TB is still an important and relevant condition seen in the UK. Especially if you attend medical school in London you will have been taught about TB, and may well be examined on it in an OSCE situation.

OSCE scenario
This 54 year old man has just been diagnosed with active pulmonary TB on your ward and wants to discuss treatment with you. Please discuss with him the standard treatment for TB and answer any questions he may have.

Introduction
- Introduce yourself
- Wash your hands
- Explain you have been asked to discuss TB treatment with him and ask his permission to do so
- Start by asking if he has any particular questions regarding the treatment or anything he wants to clarify

Treatment specifics
- Explain that TB is a serious but treatable disease using medications
- Duration: Explain that TB treatment is usually 6-month treatment
- Drugs: Explain that four main drugs are used (RIPE):
  - Rifampicin, Isoniazid, Pyrazinamide, Ethambutol
- Specifics: Explain that need to take all four drugs daily for 2 months, then just Rifampicin and Isoniazid for a further 4 months

Drug side effects
- Explain that the drugs do have side effects, which we will monitor for and minimise the risk of, but he should still be aware of, as some can be serious. Important ones to mention listed below.
- Rifampicin: Orange discolouration of sweat, tears, urine
- Isoniazid: Peripheral neuropathy (you will reduce the risk by prescribing concurrent pyridoxine)
- Pyrazinamide: Gout, arthralgia, liver toxicity
- Ethambutol: Colour blindness (must test for before starting)
- General: Hepatitis, rash, fevers

Starting treatment
- Usually treatment will be started straight away
- Prior to treatment needs:
  - LFT’s – drugs can affect liver so would be cautious in starting if abnormal LFT’s
  - Ishihara plates – must test for colour blindness due to ethambutol toxicity

Infection Control
- Explain that it usually take two weeks of treatment for him to stop being infectious
- In hospital:
  - While in hospital he will be nursed in a single room (ideally negative pressure)
  - Should wear a respiratory mask if leaves room
  - He needs to stay there until 2 weeks of therapy completed or discharged
At home:
- Warn of increased infectiousness for first 2 weeks
- Advise him to stay away from children, elderly or immunocompromised
- Ideally he should self-isolate – minimal contact with others/public

Compliance
- Stress the importance of taking medications daily, as prescribed
- Highlight the importance of not stopping when feel better:
  - “You may start to feel better after two weeks but this does not mean that the infection is removed from your lungs”
- Raise possibility of resistant (MDR-TB)
  - “If you stop taking the medications before you are supposed to this may lead to resistant forms of the bacteria, which are harder to treat and can cause more serious illness”

Contacts
- Ask who he lives with/who he has been in close contact with (e.g. housemates/work colleagues/partners)
- Explain any close contacts will need to be tested for TB as well and they will be contacted by the TB team regarding this

Finish
- Ask if he has any further questions
- Offer leaflets/information as to where can get further information
- Thank him for his time and give contact details of TB team/yourself

Contact tracing and testing
- Household contacts = those who share a bedroom, kitchen, bathroom or sitting room with the patient
- All household contacts need to be screened for TB (ALSO other close contacts e.g. share desk at work)
- Contacts are assessed initially whether symptomatic:
  - If symptomatic → refer to TB specialist (likely active TB)
  - If asymptomatic → further testing to find those with latent TB
- Asymptomatic:
  - > 65 years → CXR
  - < 65 years → Mantoux test
- Mantoux test results:
  - Inconclusive → refer to TB specialist
  - Positive (> 5mm induration regardless of BCG results) → Interferon-gamma release assay
  - IGRA/Mantoux positive → treat for latent TB
  - IGRA/Mantoux negative → BCG vaccine

Latent TB
- Treat adults < 65 with either:
  - 3 months Isoniazid and Rifampicin OR
  - 6 months Isoniazid
BCG Testing

- Those given BCG:
  - Now in UK no longer routinely given
  - Only 70% effective
  - Given to:
    - Those who have themselves or whose family have recently migrated from a high risk country
    - Those who have recently been a contact of someone with active TB
    - Children who live in a high prevalence area
    - Travel to high risk area
    - Occupational risk