

**Survey of Commercial Solaria**  
**by DHB Public Health Units Between 1 July and 31 December 2012**

**Summary of Findings**

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## **1 Executive summary**

This report summarises the work and findings of District Health Board Public Health Units (PHUs) following their first six-monthly visits to solarium operators. The visits were requested by the Ministry of Health (MoH) in order to raise awareness amongst solarium operators of best practice requirements for operating solaria in order to minimise risks.

PHUs visited 144 establishments to fulfil this request. Although assessing compliance with the Solarium Standard was not specifically requested, many of them checked compliance with key requirements (such as refusing sessions to high risk individuals, using consent forms etc) and found that it was generally mediocre. PHUs noted that the numbers of sunbed operators had decreased significantly in recent years, and more were planning to stop offering these services in the near future.

One PHU had completed similar work in 2009/10 and found that overall there was a slight decrease in compliance with the Standard between then and 2012.

It is recommended that the means by which the effectiveness of this work is to be assessed be decided, and if PHUs are to do this in the course of their visits they should be given a standardised assessment scheme to follow. They should also be encouraged to follow some of the successful approaches taken by other PHUs in carrying out this work.

No assessments of solaria undertaken to date have investigated compliance with the more technical parts of the Standard, such as verifying the lamp output and determination of exposure times. Some thought should be given to how this might be achieved.

## **2 Solarium visit objectives**

### **2.1 Background**

In 2005, 2006 and from 2010 – 2012 (inclusive) the MoH has commissioned Consumer NZ to survey commercial solaria in order to determine the extent to which they are following the procedures recommended in the voluntary Standard AS/NZS 2635:2008 *Solaria for cosmetic purposes* (the Standard). Their surveys have involved both “mystery shopper” visits to solaria (mostly in the main centres), and postal questionnaires sent to all solaria identified from the Yellow Pages and online.

Mystery shopper visits focus on compliance with essential procedural aspects of the Standard, such as:

- Declining to offer sunbed sessions to people with skin type 1
- Declining to offer sessions to under-18s
- Providing a consent form
- Displaying adequate warning signs
- Ensuring a minimum 48 hour delay between sessions.

Overall, these surveys have found only marginal improvements in compliance over time. In 2012, for example, only 15% of the operators checked refused sessions to someone with Type 1 skin. Of the operators who allowed the sessions to go ahead, only 17% met all the other requirements checked.

Postal surveys have checked on awareness and ownership of the Standard and the free Guide to the Standard prepared in 2009 by the National Radiation Laboratory (NRL), and

sources of advice on minimising risks. Results from the 2012 postal survey, including comparisons with 2011 and 2010 where available, are summarised below.

### 2.1.1 Awareness of the Standard and NRL Guide

Data from 2010 – 2012 is presented below. While it appears encouraging that there has been an improvement, and that 90% of operators are aware of the Standard, the sample may well not be representative of all operators as there was only a 38% response rate.

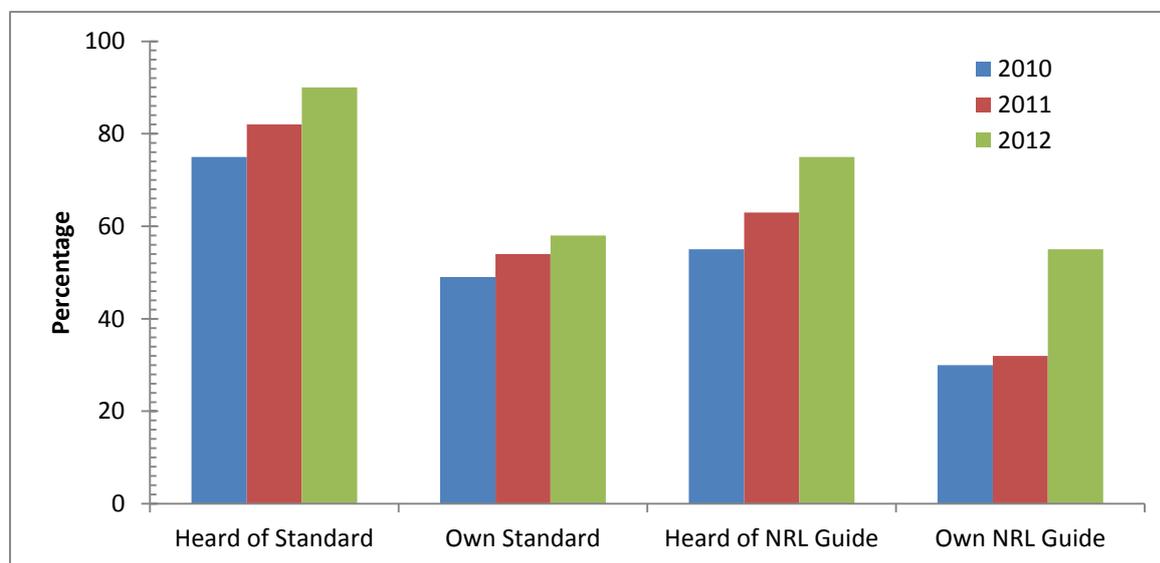


Figure 1. Awareness of the Standard and the NRL Guide to the Standard

### 2.1.2 Sources of advice

The graph below shows sources of advice received by operators on minimising risks. Many of the operators had received advice from several sources. 31% of operators had been visited by PHU staff.

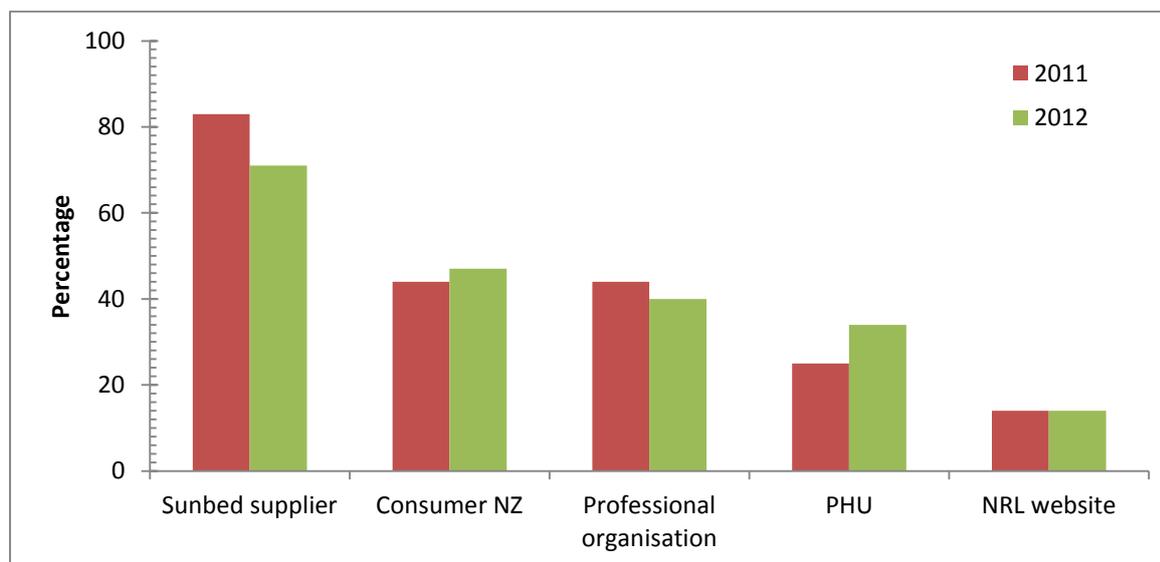
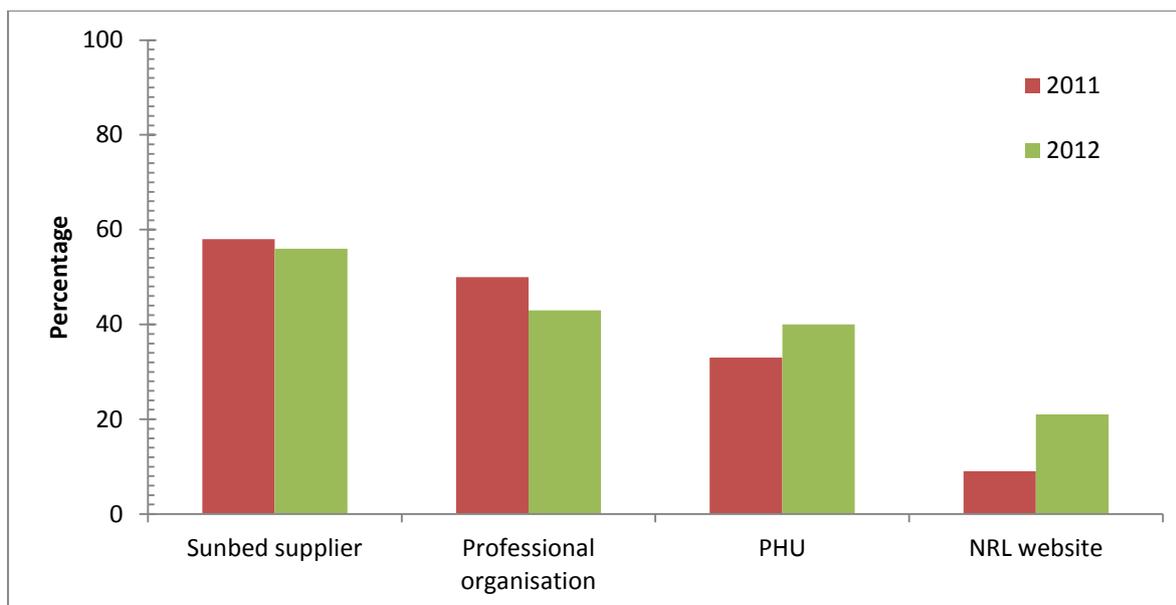


Figure 2. Sources of advice on minimising risk from sunbed operation.

Operators were also asked about their preferred source of advice on minimising risks. Again, several operators preferred to receive advice from more than one source.



**Figure 3. Preferred sources of advice on minimising risk from sunbed operation.**

## 2.2 PHU visits

The request for PHUs to visit solarium, and the objectives of the visits, was made by the MoH in May 2012. The key objectives were:

- To visit all commercial solarium in the region covered by the PHU at least every six months;
- To provide information to operators on best practice to reduce the public health risks from using solarium;
- To make operators aware of regulatory regimes being implemented overseas, such as the ban on solarium in New South Wales from 31 December 2014.

PHUs were required to report by 31 January and 31 July each year, with information for each solarium on:

- Date of visit;
- Names of solarium and managers/operators;
- Summary of information provided;
- Findings, observations and comments.

Included in the email was an advisory note *Reducing the risk of cancers from the use of commercial solarium and sunbeds* with background information on risks of sunbed use and best practice to minimise them, and a summary of sunbed regulations in other countries. There was also a summary of best practice procedures, and examples of consent forms and warning notices (which were not included in the NRL Guide).

## 3 Visit reports for July - December 2012

Reports from PHUs covering the period to 31 December 2012 have been received.

PHUs had undertaken the work in a variety of ways, with some making appointments for visits, and others arriving with no warning. Several PHUs had visited solarium previously, and so were able to comment on any changes to operational practices over time. Three PHUs followed a common approach and reporting format.

In addition to the work requested by the MoH, all PHUs took the opportunity to assess compliance with some of the key procedural aspects of the Standard. Their findings are summarised in section 3.6.

### **3.1 Visits**

In total, 144 premises were visited. PHUs had found business operating sunbeds through a variety of means: existing lists of operators from previous visits, Yellow Pages, internet searches, asking other operators, and referrals from other people.

Some PHUs reported that they were unable to visit a small number of operators, generally because they could not contact the operator to make an appointment. While most operators were very receptive to the visits, a few were uncooperative or even hostile and refused to participate.

Both unannounced and prearranged visits were made. Toi Te Ora tried both and reported a much better response when they had made an appointment. Visits in Auckland were unannounced but mostly met with a good reception, which could perhaps be partly attributed to a good rapport established during similar visits in 2009. It was felt that in future prearranged visits would be more productive, and show a greater courtesy towards the operators.

Several PHUs had visited sunbed operators in previous years, and noted that the number of operators had gone down significantly. In Auckland, for example, 73 operators were recorded in 2009, whereas in 2012 there were only 39. MidCentral reported that they knew of 41 operators in 2009/2010, but in 2012 there were 26. (Interestingly, only 16 of these had operated sunbeds in 2010, the rest were new providers.) Many PHUs commented that some operators were planning to stop offering sunbeds, for example when the bed next needed maintenance or lamp replacement. Reasons given included the low revenue, cost of maintenance, the space they take up and the difficulties in complying with the Standard.

### **3.2 Information provided to operators**

PHUs all provided information to the operators of the type outlined in the MoH email initiating the work. Several provided additional material, such as:

- Laminated copies of warning signs and Fitzpatrick scale
- Copies of Cancer Society information sheets
- Copies of relevant newspaper articles

Several PHUs also gave written feedback to operators identifying areas of non-compliance, and providing a point of contact in the PHU should the operator require assistance or further information.

### **3.3 Observations and feedback**

#### **3.3.1 Compliance with the Standard**

A systematic evaluation of compliance with administrative and procedural parts of the Standard was not an objective of this work, but all PHUs made observations and comments on compliance with various aspects of the Standard.

Most PHUs reported poor to average compliance, but there appeared to be a trend towards better compliance in the larger centres. This was particularly evident in Auckland, where 68% of operators were considered to have “excellent” knowledge of the Standard. In

Auckland, good knowledge tended to be associated with larger operations such as Beauty Salons and Tanning Studios, while hair salons scored badly. Another PHU commented that “Some of the operators visited were obviously unhappy at the idea of compliance with the Standard interfering with their core work, such as hairdressing.”

Similarly, knowledge of the existence of the Standard, and its contents, appeared to vary widely, with better knowledge in the main centres.

There was no indication that any of the operators visited complied fully with all aspects of the Standard which were checked.

Section 3.3.6 of this report presents a more quantitative analysis on some of the data reported

### **3.3.2 Treatment of medical conditions**

Two PHUs reported concerns that patients had been recommended by doctors (and, in one instance, a dermatologist) to go to solaria for treatment of skin disorders such as acne and psoriasis.

### **3.3.3 Availability of sunbeds on TradeMe**

A few PHUs reported that sunbeds from operators who had ceased offering solarium services were ending up for sale on TradeMe, which may be shifting the problem elsewhere (possibly to people operating services from private homes).

### **3.3.4 Public demand for services**

One PHU commented that there is still client demand for sunbeds, and some customers will go to great lengths to find an alternative provider if their current operator ceases operation.

### **3.3.5 Claims of health benefits**

Some PHUs noted claims of health benefits being made. One of them forwarded a promotional brochure which included such claims to the Commerce Commission. Another PHU commented verbally that while none of the operators had made written claims of benefits, in conversation they would often talk about them.

### **3.3.6 Quantitative analysis**

There was sufficient data from most PHUs to allow a quantitative analysis of compliance with several aspects of the Standard. The numbers presented from this analysis should, however, be treated cautiously. For example, while some PHUs systematically presented information on compliance with a fixed set of requirements, others were not so systematic. In that situation, if compliance or non-compliance with a requirement was mentioned for one establishment but not another, it is not clear whether that is because it was not checked, or because compliance or non-compliance should be assumed.

In addition, some PHUs graded compliance on a three-point scale, ranging from none to partial to full compliance. For those reports, only full compliance scores have been counted in the analysis presented here.

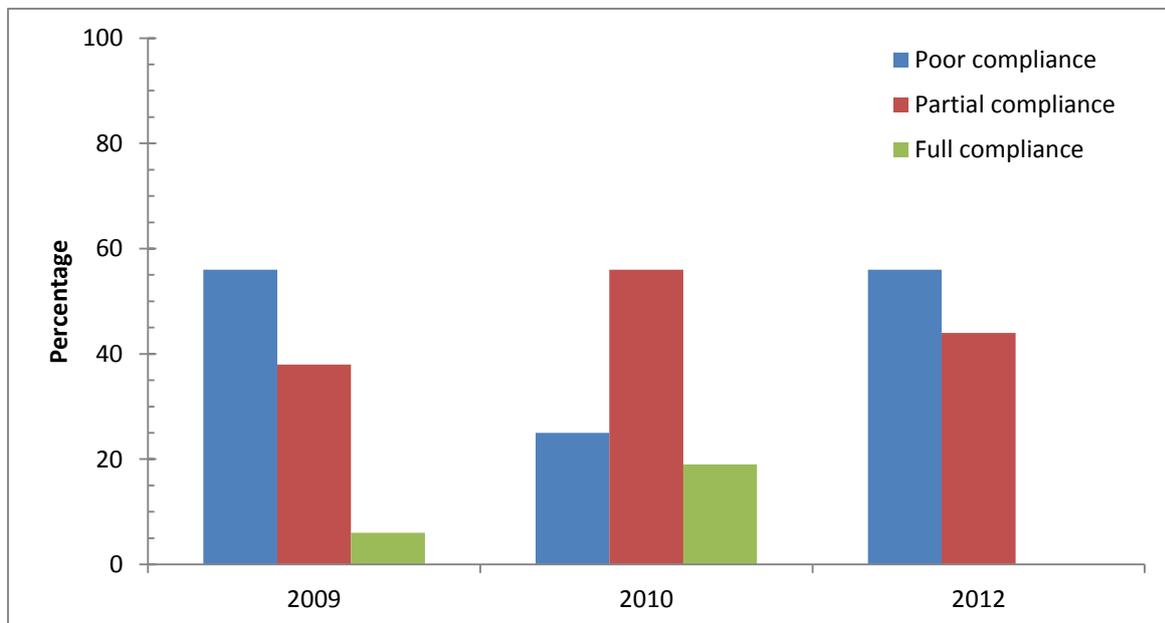
Because of these limitations, the results presented here should be taken as indicative only and not considered as authoritative data on the degree of compliance in New Zealand. In the table of results below, equivalent results from recent Consumer NZ surveys are included for comparison, where these are available.

Compliance area	% fully compliant PHUs 2012	% compliant 2011 Consumer NZ	% compliant 2012 Consumer NZ
Staff training	29		
No health claims	61		
Warning signs	32	25	47
Skin assessment	38	35	
Exclude high risk clients	31		15
Consent form	51	38	47
Records kept two years	44		
Eye protection	89	85	100
48 hours between sessions	40	75	65

### 3.3.7 Comparison with previous surveys

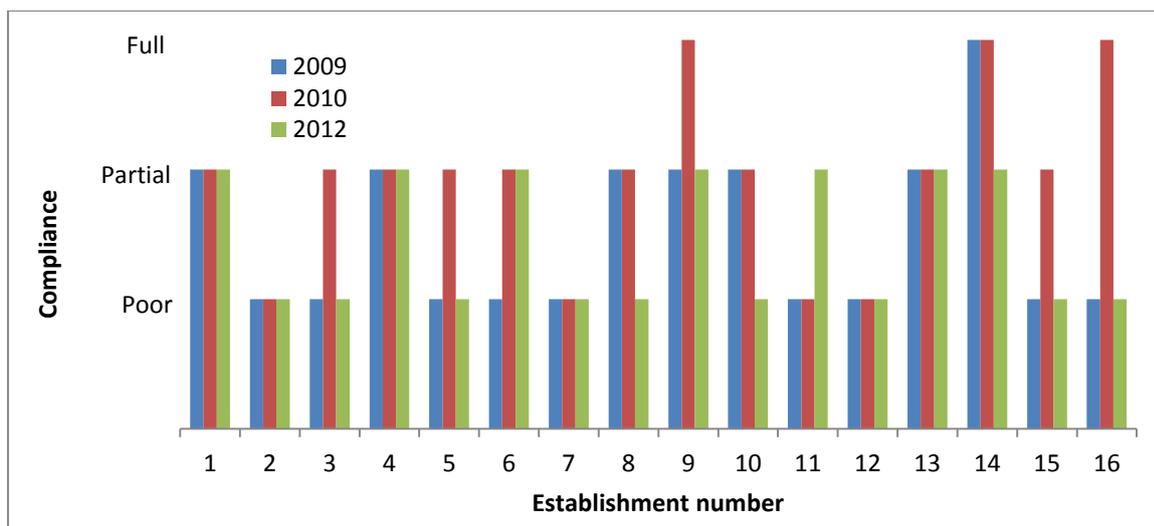
As discussed in section 3.1, MidCentral had carried out a previous survey in 2009/2010, and 16 of the operators known to them in 2010 were still offering sunbed services in 2012. The 2009/2010 work had included visits from a “mystery shopper” and a Compliance Officer, distribution of educational material and resources to all premises and several stories about the work in local and regional newspapers. Written feedback on areas on non-compliance and how they could be addressed was provided to operators following the Compliance Officer’s visit.

PHU staff have analysed data from the three assessments (Mystery Shopper in 2009, Compliance Officer in 2010, PHU staff in 2012) for the 16 establishments common to all three surveys. Overall assessments were graded as either poor, partial or full compliance, where a grading of “poor” meant that there was compliance in less than 50% of the areas checked. Findings are presented in the graphs below.

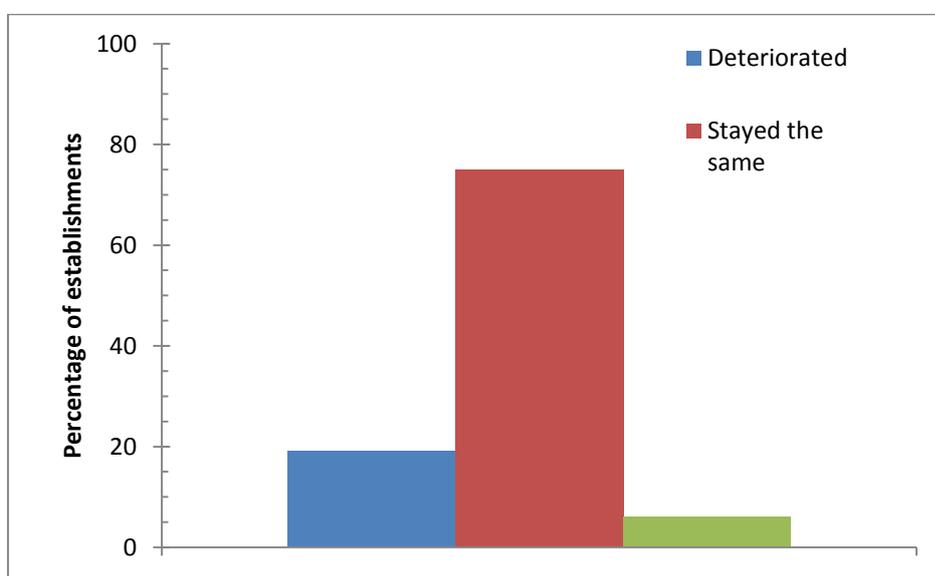


**Figure 4. Overall level compliance of solarium in MidCentral area over three surveys**

This graph suggests that there has been little change in the overall level of compliance between 2009 and 2012.



**Figure 5. Compliance variations for individual establishments across three surveys in the MidCentral area**



**Figure 6. Overall change in compliance for establishments in the MidCentral area, 2009 - 2012**

This final graph suggests that in spite of the attempts to raise awareness of good practice in 2010, overall compliance deteriorated slightly.

## 4 Summary of findings and recommendations

### 4.1 Summary of findings

The primary objective of this work was to raise awareness amongst solarium operators of best practice means to reduce the risks to public health from use of commercial solariums, and of regulatory approaches being taken in other countries.

144 commercial solariums were visited and supplied with information. The visits were generally well-received. A few operators were not interested or even hostile.

PHUs noted that there had been a significant decrease in the numbers of solarium operators in recent years, and more operators were talking about ceasing to offer sunbed services.

There are several factors behind this decrease, but amongst them is the difficulty some operators have in complying with the Standard.

While determining compliance with the requirements of the Solarium Standard was not specifically requested, all PHUs reported on compliance to a greater or lesser extent. This data was broadly consistent with findings from surveys undertaken by Consumer NZ in recent years, and demonstrated only mediocre compliance with key procedural and administrative requirements in the Standard.

Data from one PHU, which had undertaken similar work in 2009/10 (including the supply of information on best practice operating procedures to all establishments, and written follow-up to all operators on areas where they did not comply with the Standard), showed a small overall deterioration in compliance amongst establishments that were included in 2009/10 and the current visits.

Several areas of concern were raised, including doctors recommending patients visit solaria to help alleviate skin conditions, and the continuing demand from some clients.

Neither this work, nor work carried out by Consumer NZ, has assessed the more technical parts of the Standard, notably the assessment of the effective ultra-violet radiation output ( $UVR_{\text{eff}}$ ) from the lamps and determination of tanning times. Several operators said that they find these parts of the Standard very difficult to understand.

#### **4.2 Recommendations**

No firm requirements were given to PHUs regarding the manner in which they conducted this work, and the format of their reporting. Several PHUs came up with successful approaches to undertake the work and report on their findings, which helped enable the quantitative analysis presented here.

Clearly, an important part of this work is to determine whether it is making any difference to how solaria are operated. If there is to be a continuing requirement for PHUs to make six-monthly visits, this data may be best (or most efficiently) acquired in the course of those visits. (On the other hand, using mystery shoppers may give a truer picture of how the solaria are being operated in practice.) For that reason, it is recommended that:

- A decision is made on how the effectiveness of this work is to be evaluated, and, if that is to be done in the course of PHU visits, a standardised assessment scheme is devised for them to use. This could be based on some of the schemes already being used.

There were many examples of what could be considered “good practice” in the way that PHUs approached this work, including pre-arranged appointments, follow-up letters to summarise findings from visits, and maintaining simple lists or databases of establishments operating sunbeds. It is recommended that:

- PHUs be informed of these good practice methods and encouraged to follow them in future visits.

It was a concern that some operators reported people being recommended by doctors (and even a dermatologist) to take sunbed sessions to alleviate some skin conditions. As the UV dose from a sunbed session is almost certainly unknown, and could even result in causing

harm rather than benefit, this does not appear to be a helpful practice. It is recommended that:

- Some means be found to discourage this practice

If there is an expectation that operators will comply with the Standard, on a voluntary or regulated basis, then at some stage some work should be done on assessing and monitoring compliance with the more technical parts of the Standard, notably the measurement of lamp output and determination of exposure times. It is recommended that:

- The MoH develop options on how this could be achieved.