

## Achievement Standard

**Subject Reference** Human Biology 1.4

**Title** Describe how humans respond to pathogens

**Level** 1      **Credits** 2      **Assessment** External

**Subfield** Science

**Domain** Biology

**Status** Registered      **Status date** 5 November 2007

**Planned review date** 28 February 2009      **Date version published** 5 November 2007

This achievement standard involves the description of how humans respond to pathogens.

### Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<ul style="list-style-type: none"> <li>• Describe how humans respond to pathogens.</li> </ul>	<ul style="list-style-type: none"> <li>• Explain how humans respond to pathogens.</li> </ul>	<ul style="list-style-type: none"> <li>• Discuss how humans respond to pathogens.</li> </ul>

### Explanatory Notes

1 Assessment will be selected from:

- response mechanisms that:
  - prevent entry of pathogens – skin, mucus, cilia, acid, sweat, blood clots
  - deal with pathogens after entry – white blood cells (production sites, functioning), inflammatory response
  - support immunity (natural, acquired, active, passive) – antibodies (production, functioning), role of the circulation system, role of the lymphatic system
- symptoms of pathogenic invasion
- methods for reducing spread.

2 Terms:

- *Describe* requires the student to define, use annotated diagrams, give characteristics of, or an account of.
- *Explain* requires the student to provide a reason as to how or why something occurs.
- *Discuss* requires the student to show understanding by linking biological ideas. It may involve students in elaborating, applying, justifying, relating, evaluating, comparing and contrasting, and analysing.

**Quality Assurance**

- 1 Providers and Industry Training Organisations must be accredited by NZQA before they can register credits from assessment against achievement standards.
- 2 Accredited providers and Industry Training Organisations assessing against achievement standards must engage with the moderation system that applies to those achievement standards.

Accreditation and Moderation Action Plan (AMAP) reference

0226