Infection Control Branch

Guidance Note on Monitoring of Body Temperature

When there is a spread of infectious diseases in community, routine monitoring of body temperature can aid early detection and segregation of persons with fever with others, which is an effective measure to prevent the spread of infectious diseases.

Use of non-contact infrared thermometer / thermal imaging system

2. Non-contact infrared thermometer or thermal imaging system may be used to measure surface skin temperature because of its convenience as a screening tool.

3. Surface skin temperature (e.g. forehead, wrist) may not provide a reliable reference to decide if the individual has fever. It is prudent to have a second means for confirmation by measuring the core body temperature (e.g. tympanic) for those with reading higher than the cut-off value or in case of doubt with the first reading by non-contact infrared thermometer or thermal imaging system.

4. Before using any temperature screening device, read the instructions carefully for proper operation as well as the reference range of the readings. The cut-off value for infrared forehead thermometer has been cited as 35.6 °C or 36.0 °C according to different sources. Alternatively, value as advised by the manufacturer of the particular device can be followed.
Persons with fever and respiratory symptoms should

(a) refrain from work or school, and minimize social contact;
(b) wear masks, be vigilant to hand hygiene and respiratory manners;
(c) seek medical advice as soon as possible.

Special Attention during Serious or Emergency Response Level

5. Schools

Schools are places where people congregate, students should have temperature check daily before attending school. When having fever, refrain from school. Schools also have the discretion to initiate the measure at according to own situation.

6. Offices and other institutions

Apply the same principles as temperature monitoring in schools.

7. Hospitals

(a) Patients (administered by hospital staff): At least daily temperature check for inpatients and report of clustering to hospital infection control team.
(b) Staff (including contract out staff): staff should conduct daily body temperature check. Mandatory record is not required. Supervisors and the hospital infection control team should monitor the number of sick staff and alert to any clustering.
(c) Visitors: General publics will be advised to take temperature check by themselves. They should not visit hospital if they have fever.

July 2009

(Last updated in November 2020)
Reference


7. National Health Commission of the People’s Republic of China. In winter, where the temperature is low, where is the most accurate temperature measurement with a handheld infrared body temperature detector? Forehead, wrist or neck? Will the tester be cross-infected when used by multiple people? Available from: http://www.nhc.gov.cn/xcs/nwwd/202002/5a4812f799ce4b9599bd608280d6567a.shtml [Accessed 20th Oct 2020]


Annex

Reference range for temperature screening

Body temperature may be measured at different body locations. Commonly used locations include oral, rectal, armpit, ear (tympanic) and skin surface e.g. forehead. Before using a thermometer, read the instructions carefully for proper operation as well as the reference range of the readings. Accuracy, suitability, convenience and acceptability by user should all be taken into account when choosing the appropriate thermometer.

Body temperature varies with age, time of day and level of physical activity. For measurement purpose, temperature at or higher than the reference value quoted below will be considered as significant and one should consult a doctor for suspected fever.

<table>
<thead>
<tr>
<th>Measuring method</th>
<th>Celsius scale (°C)</th>
<th>Fahrenheit scale (°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>37.5</td>
<td>99.5</td>
</tr>
<tr>
<td>Tympanic</td>
<td>38</td>
<td>100.4</td>
</tr>
<tr>
<td>Rectal</td>
<td>38</td>
<td>100.4</td>
</tr>
<tr>
<td>Armpit</td>
<td>37.3</td>
<td>99.1</td>
</tr>
</tbody>
</table>

Remarks: Read the instructions carefully for the reference range of the readings when using different methods of taking body temperatures.