



# Faculty of Public Health

Of the Royal Colleges of Physicians of the United Kingdom

Working to improve the public's health

**OSPHE 075**

**Contact Investigations for TB**

## Contact Investigations for TB

# CANDIDATE PACK

## Candidate task

You are a member of a Public Health team currently attached to the Health Protection Unit<sup>1</sup> that provides services to a local health organisation. Following diagnosis of sputum-positive Tuberculosis (TB) in a 9 year old Pakistani child, you are asked by the local specialist from the Health Protection Unit to meet with the Head Teacher, to explain contact tracing priorities and to consolidate what needs to be done in terms of the school.

You have 8 minutes to prepare for the station. You are not required to prepare any visual aids. You will then spend 8 minutes discussing the task with an actor. You may use paper notes to aid your verbal briefing.

## Outline of situation

The health organisation is responsible for an urban population of 150,000, of which 16% are from minority ethnic backgrounds, mainly of Asian ethnicity. The 9 year old child has been diagnosed by the local Paediatric Respiratory Medicine Physician and has sputum-positive TB. It is necessary to conduct contact tracing.

## Candidate guidance

Read the briefing paper carefully.

**Paper 1904.1** is an Extract from National Institute guidance on Tuberculosis management (Tuberculosis, issue date March 2005, NIHCE).

Consult this document as you see fit to assist you in making notes to prepare for your meeting with the Head Teacher.

You are to gauge the Head Teacher's understanding of TB and provide information appropriately. You are to gather information from the Head Teacher that will allow you to incorporate this into an action plan to achieve contact tracing, to be agreed at the Health Protection Unit following your meeting. You are to achieve the Head Teacher's support and ensure that public relations aspects are not overlooked.

## At the station

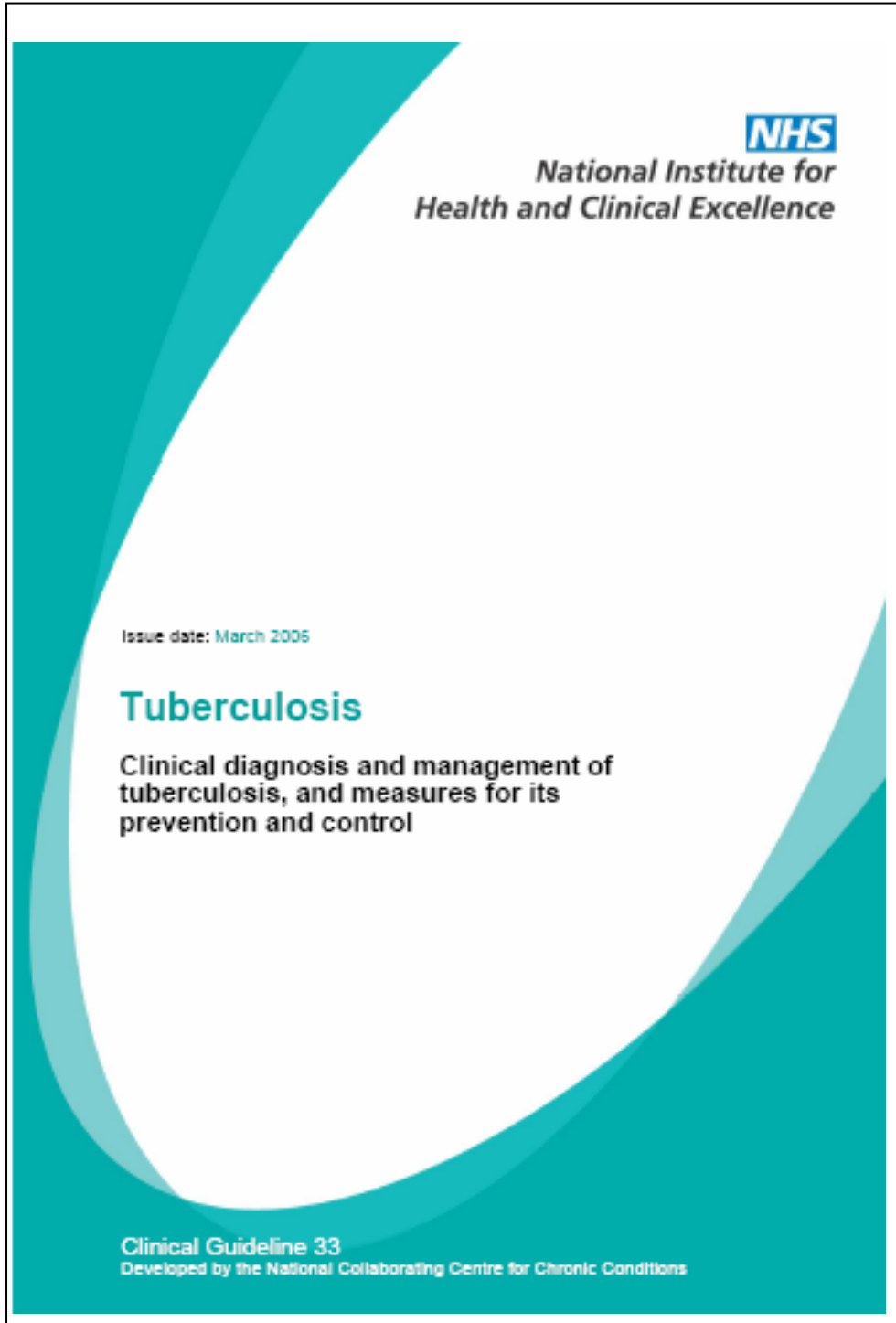
You will be greeted by a marker examiner who will take your candidate number and name, and then hand over to the actor by saying:

"This is the head teacher. They will now start the station".

<sup>1</sup>Health Protection Unit is the local branch of a national body that provides specialists responsible for community infectious and non-infectious hazard control.

# CONTACT INVESTIGATIONS FOR TB

Candidate Briefing Paper 1904.1



**EDITED EXTRACT FOR THIS EXAMINATION 1.8 Active case finding****Contact tracing: human to human transmission**

- 1.8.1.1 Once a person has been diagnosed with active TB, the diagnosing physician should inform relevant colleagues so that the need for contact tracing can be assessed without delay. Contact tracing should not be delayed until notification.
- 1.8.1.2 Screening should be offered to the household contacts of any person with active TB, irrespective of the site of infection. Household contacts are defined as those who share a bedroom, kitchen, bathroom or sitting room with the index case. Screening should comprise:
- standard testing for latent TB for those aged 35 or younger, and consideration of BCG or treatment for latent TB infection once active TB has been ruled out
  - interferon-gamma test 6 weeks after the Mantoux test, and consideration of BCG or treatment for latent TB infection once active TB has been ruled out, for those who:
    - are previously unvaccinated and
    - are household contacts of a person with sputum-smear positive TB and
    - are Mantoux negative (less than 6mm).
  - chest X-ray (if there are no contraindications) for those older than 35, possibly leading to further investigation for active TB.

The recommendations on asymptomatic household and other close contacts of people with active TB are summarised in an algorithm (appendix E – not supplied for OSPHE purposes).

- 1.8.1.3 For people with sputum smear-positive TB, other close contacts should be assessed. These may include boyfriends or girlfriends and frequent visitors to the home of the index case. Occasionally, a workplace associate may be judged to have had contact equivalent to that of household contacts, and should be assessed in the same way.
- 1.8.1.4 Casual contacts of people with TB, who will include the great majority of workplace contacts, should not normally be assessed.
- 1.8.1.5 The need for tracing casual contacts of people with TB should be assessed if:
- the index case is judged to be particularly infectious (for example, evidenced by transmission to close contacts), or
  - any casual contacts are known to possess features that put them at special risk of infection.
- 1.8.1.6 'Inform and advise' information should be offered to all contacts of people with smear-positive TB.

**Contact tracing: cases in schools**

- 1.8.4.1 Following diagnosis of TB in a school pupil or member of staff, the consultant in communicable disease control should be prepared to explain the prevention and control procedures to staff, parents and the press. Advice on managing these incidents and their public relations is available from the Health Protection Unit.
- 1.8.4.2 If a school pupil is diagnosed with sputum smear-positive TB, the rest of his or her class (if there is a single class group), or the rest of the year group who share classes, should be assessed as part of contact tracing.
- 1.8.4.3 If a teacher has sputum smear-positive TB, the pupils in his or her classes during the preceding 3 months should be assessed as part of contact tracing.
- 1.8.4.4 Clinicians conducting contact tracing in a school should consider extending it to include children and teachers involved in extracurricular activities, and non-teaching staff, on the basis of:
- the degree of infectivity of the index case;
  - the length of time the index case was in contact with others;
  - whether contacts are unusually susceptible to infection;
  - the proximity of contact.
- 1.8.4.5 Secondary cases of sputum smear-positive TB should be treated as index cases for contact tracing.
- 1.8.4.6 If the index case of a school pupil's TB infection is not found, and the child is not in a high-risk group for TB, contact tracing and screening (by either symptom enquiry or chest X-ray) should be considered for all relevant members of staff at the school.

Edited extract of NICE guideline – tuberculosis 37.

## Contact Investigations for TB

# **MAIN MARKER EXAMINER PACK**

## **Examiner situation**

Refer to **Paper 1904.1** which is an extract from the National Institute for Health and Clinical Excellence (NICE), Clinical Guideline 33, Tuberculosis, issue date March 2005. The Candidate and Actor Briefing Packs contain this document.

## **Examiner Answer guidance**

**Unacceptable performance leading to a fail** – The candidate fails to mention that contact tracing should involve members of the child's household and frequent visitors to the home, and does not even pick up the cue from the actor asking about this. The examiner should award the lowest scores in this case for competencies 2, 3, and 4.

## **Examiner briefing pack (these will be inserted by the Faculty office)**

Candidate pack, Actor briefing pack.

## Marking Guide for Examiners

1. Has the candidate appropriately demonstrated presenting skills in a typical public health setting (presenting to a person or audience)?

Avoids jargon. Is clear. Appropriate language for the audience. Maintains eye contact. Appropriate manner for the situation. Shows empathy.

2. Has the candidate appropriately demonstrated listening skills in a typical public health setting (listening and responding appropriately)?

Ensures actor questions are answered appropriately. Answers totality of the question. Manner of response appropriate.

3. Has the candidate demonstrated ascertainment of key public health facts from the material provided and used it appropriately?

Demonstrates understanding and covers:

- Basic facts about TB and how it is spread (incubation period, bacterial (drug resistance risk), airborne droplet spread, concept of infectious cases, very high rates in certain groups);
- What needs to be done to achieve effective contact tracing (careful history of family and school contacts, algorithm approach);
- What will happen to contacts who are diagnosed to have TB (chemoprophylaxis, further investigation, they become index cases for further contact tracing).

4. Has the candidate given a balanced view and/or explained appropriately key public health concepts in a public health setting?

- Demonstrates awareness of the relevant target populations (children, BME groups, high prevalence populations, immunocompromised or symptomatic).
- Demonstrates ability to explain to Head Teacher the approach that needs to be taken to perform contact tracing in the school, including media/PR issues.

5. Has the candidate demonstrated sensitivity in handling uncertainty, the unexpected, conflict and/or responding to challenging questions?

Demonstrates ability to address any concerns that the Head Teacher may express.

## Contact Investigations for TB

# **ACTOR BRIEFING PACK**

## Station background

As candidate briefing.

## Actor Brief

You are to play the Head Teacher.

You are particularly busy now as the school is nearing an Ofsted inspection (government schools inspection unit).

You normally have a somewhat brisk business-like manner but this is even more evident than usual today.

You will begin by introducing yourself to the Candidate as the Head Teacher and thank the Candidate for attending the meeting. You will explain that you want to know what needs to be done.

**“Thank you for coming in. Perhaps you could tell me what you need to do here?”**

Depending on the candidate volunteering information, you should ensure that you get answers to:

**“Please tell me how this TB is spread?”**

**“What is contact tracing?”**

**“So who do you concentrate on as close contacts?”**

**“How will we do it in the school?”**

**“What happens to the contacts who test positive?”**

**“I have some external support workers who come in and help the children during drama and physical activity sessions – what about them?”**

You will seek clarification as you think necessary during the course of the meeting. Towards the end of the meeting, you raise the matter of dealing with the concerns of other children, parents and staff.

**“My staff and the parents, and the children are going to be very concerned – and what about the media? What do you advise we do?”**

You conclude by thanking the Candidate for their time. Ensure the candidate completes the station on time, leaving the Examiner at the end to concentrate on their marking.

### **Any 'No Go' areas**

No detailed discussion of the treatment of active TB.

### **Level of conflict**

Medium. Ensure you challenge the candidate if they do not answer your questions or give inconsistent answers.