

RISK ASSESSMENT FACT SHEET

Risk assessment is an important element of biosecurity management.

Risk assessment is about identifying a hazard, considering what could happen (consequence) and what the chances of this occurring are (likelihood). This is a practical approach to ensure that you apply your resources to where they will achieve an outcome, without wasting time and money.

Risk assessment can help determine:

- How severe the risk is
- Whether any existing control measures are effective
- What action you can take to control the risk
- How urgently action needs to be taken.

This fact sheet should be used in conjunction with an Animal Health Australia biosecurity plan template to assist in adequately identifying risk and managing those risks accordingly.

Table 2 assists in identifying the level of risk. This is a combination of the consequence and the likelihood. When you have identified a risk to your business, use this table to determine its risk rating by considering what the consequence would be if this occurred vs how likely it would be to occur.



TABLE 1. CONSEQUENCE TABLE

	Animal health and production	Plant health and production	Human health and safety	Industry market access	Commerical	Environmental	Reputation and image
very high	Significant illness, injuries or deaths	Significant damage or loss	Significant public health risk and or human death / long lasting wellbeing impact	Major national economic trade (international or national markets) impact, disruption or loss	Very high financial loss	Irreversible environmental impact	Long term / national or international damage to reputation or image
high	Considerable illness, injuries and deaths	Considerable damage or loss	Major public health risk and or injuries with wellbeing impact	High economic trade impact, disruption or loss state wide or multiple states	High financial loss	High, serious, longer term or wide spread environmental impact	Long term / state or national damage to reputation or image
moderate	Some illness, injuries or deaths	Some damage or loss	Limited public health risk and or injuries requiring medical treatment	Widespread trade impact, disruption or loss across multiple properties or multiple industries within the state	Moderate financial loss	Moderate, medium term, medium spread environmental impact	Medium term / regional damage to reputation or image.
low	Limited illness, injuries or deaths	Limited damage or loss	Minor injuries or illness, no public health risk, short term wellbeing impact	A single enterprise is affected / markets are restricted	Low financial loss	Minor / recoverable or short term, isolated / localised environmental impact	Recoverable / short term damage to reputation or image.
negligible	No loss or impact on animal health / production	No loss or impact on plant health / production	No human health or safety impacts	No market access losses	No financial losses	No environmental impacts	No damage to reputation or image.

TABLE 2. RISK MATRIX

		CONSEQUENCE				
		negligible	low	moderate	high	very high
LIKELIHOOD	very high	moderate	moderate	high	very high	very high
	high	low	moderate	moderate	high	very high
	moderate	low	low	moderate	high	high
	low	negligible	low	moderate	moderate	high
	negligible	negligible	low	low	moderate	moderate

TABLE 3. RISK RESPONSE TABLE

Level of risk rating	Response
Very High	Urgent attention
High	Intervention required
Moderate	Active management
Low	On-going monitoring
Negligible	Acceptable risk

Guidelines for assessing likelihood

very high	Occurs frequently
high	Has occurred before, will occur again
moderate	Possible but not common
low	Could occur but is not likely
negligible	Has never occurred before and is very unlikely to

Scenario

John breeds cattle and sells the progeny through stud sales. He agrees that the risk of purchasing new livestock and introducing them into his herd presents a risk of introducing disease. John considers any loss of production, income or damage to his stud business reputation to be **high** as it could take years to recover from such an event. John's current practices include monitoring the health status of newly purchased livestock or their introduction to the herd on his property, so he considers the likelihood of disease introduction is considered to be **low**. John further identifies that the combined overall risk rating as **moderate** and lists this under the risk rating section of his Animal Health Australia biosecurity plan template.

John identifies that moderate risk requires active management of which he already does. He decides that he is willing to accept this risk and moves on to the next column. As John works his way through the plan he identifies other areas that are considered to be high risk and applies some of the recommended practices to reduce the likelihood of the risk from occurring. Where the recommended practices listed in column 2 do not suit John's enterprises, he records what he does instead. When a risk does not apply to John, he lists why this does not apply to him in the third column and moves to the next section.

1

Using the consequence table – The highest rated category is your overall consequence rating.

TABLE 1. CONSEQUENCE TABLE

	Animal health and production	Plant health and production	Human health and safety	Industry market access	Commerical	Environmental	Reputation and image
very high	Significant illness, injuries or deaths	Significant damage or loss	Significant public health risk and or human death / long lasting wellbeing impact	Major national economic trade (international or national markets) impact, implication, disruption or loss	Very high financial loss	Irreversible environmental impact	Long term / national or international damage to reputation or image
high	Considerable illness, injuries and deaths	Considerable damage or loss	Major public health risk and or injuries with wellbeing impact	High economic trade impact, implication disruption or loss state wide or multiple states	High financial loss	High, serious, longer term or wide spread environmental impact	Long term / state or national damage to reputation or image
moderate	Some illness, injuries or deaths	Some damage or loss	Limited public health risk and or injuries requiring medical treatment	Widespread trade impact, implication disruption or loss across multiple properties or multiple enterprises within the state	Moderate financial loss	Moderate, medium term, medium spread environmental impact	Medium term / regional damage to reputation or image.
low	Limited illness, injuries or deaths	Limited damage or loss	Minor injuries or illness, no public health risk, short term wellbeing impact	A single enterprise is affected / markets are restricted	Low financial loss	Minor / recoverable or short term, isolated / localised environmental impact	Recoverable / short term damage to reputation or image.
negligible	No loss or impact on animal health / production	No loss or impact on plant health / production	No human health or safety impacts	No market access losses	No financial losses	No environmental impacts	No damage to reputation or image.

2

Using the risk matrix – Compare your consequence rating to the likelihood of that risk occurring to find your overall risk rating.

TABLE 2. RISK MATRIX

		CONSEQUENCE				
		negligible	low	moderate	high	very high
LIKELIHOOD	very high	moderate	moderate	high	very high	very high
	high	low	moderate	moderate	high	very high
	moderate	low	low	moderate	high	high
	low	negligible	low	moderate	moderate	high
	negligible	negligible	low	low	moderate	moderate

3

Your biosecurity plan – record the risk rating in your biosecurity plan.

Biosecurity risk	Recommended Biosecurity Practice	Procedure	Risk Rating
			moderate