Algorithm for the assessment and initial management in primary care of returning travellers and visitors from countries* affected by Middle East Respiratory Syndrome-Coronavirus (MERS-CoV) or avian influenza A (eg H5N1, H7N9, H10N8) presenting with febrile respiratory illness: recognition of a possible case and initial management

*High-risk areas as defined in PHE algorithms:

1 MERS-CoV: PHE MERS-CoV Case Algorithm
   http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1317136270914

2 Avian influenza H5N1: PHE H5N1 Case Algorithm
   http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1317133362396

3 Avian influenza H7N9 or H10N8: PHE H7N9 Case Algorithm
   http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1317138620910
**MERS-CoV/Avian Influenza Primary Care Algorithm**

**Infection control procedures:** If the patient mentions a febrile respiratory illness on arrival to the primary care facility, standard respiratory precautions are indicated to minimise contact/exposure to staff and other patients.

### Risk assessment
For a suspect case patients must fulfil the conditions in **both** the boxes below:

<table>
<thead>
<tr>
<th>MERS-CoV or avian influenza A (eg H5N1, H7N9, H10N8)</th>
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</thead>
<tbody>
<tr>
<td><strong>Clinical</strong></td>
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<tr>
<td>A. Fever ≥38°C</td>
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<tr>
<td><strong>AND</strong></td>
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<tr>
<td>B. Lower respiratory tract symptoms (cough or shortness of breath) or clinical signs of lower respiratory tract infection</td>
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<tr>
<td><strong>OR</strong></td>
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<tr>
<td>C. Other severe/life-threatening illness suggestive of an infectious process</td>
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<tr>
<td><strong>Exposure</strong></td>
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<tr>
<td><strong>AND</strong> History of travel to, or residence in a high-risk area* for MERS-CoV or avian influenza A within two weeks of symptom onset</td>
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<td><strong>Note:</strong> two weeks has been chosen as the longest period, but for H5N1 the period is seven days, H7N9 10 days and MERS-CoV 14 days</td>
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</tbody>
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#### Unlikely to be MERS-CoV or avian influenza A.
Treat and investigate as clinically indicated

1. Treat and investigate as indicated
2. Suggest non-urgent molecular testing for influenza. Avian influenza/MERS-CoV is unlikely if clinical severity does not require hospitalisation
3. Follow up by local PHE health protection team, preferably by phone, to confirm recovery/improvement. The patient should be asked to consider voluntary isolation while symptomatic
4. Isolation for contacts is not recommended

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#### Does clinical severity warrant hospitalisation?

- **No**
- **Yes**

If patient deteriorates and needs hospitalisation

Inform and discuss with local PHE health protection team to risk assess using PHE algorithms according to travel history:

- **MERS-CoV:** [PHE MERS-CoV Case Algorithm](#)
- **H5N1:** [PHE H5N1 Case Algorithm](#)
- **H7N9 or H10N8:** [PHE H7N9 Case Algorithm](#)

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#### Infection control procedures:
- ensure respiratory isolation
- ask patient to wear a surgical mask
- wear personal protective equipment (PPE) – if possible, this should be correctly fitted FFP3 respirator, gown, gloves and eye protection. If not available, wear a surgical mask, plastic apron and gloves. Eye protection may be considered if the likelihood of splash exists
- when arranging an ambulance for the patient, inform ambulance personnel of possible diagnosis and of the need to wear PPE

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