

## Control method: Baiting of feral pigs with CSSP (yellow phosphorus)

**Assumptions:**

- This is not considered an acceptable method therefore there is no standard operating procedure.
- CSSP (yellow phosphorus) is considered inhumane and its use is being phased out in all states and territories.

### PART A: assessment of overall welfare impact

DOMAIN 1 Water or food restriction, malnutrition					
No impact	Mild impact	Moderate impact	Severe impact	Extreme impact	
DOMAIN 2 Environmental challenge					
No impact	Mild impact	Moderate impact	Severe impact	Extreme impact	
DOMAIN 3 Disease, injury, functional impairment					
No impact	Mild impact	Moderate impact	Severe impact	Extreme impact	
DOMAIN 4 Behavioural or interactive restriction					
No impact	Mild impact	Moderate impact	Severe impact	Extreme impact	
DOMAIN 5 Anxiety, fear, pain, distress, thirst, hunger					
No impact	Mild impact	Moderate impact	Severe impact	Extreme impact	
↓					
Overall impact					
No impact					
DURATION OF IMPACT					
Immediate to seconds	Minutes	Hours	Days	Weeks	

<b>SCORE FOR PART A:</b>	<b>1</b>
Summary of evidence:	Note that Part A of the assessment examines the 'impact on the animal prior to the action that causes death'. Part B then looks at the 'actual mode of death' and the 'extent and duration of suffering caused'. With ingestion of lethal toxic baits there is usually little or no impact in Part A.
Domain 1	No impact in this domain.
Domain 2	No impact in this domain.
Domain 3	No impact in this domain.
Domain 4	No impact in this domain.
Domain 5	No impact in this domain.

### PART B: assessment of mode of death

Time to insensibility (minus any lag time)				
Very rapid	Minutes	Hours	Days	Weeks
Level of suffering (after application of the method that causes death but before insensibility)				
No suffering	Mild suffering	Moderate suffering	Severe suffering	Extreme suffering

<b>SCORE FOR PART B:</b>	<b>H</b>
Summary of evidence:	
Duration –	<p>With very large doses, pigs can die from shock within 6-12 hours of ingestion. If the dose is lower, animals may survive for a several days before dying from liver necrosis and heart failure. Most pigs die 2-4 days after ingestion. However, in some cases there may be a delay of up to 3 weeks before death occurs<sup>1</sup>.</p> <p>A study on possums reported the development of clinical signs 3-6 hours after ingestion, the animals were then prostrate from about 18 hours, lost consciousness at 24 hours with death occurring at 25 hours post ingestion<sup>2</sup>.</p>

**Suffering –**

The primary action of phosphorus is probably hypotensive shock secondary to peripheral vascular collapse<sup>3</sup>. The development of clinical signs in animals, which include acute abdominal pain and vomiting may be immediate or delayed for several hours. These initial signs may be followed by a period of apparent recovery lasting from a few hours up to 3 or 4 days. The abdominal pain and vomiting then recur, together with jaundice and nervous signs. This condition may last for several days until delirium and convulsions abs eventually coma and death supervene<sup>4</sup>.

In feral pigs, ingestion of yellow phosphorus produces lethargy, depression and signs of gastrointestinal irritation such as reluctance to move or eat and vomiting (rarely). Moribund animals have been observed to lie on their sides, paddling (rapid purposeless running movements of front and hind feet) with occasional vocalisation. They also do not withdraw when approached. Post mortem changes include liver damage and haemorrhage in the rectum, stomach and small intestine<sup>1</sup>.

Clinical signs in possums include retching, vomiting, frequent repositioning, crouching posture, abnormal breathing and terminal spasms<sup>2</sup>. Possums are thought to experience pain and discomfort for a period of around 18 hours prior to death.

**Summary**

<b>CONTROL METHOD:</b>	<b>Baiting of feral pigs with CSSP (yellow phosphorus)</b>
<b>OVERALL HUMANENESS SCORE:</b>	<b>1H</b>
<b>Comments</b>	
<p>In humans, signs and symptoms of acute phosphorus poisoning can include epigastric or generalised pain, emesis, severe thirst, hepatomegaly, restlessness, shock, cyanosis, coma and convulsions. Haematemesis is also common<sup>3</sup>. Diagnosis is suspected if there is evidence of cutaneous burns, a garlic odour in the vomitus or faeces, or the ‘smoking’ and luminescence of vomitus and faeces<sup>5</sup>.</p>	

**Bibliography**

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