

# Canterbury

District Health Board

Te Poari Hauora o Waitaha

## Submission on Code of Practice for the Security of Radioactive Material

**To:** Ministry of Health  
Office of Radiation Safety

**Submitter:** Canterbury District Health Board

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**Proposal:** This Code of Practice has been issued under section 86 of the Radiation Safety Act 2016. This code provides details necessary to comply with the fundamental requirements in sections 9-12 of the Act.

## **SUBMISSION ON CODE OF PRACTICE FOR RADIATION THERAPY: DRAFT FOR CONSULTATION**

### **Details of submitter**

1. Canterbury District Health Board (CDHB).

### **Details of submission**

2. The submitter is responsible for promoting the reduction of adverse environmental effects on the health of people and communities and to improve, promote and protect their health pursuant to the New Zealand Public Health and Disability Act 2000 and the Health Act 1956. These statutory obligations are the responsibility of the Ministry of Health and, in the Canterbury District, are carried out under contract by Community and Public Health under Crown funding agreements on behalf of the Canterbury District Health Board.
3. The Ministry of Health requires the submitter to reduce potential health risks by such means as submissions to ensure the public health significance of potential adverse effects are adequately considered during policy development.
4. We welcome the opportunity to comment on the Code of Practice for the Security of Radiative Material.

### **General Comments**

5. The CDHB supports the Code of Practice and has a number of recommendations for consideration which would further improve health outcomes for the community by improving the safety and protection of patients, staff and the public.
6. Considering the specific questions raised in the consultation, the CDHB:
  - a) Supports the scope of the code
  - b) Supports the use of a hybrid approach using some performance based and some prescriptive requirements
  - c) Supports the inclusion of only minimal requirements where they are not relevant to New Zealand
  - d) Finds the examples in Appendices 1 and 2 useful and supports their inclusion

- e) Supports the adoption of requirements from the latest draft guidance from IAEA
- f) Finds the question asked about exemption of excepted packages confusing to the extent we are unable to respond
- g) Supports the use of risk multipliers. However the CDHB recommends the Code include and adopt the specific examples given in Table 5 of IAEA document [https://www-pub.iaea.org/MTCD/Publications/PDF/Pub1387\\_web.pdf](https://www-pub.iaea.org/MTCD/Publications/PDF/Pub1387_web.pdf). Inclusion of these examples ensures New Zealand is aligned with internationally accepted practice.
- h) Supports with comments the training requirements
- i) Considers the information in the code is appropriately presented and complete.

### Specific comments

Item	Comment
Definitions - Sensitive information	As it is currently stated this applies to nuclear security only. Security of all radioactive material requires careful management of sensitive information to ensure security is not compromised. The CDHB recommends generalising this definition by inclusion of radioactive material rather than just nuclear facilities.
Security Management 2 (b)	The current threat level is easily obtained from the government website. This is a more expedient means of notification rather than relying on the Office of Radiation Safety. Changes to the threat level also tend to be widely publicised in mass media. The Office of Radiation Safety could also communicate with licensees about changes to the threat level, but security requirements should not be solely dependent upon this communication. The CDHB recommends removing the words <i>“if this has been supplied by the Office of Radiation Safety”</i>
Use and Storage 3 (a)	As this is currently written, and applying the definition of Response Personnel from Key Roles, this requires the Managing Entity to train, list, notify, and authorise their staff and contractors, but also the NZ Police and NZ Defence Force. Clearly this is unmanageable and unintended. The CDHB recommends this clause be limited to the staff and contractors of the managing entity by amending the wording to <i>“ensure that <b>all staff and contractors</b> with responsibilities...”</i>
Transport	It would assist clarity if the terms <b>basic, enhanced and excepted security packages</b> were defined, or alternatively a reference to Appendix 2 be placed at the start of this section
Transport	The practices listed for excepted security packages (7 a-c) should apply to all packages. As the Code is currently structured these

	<p>practices are not described for the basic and enhanced security packages.</p> <p>The CDHB recommends the practices described in section 7 be introduced at the start of the Transport section. The more stringent requirements for basic and enhanced security packages should then build on these basic security principles</p>
Transport	<p>There is no description of where handover of responsibility occurs from consignor to courier to consignee. These are key points for ensuring a continuous chain of security and warrant clear description.</p> <p>The CDHB recommends providing definitions and/or examples of where the transport handover points occur.</p>
Security System 8, 9 and 10 (a)	<p>The requirement to verify and document radioactive material at intervals is somewhat ambiguous when multiple sources, potentially of different security levels, are stored in an area.</p> <p>The CDHB recommends amending the requirements to read “<i>verify and document the presence of <b>each item of radioactive material...</b></i>”</p>
Security System 10	<p>The requirement under (b) is to provide detection of unauthorised removal of radioactive material. But under (d) the requirement is to provide delay after detection. These two requirements are irreconcilable - if the detection (b) only occurs upon removal then it is impossible to delay after detection as removal of material has already happened.</p> <p>The CDHB recommends requiring in (b) “<i>detection of <b>unauthorised access or removal of radioactive material</b></i>”.</p> <p>Alternatively for a slightly lower level of security more clearly differentiated from level B the CDHB recommends amending (d) to read “<i>provide <b>a security system that</b></i>  <i>i) contains at least one barrier... and</i>  <i>ii) is sufficient to provide confidence...</i>”</p>
Appendix 1	<p>The CDHB recommends adopting the examples provided by IAEA. Notably for the CDHB this recommends HDR sources be categorised as category 2 (presumably equivalent to CoP level B) whereas the current Appendix 1 places HDR sources in category 3. The CDHB does not consider there are extenuating circumstances justifying New Zealand adopt security less than international recommendations.</p>
Appendix 3	<p>Two radionuclides used reasonably frequently in medicine are not listed in the table.</p> <p>The CDHB recommends adding F-18 and Lu-177 to the table with their associated D and A2 values.</p>
Appendix 4 Security Goals	<p>The transport of radioactive material or nuclear in excepted security packages is not listed in the security goals table. The table of goals is a useful summary and the CDHB recommends adding the missing category with an appropriately stated security goal.</p>

Appendix 5 Security Plans	For clarity and ease of referencing it would be helpful if the requirements were numbered rather than bulleted
Appendix 5 Security Plans	<p>Security System</p> <ul style="list-style-type: none"> <li>• Threat Information if this has been provided</li> </ul> <p>The Threat information is dynamic and as recently experienced may change rapidly. The CDHB considers the current status should not be captured within a security plan. However the plan should contain information about obtaining the threat level and what contingencies and considerations may occur at various threat levels or when it changes.</p> <p>The CDHB recommends amending the references to Threat Level to describe this planning approach rather than recording the current threat level</p>
Security Procedures	<p>The phrase “Description of the written procedures...” was unclear in meaning and clumsy.</p> <p>The CDHB recommends clarifying what is intended by this clause. For simplicity the CDHB recommends the security procedures should be included within the security plan. It is recognised that in some situations sensitive information may require more confidential management. In these circumstances the security plan may instead refer to the location or source of more detailed security procedures.</p>
Appendix 6 Training	The CDHB notes the third column should be headed SLC (rather than a duplicate SLB column)
Appendix 6 Training	<p>Within column SLC, row Radiation Basics, the CDHB considers the security officer should have a basic understanding of radiation to adequately fulfil their obligations.</p> <p>The CDHB therefore recommends a training level of <b>medium</b> to be appropriate.</p>

## Conclusion

- The CDHB does not wish to be heard in support of this submission.
- If others make a similar submission, the submitter will not consider presenting a joint case with them at the hearing.
- Thank you for the opportunity to submit on Code of Practice for Radiation Therapy.

## Person making the submission



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Date: 19/08/2019

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