator and monitoring tools.

Stakeholder liaison and engagement is a vital component of this fast moving process, and will be done in a number of different ways, including meetings and events as well as development and distribution of essential implementation guides and other materials on our website [www.gov.uk/tuberculosis-screening](http://www.gov.uk/tuberculosis-screening).

Dominik Zenner, [Dominik.Zenner@phe.gov.uk](mailto:Dominik.Zenner@phe.gov.uk)

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## **Supporting vulnerable patients throughout TB treatment**

TB disproportionately affects poor and marginalised populations who may not have access to social support. For people in the UK illegally, there is no longer a statutory duty of care towards those with a connection to the locality.

This means that TB treatment access, completion and cure are compromised as these patients do not have access to public funds for food, travel to clinics and basics such as bedding and cooking equipment, jeopardising not only the patient's recovery but also creating a public health risk of transmission. TB Alert's Patient Support Fund has previously given grants to meet these basic social needs for vulnerable patients which, on audit, support high rates of treatment completion. Hence TB Alert believes it is vital to address clinical treatment in conjunction with related health and social care issues.



Mike Mandelbaum, [Mike.Mandelbaum@tbalert.org](mailto:Mike.Mandelbaum@tbalert.org)



**Crawley TB Nurse Photoshoot**

Image courtesy of TB Alert

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## **Tackling TB in under-served populations**

### **Find and treat**

Earlier this year the Find&Treat team launched a new Mobile Health Unit outside Parliament to replace the original X-ray unit which had screened over 100,000 people and covered 250,000 miles. In addition to digital radiology and GeneXpert to rapidly detect pulmonary TB, the new unit is equipped to offer a range of immunisations, point-of-care tests and other health opportunities for some of the most vulnerable and excluded people in the country. Research by UCL and PHE has demonstrated that the populations served by Find&Treat have multiple health problems, requiring access to integrated screening and

care packages. This new one-stop-shop service is an essential part of the strategy and vital to addressing health inequalities as outreaching screening and care for people who have problems accessing diagnostic services and taking prolonged treatment is a key action of the Collaborative TB Strategy. Therefore building on the successful model of early TB detection and care pioneered by University College London Hospital (UCLH) Find&Treat in London, the Collaborative TB Strategy will directly support expanded access to active case finding with health and psychosocial support for vulnerable populations nationally.

Alistair Story, [Alistairstory@gmail.com](mailto:Alistairstory@gmail.com)

# Collaborative research to support the TB strategy

## TB – Whole Genome Sequencing

Public Health England has started to perform Whole Genome Sequencing in parallel to routine TB strain typing to assess its suitability as a one-stop test for mycobacterial infection. The aim is to identify TB, predict drug resistance, and describe relatedness between isolates within days of initial growth from a patient's specimen.

Birmingham Public Health laboratory is now sequencing all new isolates from hospitals across the Midlands, and bioinformatics analysis to interpret the data is performed by the team led by Professor Derrick Crook at Oxford University.

This work is one element of the CMO's 100,000 genome project to develop capacity and capability in genetic science. PHE has been asked by the Department of Health to lead developments in pathogen sequencing to link to the work on human genomes, and TB was selected on the basis that existing work makes it feasible to deliver improvements to NHS patient care across England by 2017. The 12 month project started in July 2014, and is building on the research of the Modernising Medical Microbiology and Health Innovations Challenge Fund consortia between Oxford University, NHS and PHE labs in Leeds, Brighton and Birmingham.

Grace Smith, [Grace.Smith@heartofengland.nhs.uk](mailto:Grace.Smith@heartofengland.nhs.uk)

## PREDICT and ACE updates

The PREDICT study, a collaborative project between PHE, Queen Mary University of London, UCL, Imperial College, University of Birmingham and Brunel University, which is assessing tools for predicting progression from latent TB infection to active disease, is nearing the conclusion of participant recruitment, with almost 9,500 people enrolled. As well as working with most large London hospitals, as well as many GP surgeries and colleagues in Birmingham and Leicester, the study has recruited over 1000 participants from places of worship. Participant follow up should be completed early in 2016 with results reported soon after. The ACE study follows on from PREDICT and is assessing the identification of cases of both latent and active TB in A&E Departments.

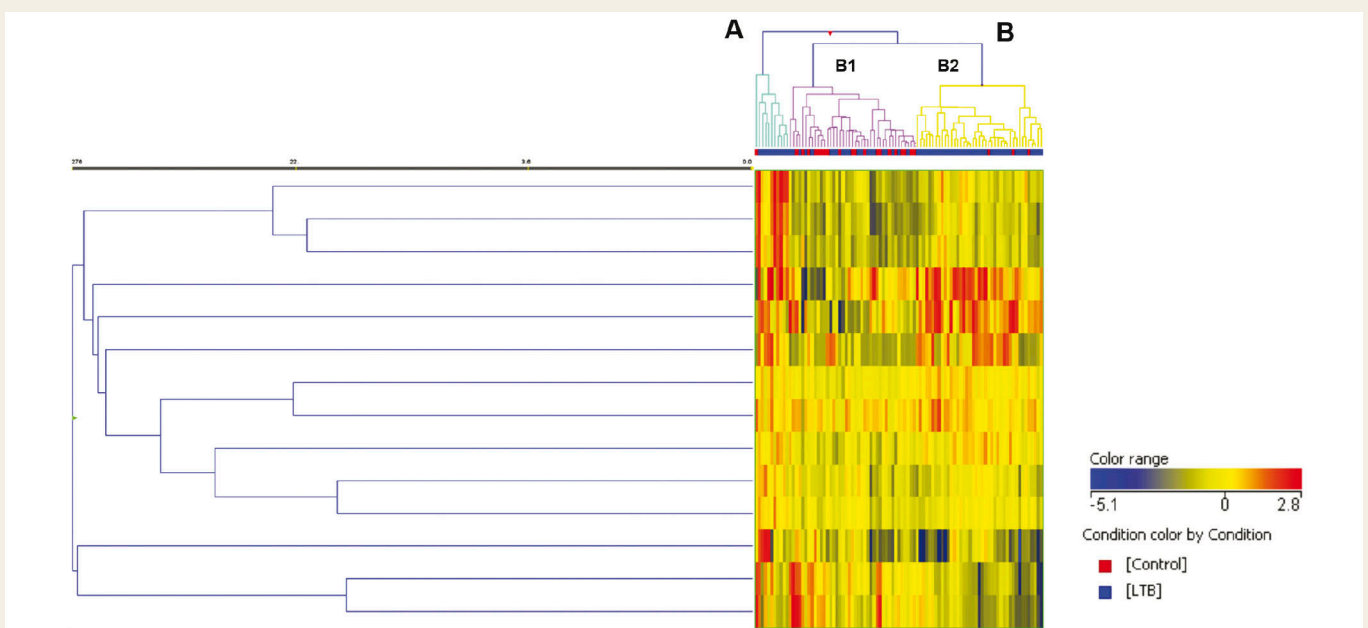
Jo Southern, [Jo.Southern@phe.gov.uk](mailto:Jo.Southern@phe.gov.uk)

## Diagnostics TB research at PHE Porton

The incidence of TB has increased steadily in the UK, mainly due to progression of latent TB infection to active disease in at risk groups. Existing diagnostic tests are somewhat insensitive and are unable to distinguish active TB from LTBI. Improved diagnosis, including stratification of latent TB infection patients more likely to progress to active TB (~10-15%), would make a considerable contribution to patient care, but also more importantly help disease control by limiting spread. The Diagnostic Technologies

and TB groups at PHE Porton and Colindale are currently collaboratively developing more sensitive biomarker-based 'point of care' diagnostic tests, which could deliver a rapid turnaround to diagnosis (< 30 minutes) from a pin-prick of blood. PHE has devoted Pipeline Fund Investment and initiated international collaborations towards research into improving TB diagnostics.

Karen Kempzell, [Karen.Kempzell@phe.gov.uk](mailto:Karen.Kempzell@phe.gov.uk)



Unsupervised Squared-Euclidean hierarchical clustering on a Human peripheral blood leukocyte expression dataset using LTBI and control samples



## TB in Health Protection Research Units

Research of the NIHR Health Protection Research Units (HPRU) in Respiratory Infections supports the goals of the Collaborative TB Strategy 2015-2020 recently launched by PHE and NHS England. Prior to this, the decade long history of collaborative research between Imperial College London and PHE provided evidence which supported the development of the strategy. As most active cases occur through reactivation of latent infection, a priority of the HPRU is to evaluate national migrant TB screening, in particular, the barriers and facilitators for patients to increase uptake. Key to this work is exploring ways of breaking down health inequalities for the most vulnerable and hard-to-reach at risk groups and the challenges posed

by migration. Complementing this, research to expand the clinical toolkit for TB includes validating the utility and cost effectiveness of methods to accelerate accurate diagnosis of TB disease and latent infection. In collaboration with the University of Oxford and the NIHR HPRU in Modelling Methodology, the clinical and epidemiological role of whole genome sequencing of *M.tuberculosis* in local and national surveillance, including outbreaks, will be defined. Beyond the Collaborative TB Strategy, HPRUs are poised to continue answering key research questions that arise, providing future proofing for TB public health needs.

Melanie Rees-Roberts, [Melanie.Rees-Roberts@imperial.ac.uk](mailto:Melanie.Rees-Roberts@imperial.ac.uk)

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## BCG vaccination and Port Health Research at LSHTM

The London School of Hygiene and Tropical Medicine (LSHTM) has been collaborating with PHE to evaluate the duration of protection of BCG funded by NIHR. This major project has completed recruitment of over 3,000 participants and will inform future BCG vaccination policy. Further work on BCG will form part of the programme of work of the Immunisation Health Protection Research Unit at LSHTM. To support future migrant screening policy, researchers at LSHTM are working with the TB screening team at PHE to undertake linkage of the TB Surveillance database with the radiographic features of 3,500 chest radiographs taken at port of entry screening in previous years. This collaborative project aims to explore potential predictors of future active TB amongst UK new entrants with chest X-rays at the time of arrival that demonstrate changes in the lungs that are not due to active TB.

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## Hard to reach groups, migrant screening and latent TB research at UCL

The UCL-TB Centre undertakes research in collaboration with PHE to support the control and ultimate elimination of TB in England. An NIHR programme grant on hard-to-reach groups has provided the evidence base to support the strategy in prioritising TB control activity in hard-to-reach groups, including assessing the role of approaches such as the Find & Treat service. Ongoing work includes a trial of video observed therapy to improve treatment completion, a trial of a 12 dose rifapentine based regimen to improve latent TB treatment (HALT study), screening for latent TB in accident and emergency departments (ACE study) and evaluation of novel diagnostic tests for active and latent TB. In collaboration with the PHE TB Screening Unit, researchers at UCL are evaluating the pre-entry screening programme for TB to identify measures that will improve case detection. A newly funded collaborative cluster randomised controlled trial, led by Queen Mary University of London in partnership with UCL and PHE will evaluate the treatment of latent TB in primary care.

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# International TB

## WHO End TB Strategy: Global strategy and targets for TB prevention, care and control after 2015

The new post-2015 Global TB Strategy aims to end the global TB epidemic, with targets to reduce TB deaths by 95% and to reduce new cases by 90% between 2015 and 2035, as well as ensuring that no family is burdened with financial expenses associated with TB. WHO will help Member States adapt and operationalise the strategy, in particular addressing the problem of multi-drug resistant TB and promoting collaboration across international borders for TB control.

Further information on the post-2015 Global TB Strategy can be found at [www.who.int/tb/post2015\\_strategy/en/](http://www.who.int/tb/post2015_strategy/en/)

In Europe, the new TB Action Plan of the WHO European Region, 2016–2020, will be in line with the new post-2015 Global TB Strategy.

## 1st Eastern Partnership Ministerial Conference on TB and Multi-drug Resistant TB

Latvia will host the 1st Eastern Partnership Ministerial Conference on TB and its Multidrug Resistance (MDR-TB) from 30 – 31 March 2015 in Riga. This high profile conference will be attended by representatives of the European Union, the European Environment Agency, the European Commission, European Union accession and Eastern Partnership (EaP) countries, international institutions and non-governmental organizations. The key objectives of the conference will be to strengthen the political cooperation on:

- elimination of TB and multi-drug resistance in EU/EEA and EaP countries
- multi-sectoral and cross-regional approaches and strategies in TB prevention and care, with a focus on vulnerable communities and cross-border spread.
- research and innovation for new tools to fight TB and MDR-TB

Further information on the conference can be found at: [www.vm.gov.lv/en/what\\_is\\_new/presidency\\_events/46\\_eastern\\_partnership\\_ministerial\\_conference\\_on\\_tuberculosis/](http://www.vm.gov.lv/en/what_is_new/presidency_events/46_eastern_partnership_ministerial_conference_on_tuberculosis/)

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