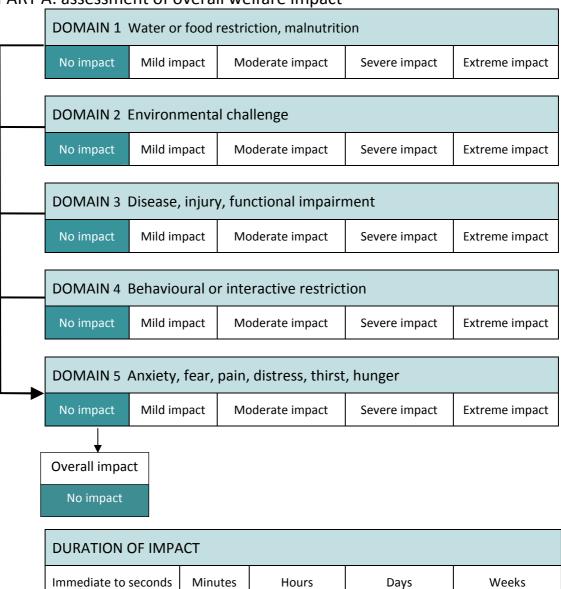
## **Control method:** Baiting of rabbits with 1080

#### Assumptions:

- Best practice is followed in accordance with the standard operating procedure RAB002 or RAB003. The welfare impact is increased if best practice is not followed. Also, if correct protocols and optimum dose are not are not adhered to, bait shyness can occur<sup>1</sup>.
- There is no difference in welfare impact between ground and aerial baiting so they are assessed here together.

### PART A: assessment of overall welfare impact



| SCORE FOR PART A:    | 1   |
|----------------------|---|
| 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 |  |  |  |

| SCORE FOR PART B:    | D-E   |
|----------------------|---|
| Summary of evidence: |   |
| Duration –           | After ingestion of 1080 there is a latent period ranging from 20 minutes to 10 hours before the onset of clinical signs <sup>2,3</sup> . Time to death is variable depending on the amount of 1080 absorbed but is usually around 3 to 4 hours after ingestion (but can range from 3 to 44 hours). <sup>2</sup> |

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#### Suffering -

During the latent period 1080 is metabolised into a toxic form. The latent period is likely to be associated with minimal pain or distress, since during this phase the compound is not toxic<sup>4</sup>.

Clinical signs of toxicosis include weakness and lethargy, laboured respiration and increased sensitivity to noise/disturbance. Convulsions start suddenly, often with gasping and squealing, followed by death <sup>2</sup>.

It is unknown if rabbits are conscious during or after convulsions. It is possible that rabbits may experience pain, breathlessness and anxiety/fear if they are conscious during the convulsions or if they become conscious afterwards. In rabbits, the potential for injuries after the appearance of symptoms is low.

Signs of central nervous system disturbance including collapse, convulsions and tetanic spasms, then follow<sup>4</sup>. Death occurs usually about two hours after the onset of clinical signs.

During the period of lethargy, rabbits may experience distress due to a decrease in access to food and water, a reduced ability to thermoregulate and an increased predation risk<sup>3</sup>, especially if they are surface dwelling rabbits

If rabbits ingest a sub-lethal amount of 1080 then they generally do not display obvious signs of poisoning and recovery occurs within 5–24 hours<sup>2</sup> with few, if any, long-term effects<sup>5</sup>.

### **Summary**

| _   | $\overline{}$ |     | _  | $\overline{}$ | $\overline{}$ |     | A F  | _   |   | $\overline{}$ |       |
|-----|---------------|-----|----|---------------|---------------|-----|------|-----|---|---------------|-------|
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Baiting of rabbits with 1080

#### **OVERALL HUMANENESS SCORE:**

1D-E

#### Comments

In human cases of 1080 poisoning, initial symptoms include nausea, vomiting and abdominal pain followed by anxiety, agitation, muscle spasm, stupor, seizure and coma. Respiratory distress is also prevalent in fatal cases<sup>6</sup>.

The  $LD_{50}$  for rabbits varies slightly (i.e. 0.34-0.50 mg per kg), depending upon the age and sex. The  $LD_{90}$  (i.e. the dose that will kill 90% of a population) is 0.51 (0.44-0.58) mg per kg.<sup>2</sup>

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