UK Health Security Agency

Serial number: 2025/14 **Date: 07.05.2025**

Event: Increasing detection of antifungal resistant *Trichophyton indotineae* in England

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IRP Level: Not applicable

Incident Lead: Not applicable

Instructions for Cascade
Please cascade as routine to the below groups:

- UKHSA Private Office Groups who cascade within Groups
- UKHSA Regions Directorate:
  - UKHSA Field Services
  - UKHSA Health Protection Teams including UKHSA Regional Deputy Directors
- UKHSA Lab Management Teams
- UKHSA Regional Communications
- Generic inbox for each of the Devolved Administrations
- Inboxes for each of the Crown Dependencies
- DHSC CMO (*excluding internal UKHSA briefing notes*)
- OHID Regional Directors of Public Health
- National NHSE EPRR
- NHSE National Operations Centre

Additionally, this briefing note should be cascaded as below:

- **Devolved Administrations** to cascade to Medical Directors and other DA teams as appropriate to their local arrangements.
- **Crown Dependencies** to cascade to teams as appropriate to local arrangements.
- **Regional Deputy Directors** to cascade to Directors of Public Health
- **UKHSA microbiologists** to cascade to non-UKHSA labs (NHS labs and private)
- **UKHSA microbiologists** to cascade to NHS Trust infection leads
- **NHS infection leads** to cascade to Dermatology departments, local medical committees, private dermatology clinics and centres

- **NHSE National Operations Centre** to cascade to Medical Directors, infectious diseases teams, microbiology departments and NHS laboratory leads, and via appropriate independent sector contacts

Summary:
Infections with terbinafine-resistant *Trichophyton indotineae* (*T. indotineae*), a dermatophyte fungus, are emerging and being increasingly detected in the UK. *T. indotineae* accounted for 40% of dermatophyte isolates referred to the UKHSA Mycology Reference Laboratory (MRL) in 2024.

UKHSA recommends that in cases of tinea corporis, specifically fungal infections of the groin, buttocks and thighs, *T. indotineae* should be suspected especially in patients with links to South Asia or where there is treatment failure with terbinafine.

Background and Interpretation:

Outbreaks of superficial skin infections caused by the emergent dermatophyte *Trichophyton indotineae* (*Trichophyton mentagrophytes* genotype VIII) were first reported in southern Asia in 2014, where it is now endemic.[1] Cases have since been reported worldwide including Europe, Canada and the USA, South America and Africa with mounting evidence of infection acquisition and transmission outside original areas of endemicity.

T. indotineae infections typically initially involve the groin and respond poorly to treatment, resulting in widespread disfiguring lesions affecting multiple body sites. Many isolates exhibit in vitro resistance to terbinafine, and most infections are clinically resistant to this first-line drug. There are also reported cases with poor response to second-line itraconazole treatment.[1] Thus infections typically require protracted treatment regimens, with potential stigma associated with the prolonged presence of lesions and impacts on patient mental health.

The UKHSA Mycology Reference Laboratory (MRL) recently published a peer-reviewed paper detailing the introduction and rapid spread of *T. indotineae* in the UK.[2] There were 161 *T. indotineae* (T*. mentagrophytes* genotype VIII) referrals to the MRL in 2024 in comparison to 31 in 2023. *T. indotineae* is comprising an increasing proportion of all dermatophyte isolates received by the MRL; 40% in 2024 compared with 13% in 2023.

Of 157 cases, 61% had an anatomical site recorded of which 57% were affected in the groin or upper leg area. Travel history was available for 36 individuals (14%), of whom 34 (94%) had travelled to South Asia.

It is likely there is substantial under-ascertainment of *T. indotineae* prevalence due to a low index of suspicion amongst clinicians leading to failure to refer isolates for formal identification to expert centres and a lack of commercial methods available to local laboratories for rapid and accurate identification, and likely misidentification by phenotypic methods.

The UKHSA MRL has detailed household spread of *T. indotineae.* This highlights the importance of recommending best hygiene practices in known cases including regularly washing clothes, towels and bedding on hot wash cycles and ensuring that washing is aired before being used. Cases should refrain from sharing these items, reduce skin-to-skin contact and keep affected areas covered by clothing.[2]

Implications & Recommendations for UKHSA Regions:

Regional colleagues should be aware of the emergence and spread of this resistant dermatophyte, working with health systems as needed.

Implications & Recommendations for UKHSA sites and services:

UKHSA laboratories should be aware of the emergence and spread of this resistant dermatophyte and support GP services seeing increased incidence of first-line treatment failure with advice on appropriate collection and analysis of clinical samples.

Any isolates from these patients should be referred to the Mycology Reference Laboratory[3] for confirmation of identification if referring centres are not confident in their ability to identify this organism to species level.

Implications & Recommendations for NHS:

Clinicians should suspect *T. indotineae* in tinea corporis cases, specifically infections of the groin, buttocks and thighs, especially in patients with links to S. Asia or where there is treatment failure with terbinafine.

Any isolates from such patients should be referred to the Mycology Reference Laboratory[3] for confirmation of identification if referring centres are not confident in their ability to identify this organism to species level.

Implications and recommendations for Local Authorities:

This briefing note is provided for information only.

References/ Sources of information:

1. Chowdhary A, Singh A, Kaur A, Khurana A. The emergence and worldwide spread of the species Trichophyton indotineae causing difficult-to-treat dermatophytosis: A new challenge in the management of dermatophytosis. PLoS Pathog. 2022 Sep 29;18(9):e1010795. doi: 10.1371/journal.ppat.1010795
2. Abdolrasouli A, Barton RC, Borman AM. Spread of Antifungal-Resistant Trichophyton indotineae, United Kingdom, 2017–2024. Emerg Infect Dis. 2025;31(1):192-194. https://doi.org/10.3201/eid3101.240923
3. Mycology reference laboratory - GOV.UK