



Risk Management of Hazardous Biological Materials:

Guidance: hazard group categorisation

PRSG8.15 v2		WELLBEING, SAFETY AND HEALTH MANAGEMENT SYSTEM					
Author:	SEB/MB	Approved by:	GT	Version number:	2	Issue Date:	July 11

Categorisation of hazardous biological material into Hazard Groups:

[Hazardous biological materials](#) are classified into defined hazard groups based on the potential level of harm that they can cause to humans, animals or the environment.

Each biological agent has been categorised into one of four hazard groups, based on factors such as the severity of the disease it causes, the routes of infection, its virulence and infectivity, existence of effective therapies, immunization, the presence or absence of vectors, quantity of agent, whether the agent is indigenous and possible effects on other species, including plants and animals (see table below).

Hazard Group 1	<ul style="list-style-type: none"> ○ is unlikely to cause human disease; and ○ in relation to susceptible animals is unlikely to produce disease or is enzootic and does not produce notifiable animal disease.
Hazard Group 2	<ul style="list-style-type: none"> ○ can cause human disease and may be a hazard to employees; it is unlikely to spread to the community and there is usually effective prophylaxis or treatment available; or ○ in relation to susceptible animals is exotic, novel or produces notifiable diseases; and it has both of the following characteristics: <ul style="list-style-type: none"> ▪ is of low clinical significance; and ▪ has low likelihood of spread.
Hazard Group 3	<ul style="list-style-type: none"> ○ can cause severe human disease and may be a serious hazard to employees; it may spread to the community, but there is usually effective prophylaxis or treatment available; or ○ in relation to susceptible animals is exotic, novel or produces notifiable disease and it has one or both of the following characteristics: <ul style="list-style-type: none"> ▪ moderate clinical significance; ▪ moderate likelihood of spread.
Hazard Group 4	<ul style="list-style-type: none"> ○ causes severe human disease and is a serious hazard to employees; it is likely to spread to the community and there is usually no effective prophylaxis or treatment available; or ○ in relation to susceptible animals is exotic, novel or produces notifiable disease; and it has one or both of the following characteristics: <ul style="list-style-type: none"> ▪ the disease has serious clinical significance; ▪ has a high likelihood of spread.
<ul style="list-style-type: none"> • Disease this is referring to disease caused by infection • Susceptible animals are any kind of mammal except man, any kind of four-footed beast which is not a mammal and any species of bird likely to be affected by the biological agent. • Novel means a new strain of biological agent not previously seen. • Spread means the passing of the biological agent from one susceptible animal to another and assumes any necessary enzootic vector is present. 	

Many hazardous biological agents have already been [categorised](#) by Advisory Committee on Dangerous Pathogens, and this classification is therefore legally recognised. When provisionally categorising biological agents, the agent should be assigned to one of the above Hazard Groups according to its level of risk of infection to humans and according to its level of risk to susceptible animals. Where the biological agent meets the definition in more than one group, the higher group should be assigned.