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PARLIAMENT OF TASMANIA

**AUDITOR-GENERAL  
SPECIAL REPORT No. 77**

**Food safety: safe as eggs?**

**November 2008**

*Presented to both Houses of Parliament in accordance with the provisions of section 57 of the  
Financial Management and Audit Act 1990*

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20 November 2008

President  
Legislative Council  
HOBART

Speaker  
House of Assembly  
HOBART

Dear Mr President  
Dear Mr Speaker

**SPECIAL REPORT NO. 77**  
**Food safety: safe as eggs?**

This report has been prepared consequent to examinations conducted under section 44 of the *Financial Management and Audit Act 1990*, for submission to Parliament under the provisions of section 57 of the Act.

The performance audit examined the government's role in food safety, in particular concerning egg production, the sale of eggs and foods containing eggs.

Yours sincerely

H M Blake  
**AUDITOR-GENERAL**



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# Foreword

This Report details the outcomes from a performance audit of food safety.

Consumers want to know that the food they buy and eat is safe. Unsafe food reaching the market can lead to people becoming sick or hospitalised and damage to the image and reputation of Tasmania's food industry can result. This audit assessed how well the various agencies and selected councils manage food safety, in particular eggs, with assessment made against legislative requirements and an international standard.

We established that egg production plans for approved producers are in place and annual inspection programs are maintained. Our testing confirmed that food safety audits were comprehensive, thorough and up-to-date. Accordingly, eggs from approved producers can be expected to conform to national standards of quality. However, it is possible for eggs to enter the market from non-approved suppliers and, in the event of an egg-related food outbreak, it is essential that the authorities are able to promptly identify eggs back to the producer.

Local government's food safety inspections, when performed, were generally of high quality although staff shortages contributed to the inability of some councils to provide inspections at the required frequency. By re-assigning administrative tasks to support staff, some councils could make more effective use of Environmental Health Officers.

We believe that, at an operational level, staff across the public sector communicate well to achieve good food safety outcomes. When outbreaks of food-borne illness have occurred, the Director of Public Health responded quickly and effectively. However, high-level strategic cooperation between the various government entities involved in food safety needs finalisation to the satisfaction of all stakeholders. In this regard, more needs to be done so that a memorandum of understanding (proposed in May 2007) be concluded.

The Report includes 13 recommendations aimed at enhancing food safety. For example, to ensure that eggs can be traced back to producers, the introduction of egg stamping in Tasmania be considered.

H M Blake

Auditor-General

20 November 2008

## List of acronyms and abbreviations

DHHS	Department of Health and Human Services
DPIW	Department of Primary Industry and Water
EHO	Environmental Health Officer
FSANZ	Food Standards Australia and New Zealand



## Executive summary

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## Executive summary

Consumers want to know that the food they buy and eat is safe. The consequences of unsafe food reaching the market are that people become sick or are hospitalised. Fatalities are possible amongst the vulnerable sections of the community, the aged or very young especially. Significant damage to the 'clean and green' image and reputation of Tasmania's food industry would also result.

Eggs are a nutritious component of the diet of most people but, because of the risk of salmonella contamination, can be hazardous to health if not handled or processed properly. Outbreaks of salmonella poisoning relating to eggs in Tasmania since 2005 have affected 181 people (with 20 people hospitalised) and raised general concerns regarding egg safety.

Through appropriate regulation of food production, distribution and sale, governments minimise the risk of food-borne illness. In Australia, the development of food safety standards is coordinated at an international level with New Zealand. Food Standards Australia New Zealand (FSANZ) is the controlling body and legislation in each jurisdiction is similar. In Tasmania, the principal government entities are:

- the Department of Health and Human Services (DHHS) whose Director of Public Health is a statutory officer with wide powers under the *Food Act 2003*. The Director is a pivot point between the Commonwealth on the one hand and local government on the other.
- the Department of Primary Industries and Water (DPIW) that is empowered to ensure compliance with approved egg production plans through annual inspections
- local government councils that have a responsibility for the safety of food businesses and food manufactured in their area.

When instances of food-related illness occur, the Director of Public Health conducts investigations that follow from notifications provided by doctors and testing laboratories. Local councils become involved in the required corrective work at the offending food-business. Similarly, DPIW will work with primary producers if a particular incident requires it.

## *Audit opinion*

### *As to how well government ensures the safety of egg production.*

DPIW has egg production plans for the 14 producers in Tasmania and maintains an annual inspection program. Audit testing confirmed that food safety audits were comprehensive, thorough and up-to-date. Accordingly, eggs from these approved producers can be expected to conform to national standards of quality.

However, it is possible for eggs to enter the market from non-approved suppliers. In the event of an egg-related food outbreak, identification of the producer is imperative to reduce the spread of disease. We believe that being able to identify eggs back to the producer would contribute to food safety.

### *As to how well local government ensures food safety at retail outlets.*

Local government's food safety inspections, when performed, were generally of high quality, notwithstanding inconsistencies in use of checklists and provision of feedback to food premises that deviated from the national standard. Unfortunately, shortages of Environmental Health Officers contributed to inability of most councils to provide inspections at the required frequency that limited the effectiveness of the inspection program. Exceptions were Brighton that was fully up-to-date and Latrobe, which had shown a substantial improvement in the past 12 months.

Management of the inspection programs was poor, with a lack of forward programs, inconsistent approaches to risk rating, poor record keeping and a lack of monitoring and reporting.

### *As to how well the various government entities involved in food safety are coordinated.*

High-level strategic cooperation between the various government entities involved in food safety needs to be agreed to the satisfaction of all stakeholders. More needs to be done so that a memorandum of understanding (proposed in May 2007) be concluded.

At an operational level, we found that staff across the public sector communicate well to achieve good food safety outcomes.

### *As to how well has the Director of Public Health responded to salmonella outbreaks.*

When outbreaks of food borne illness have occurred, the Director of Public Health has responded quickly and effectively, in line with

DHHS guidelines, to investigate incidents and eliminate sources of contamination.

### *List of recommendations*

The following table reproduces the recommendations contained in the body of this Report.

<b>Rec No.</b>	<b>Section</b>	<b>We recommend ...</b>
1	1.2	... to ensure that eggs can be traced back to producers, the introduction of egg stamping in Tasmania.
2	2.2	... that all councils ensure that development applications related to food businesses are brought to the attention of the EHO.
3	2.3.1	... that councils maintain forward inspection programs for all food businesses.
4	2.3.2	... that The priority classification system for food businesses, published by FSANZ, be used to assess all Tasmanian food businesses.
5	2.4.2	... that councils give greater priority to adequately staffing EHO positions. Consideration should be given to use of contractors or sharing of staff with other municipalities to address short-term shortages.
6	2.4.3	... that, wherever necessary, councils provide administrative support to EHOs to maximize their effectiveness.
7	2.5.1	... that EHOs use a FSANZ-compliant checklist and standard of practice in the interest of consistency.
8	2.5.1	... that EHOs further encourage food business operators to use monitoring schedules to improve food safety.
9	2.5.2	... that EHOs have food business operators sign checklists at the time of the inspection and leave a copy with them.
10	2.6	... that council management monitors progress on food premises inspections and reports to council.
11	2.6	... councils implement information about food business types into data management systems to improve systemic analysis of food safety issues.
12	2.6	... that councils report fully in Annual Reports to ensure compliance with <i>Local Government Act 1993</i> (section 72).
13	3.1	... participants in the Food Safety Forum should complete the <i>Draft Food Safety Memorandum of Understanding</i> as soon as possible.

## Management responses

### Brighton

Council notes the issues and comments contained in the Report.

Specifically I wish to advise that Brighton Council acknowledges the requirement under the Local Government Act 1993 to provide details of the resources allocated to public health in Council's Annual Report.

To this end, procedures have been put in place to ensure that this reporting requirement will now be satisfied.

### Devonport

Local governments conduct food premises inspections on a regular basis to ensure compliance with the Food Act 2003 and the Food Safety Standards. The responsibility for point source control of egg products lies with the State. For this reason Council find it difficult to comprehend why the focus of this audit is on Local Government and why 11 of the 13 recommendations are directed at Local Government.

Food business operators need to satisfy requirements in regard to food handling, skills & knowledge of food handlers, cleanliness and maintenance. Local Government Environmental Health Officers do not have input into where the operator sources their food products except in as much as the supplier should be approved.

The point source of a number of these salmonella food poisoning outbreaks was an egg production farm with an approved egg production program and subject to annual inspections from the Department Primary Industry. Local government has no jurisdiction over these poultry farms. Whilst we acknowledge that some of the recommendations made may improve councils reporting processes it must be said that had all of these 11 recommendations been in place at the time, these outbreaks would still have occurred.

Approximately 5% to 10% of food premises use raw eggs to make products such as mayonnaise, aioli and hollandaise sauce and these operators have been preparing these foods for many years therefore if this was primarily an issue about food handling, this problem would have surfaced before now. The question needs to be asked would these outbreaks have occurred if the operators had sourced their eggs from another egg producer.

This audit was conducted to determine the safety of eggs to the consumer in response to the salmonella outbreaks of the past 3 years however there are still questions that remain unanswered as to why these outbreaks occurred.

## Huon Valley

### Chapter 1

Considering the risk significance of the production of eggs, is one audit per year for primary producers sufficient?

Maybe consider 'Best before' date stamping of eggs.

### Chapter 2

Section 2.3.2 — As the construction of the premises is integral to the production of safe food; I believe that it is essential to include the construction of the premises into the risk assessment. This increases the value of the assessment rather than watering it down.

Section 2.5.1 — The FSANZ checklist is a good start. However, it has significant limitations with regard to having sufficient space to make notes.

Section 2.5.2 — In regard to Recommendation 9, it is not always appropriate to leave a copy of the checklist with the operator of the premises as the operator is not always the owner and there may be privacy issues that need to be taken into account.

### Chapter 3

There needs to be more contact between DHHS and the local EHO and better support from DHHS.

## Kingborough

**Recommendation 1** — No comments. Supportive of recommendation.

**Recommendation 2** — Council feels that this is adequately addressed.

**Recommendation 3** — This has been an issue also highlighted by Council's EHOs. Council is currently undertaking a major review of the data management and operational systems for Environmental Health and intends on satisfactorily addressing this recommendation.

**Recommendation 4** — Council currently implements this system for food business classification.

**Recommendation 5** — Council notes the EHO to population ratio of 1:10 000 in Section 2.4.2. Council is currently operating with 2 full-time qualified EHOs and 1 part-time qualified EHO (3 days a week). It should be noted that 1 full-time EHO is in a management position and does not undertake EHO work.

The roles undertaken by an EHO in local government are becoming increasingly complex and diverse. If this ratio is recommended by

the Director of Public Health as a 'benchmark', then the Department of Health and Human Services should be placing increased emphasis on facilitating an increase in training and development of EHOs.

It is noted that Section 2.4.1 of the report concluded that Kingborough's intended inspection frequency is not being achieved. Given Kingborough's shortfall in qualified EHO numbers compared with the benchmark recommendations, Council actively utilises a preventative and educative approach including those detailed in the report.

**Recommendation 6** — No comments. Supportive of recommendation.

**Recommendation 7** — Council EHOs are now using this FSANZ-compliant checklist. During the audit, Council was in the transitional period of phasing out the existing checklist for the nationally consistent approach.

**Recommendation 8** — Council is very proactive in this regard and provide template monitoring schedules and guidance for operator use.

**Recommendation 9** — Council feels that this is adequately addressed and currently undertakes this practice. However, it should be noted that a possible change in approach to electronic palm pilots for food business inspections may see this recommendation difficult to satisfy.

**Recommendation 10** — Council will review internal reporting procedures.

**Recommendation 11** — Council can currently determine the categories/types of food businesses, however an overall system review (as detailed in Recommendation 3) will further enhance the efficiency of this data management.

**Recommendation 12** — Council is predominantly compliant in this regard, however will review the partial compliance component to ensure it is wholly meeting the legislative reporting requirements.

**Recommendation 13** — No comments. Supportive of recommendation.

## Latrobe

**Recommendation 1** — Agree

**Recommendation 2** — The current practice within Latrobe Council is that development applications are assessed by the environmental health, engineering, building, plumbing and planning officers from the Council's Development Services department.

Although Latrobe agrees with Recommendation 2, it is irrelevant as this recommendation is already being implemented by the Council.

**Recommendation 3** — Agree

**Recommendation 4** — Agree

**Recommendation 5** — Agree

**Recommendation 6** — Agree

**Recommendation 7** — Agree

**Recommendation 8** — Agree

**Recommendation 9** — This recommendation refers to the FSANZ checklist which is known as the AFSA checklist. So long as Recommendation 7 is enforced then Recommendation 9 will be enforced as well. However, this will not reduce the administration work as non-conformities must be followed up with an Improvement Notice under Section 19 & 20 of the Tasmanian Food Act 2003. Leaving a copy of inspection notes with the food business operator does not mean the non-conformities noticed during the inspection are enforceable.

**Recommendation 10** — Agree. For example, monthly meetings between management and the Environmental Health Officer to discuss how many inspections were conducted in the month, how many of those businesses did not conform to the Tasmanian Food 2003 and Australian Food Safety Standard which resulted in Improvement Notices, how many businesses were not inspected that should have been and how many inspections were due in the following month.

**Recommendation 11** — Agree

**Recommendation 12** — Agree

**Recommendation 13** — Agree

## **DPIW**

DPIW supports Recommendation 1 to introduce egg stamping in Tasmania. The issue of egg traceability has been raised on several agenda nationally and at a Tasmanian Government / Industry meeting in October 2007. Government agencies and industry generally support the concept and we agree with the positive aspects of egg stamping identified in the Report. We view stamping as a means of further supporting the application of the national Primary Production and Processing Standard for Eggs and Egg Products, which is under development.

DPIW has commenced consultation on proposed new primary industries food safety legislation which, inter alia, will replace the



current Egg Industry Act 2002. DPIW will be seeking provision for egg stamping and adoption of the new Standard in the 2009 Bill.

DPIW also accepts Recommendation 13. As Chair and Secretariat of the Food Safety Forum, DPIW has taken the lead in the initiation and subsequent redrafting of the Memorandum of Understanding (MoU) and despite some difficulties experienced to date in defining roles and responsibilities to all parties satisfaction, the DPIW will continue to work towards agreement of an MOU by Food Safety Forum members by the end of this year and remains optimistic of achieving that.

## DHHS

The Department of Health and Human Services is pleased to learn that one of the outcomes from the audit was that the office of the Director of Public Health (DPH) was found to have acted 'quickly and effectively' in response to foodborne illness out breaks. This was aided by a close collaboration with officers from the department of Primary Industries and Water and the respective local government council Environmental Health Officers (EHOs).

We accept the recommendation relating to our role in finalising the Food Safety Forum's Memorandum of Understanding and undertake to do so. However, I would like to emphasise that some of the recommendations relating to local government do not reflect the genuine and positive efforts that EHOs in many Councils are already expending on food safety, within the current resource constraints.

EHOs in many ways are the 'eyes and ears' of the DPH on the ground in Tasmania. It is the EHO in a Council who prepares reports for the DPH on matters such as food safety and who is the 'effector arm' when public health interventions become necessary (such as in foodborne illness outbreaks). Increasingly, there is a broader role for EHOs in health protection and promotion through environmental measures.

There has been a decline in EHO numbers in real terms over recent years, and the workforce, particularly in local government, is now in a precarious position with unfilled vacancies, inappropriate use of trainees, low average output of graduates, difficulties in recruiting and retaining qualified staff, and competition from private enterprise and interstate employment opportunities.

I hope this audit report may assist in reversing this trend within the environmental health workforce.



## **Introduction**

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# Introduction

## *Background*

Consumers want to know that the food they buy and eat is safe. The consequences of unsafe food reaching the market are that people become sick or are hospitalised. Fatalities are possible amongst the vulnerable sections of the community, the aged or very young especially. Significant damage to the ‘clean and green’ image and reputation of Tasmania’s food industry would also result.

In Australia, the development of food safety standards is coordinated at an international level with New Zealand. Food Standards Australia New Zealand (FSANZ) is the controlling body and has various forums for state input from the level of ministerial council down to sub-committees. Each Australian state or territory has very similar legislation that fits into an integrated national model.

FSANZ develops Australia-only food standards that address food safety issues — including requirements for primary production. The organisation publishes the food standards code that has sections dealing with eggs and the processing of egg products.

Eggs are a nutritious component of the diet of most Tasmanians but can be hazardous to health if not handled or processed properly. Outbreaks of salmonella poisoning relating to eggs in Tasmania since 2005 have affected 181 people (with 20 people hospitalised) and raised general concerns regarding egg safety.

Salmonella are naturally occurring bacteria; chickens and eggs are especially susceptible to types of salmonella. Salmonella is the suspected cause of up to one-third of all food-borne illness in Australia<sup>1</sup>. Eggs that are cracked or dirty have a higher chance of carrying salmonella and, in turn, significantly increase the risk of food-borne illness.

From 2001 to 2004, the average yearly rate of laboratory-confirmed salmonella infections in Tasmania was less than that for Australia as a whole (31.2 versus 37.6 cases per 100 000 population respectively).<sup>2</sup> Illness caused by food-borne salmonella is a notifiable disease<sup>3</sup> that means that general practitioners and testing laboratories must notify

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<sup>1</sup> OzFoodNet

<sup>2</sup> *Large Outbreaks Of Salmonella Typhimurium Phage Type 135 Infections Associated with the Consumption of Products Containing Raw Egg in Tasmania*. Nicola Stephens, Cameron Sault, Simon M Firestone, Diane Lightfoot, Cameron Bell, 2007

<sup>3</sup> *Guidelines for Notification of Notifiable Diseases, Human Pathogenic Organisms and Contaminants 2006* (Department of Health and Human Services), January 2006

the Department of Health and Human Services (DHHS) upon identification of cases.

The Tasmanian egg industry mainly comprises 14 commercial producers ranging from more than 150 000 birds to small farms of less than 1 000 birds. While those producers are generally family operations, the largest has 65–70% of the Tasmanian commercial market. The five largest producers account for approximately 85% of licensed hens.

### *Government's role*

To manage public health, and minimise the risk of food-borne illness, industry and consumers rely on appropriate regulation of food production, distribution and sale. Changing eating habits, the tendency to eat out more and the demand for a wide range of foods all year round are factors that create challenges for regulators. Therefore, food safety management along the entire supply and distribution chain becomes increasingly important.

### *Managing public health — DHHS*

The Director of Public Health is a statutory officer who works within DHHS. The *Food Act 2003* defines the Director's role in relation to food safety. As an official of state government, the Director is an intermediary between the Commonwealth on the one hand and local government on the other. In relation to local government, the Director supports and assists councils' Environmental Health Officers (EHOs).

Briefly, the objectives of the *Food Act 2003* are to:

- ensure food for sale is both safe and suitable for human consumption
- prevent misleading conduct in connection with the sale of food
- provide for the application of the Australia–New Zealand Food Safety Code.

### *Primary production — Department of Primary Industries and Water*

Egg production involves DPIW regulation at the farm through the *Egg Industry Act 2002*. Anyone who keeps more than 20 hens for the purpose of selling eggs must submit egg production programs that address relevant criteria, such as:

- food safety
- animal welfare

- environmental impact.

Within three months after the approval of a producer's egg production program, the program must be audited by an accredited auditor. In addition, the *Egg Industry Act 2002* allows for the appointment of inspectors who are empowered to ensure compliance with egg production plans through annual inspections.

### *Retail — local government*

All Tasmanian councils employ EHOs whose numbers vary from 5–6 in large councils down to fractional FTEs at rural councils. EHOs have a wide range of functions of which food safety is just one<sup>4</sup>.

The frequency of inspections at food premises is determined by a risk-based approach taking into account factors such as:

- food type
- method of processing food
- type and number of consumers at risk.

For example, food premises catering for the elderly or for small children (i.e. recognised high-risk groups), or serving seafood, would be likely to have a Category A rating.

### *Outbreaks of food-borne illness*

Two government departments — DPIW and DHHS — jointly investigate the sources of outbreaks because egg production and sale of egg products are separate functions.

Within the office of the Director of Public Health, there is a Communicable Diseases Prevention Unit. The unit conducts investigations that follow from notifications provided by doctors and testing laboratories. Officers interview affected cases and gather evidence with the aim of pinpointing the source of the outbreak. EHOs from the local council will become involved in the required corrective work at the offending food-business. With egg-related outbreaks, DPIW will work with the egg producer if there are problems with egg production.

### *What could still go wrong?*

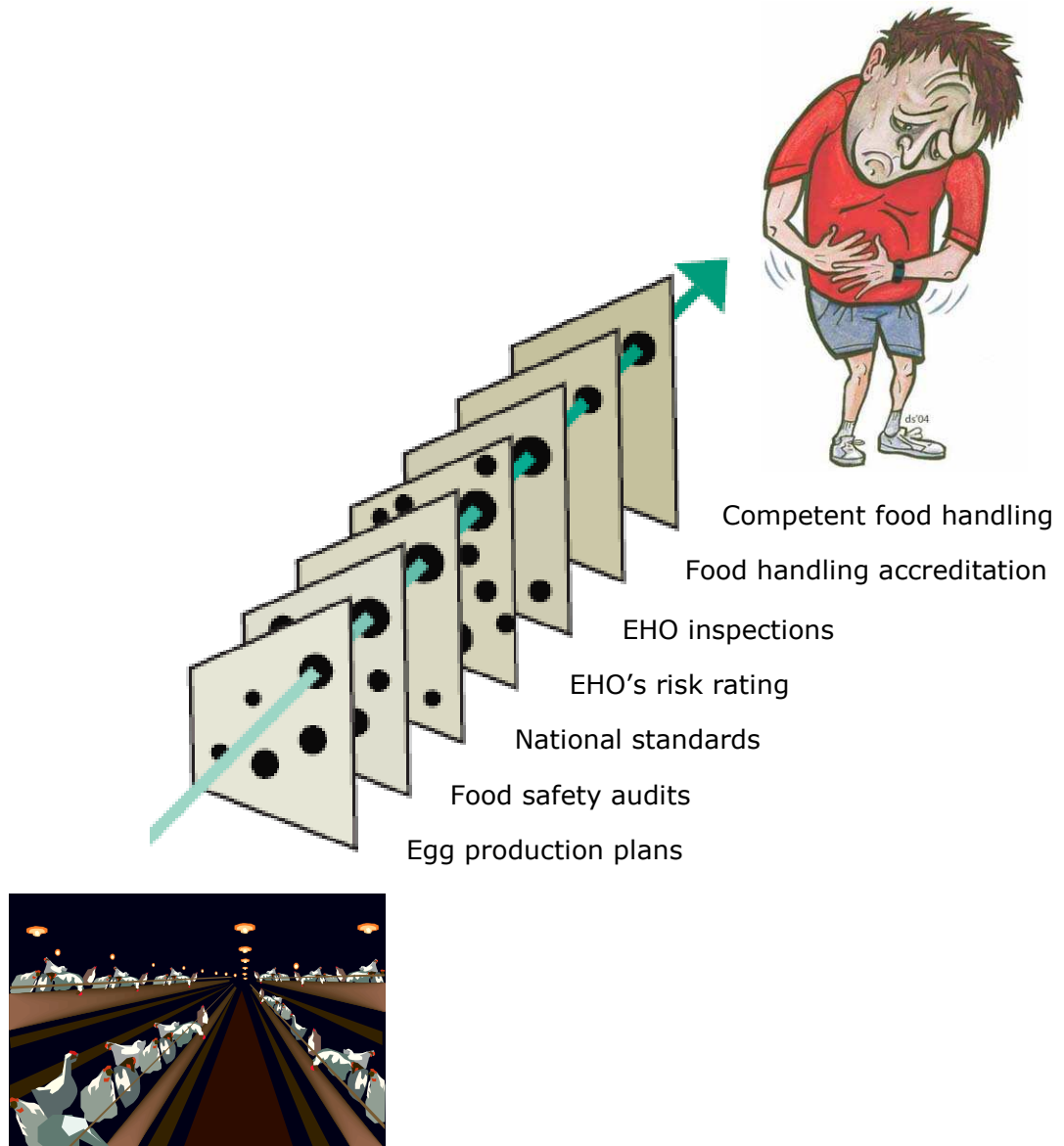
The layers of regulation, audit, inspection and safe practice minimise the risk of contracting food poisoning from food that the public purchase at food businesses. There is always some degree of risk at each stage of the process. These weaknesses in the system are

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<sup>4</sup> Other EHO duties may include public and environmental health regulation, immunisation, wastewater, public buildings, water sampling and monitoring, environmental management, health education and emergency management.

analogous to the holes in slices of Swiss cheese. Every part of the process from egg farm to consumer attempts to make these holes as small as possible. It is possible, though the risk is small, for the holes to line up and an outbreak to occur.

**Figure 1: The Swiss cheese model of food safety applied to eggs**



### *Audit objective*

The audit's objective was to express an opinion on the effectiveness of government's role in food safety particularly as it relates to:

- egg production
- retail of raw eggs
- manufacture and sale of egg-related products.

Strategic planning, strategies, performance indicators, monitoring and reporting were also covered.

## *Audit scope*

The audit encompassed:

- relevant activities undertaken by DPIW
- action taken by DHHS in response to salmonella outbreaks.

The following councils were audited:

- Brighton
- Devonport City
- Huon Valley
- Kingborough
- Latrobe.

## *Audit criteria*

The audit criteria that we applied asked the following questions:

- How well government ensures the safety of egg production?
- How well local government ensures food safety at retail outlets?
- How well the various government entities involved in food safety are coordinated?
- How well has the Director of Public Health responded to salmonella outbreaks?

## *Audit methodology*

We used the following methods during the course of the audit to gather evidence:

- review of background materials on food safety in Australia
- held discussions with staff from the office of the Director of Public Health
- collected information through field visits to DPIW, including discussion with Food Safety Auditors
- collected information through field visits to a sample of councils that involved discussion with EHOs.



### *Timing*

Planning for this performance audit began in February 2008. August saw the end of fieldwork and the report was finalised in October 2008.

### *Resources*

The total cost of the audit excluding production costs was \$110 000.

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## 1 Inspections of primary production

# 1 Inspections of primary production

## 1.1 Background

As stated in the Introduction, egg production involves DPIW regulation at the farm through the *Egg Industry Act 2002*. However, it was not until late 2004, when the *Egg Industry Regulations 2004* became effective, that DPIW had powers to inspect egg production facilities and enforce standards. Up until this point, no food safety inspections were undertaken by DPIW.

After an initial audit of the egg production plan, the producer is subject to a regime of ongoing annual inspections from DPIW's Food Safety Auditors. This meant that all egg producers had to submit an egg production plan for approval and audit during 2005 and 2006.

While some people are concerned that there may be a connection between battery cage system and increased risk of salmonella, a research report published by the Productivity Commission in 1998 noted<sup>5</sup>:

The Commission does not consider human health concerns can form a basis for deeming any production system more desirable than others.

## 1.2 Is DPIW aware of all egg producers?

As stated in the Introduction, the *Egg Industry Act 2002* requires egg producers keeping more than 20 hens to submit an egg production program for approval by DPIW. Our view is that for many reasons, including the need for planning approvals, it would not be possible for a large-scale producer to enter the market without DPIW becoming aware.

In smaller cases, where a person is either unaware of the legal requirement, or chooses to ignore it, in addition to its own observations the department relies on the retail industry, observant members of the public, council EHOs and existing producers to detect and report illegal egg producers. However, there is no ironclad mechanism to guarantee early detection.

The mixing of eggs from different sources, including an illegal egg producer, made identification of suppliers difficult at a food retail business implicated in a recent salmonella outbreak. In that case, DPIW mounted a successful prosecution under the *Egg Industry Act 2002* against the illegal producer. See Chapter 4.

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<sup>5</sup> *Battery Eggs Sale and Production in the ACT*, Productivity Commission, October 1998

Verification that eggs come from approved producers is advantageous for the following reasons:

- It allows easier tracing of eggs to point source in the event of an outbreak.
- DPIW, EHOs and the public would be able to ensure that eggs for sale come from approved producers.
- The public is confident that identified eggs have been through regulated quality control systems.

The practical way to achieve this is to introduce egg stamping as a means of positively identifying each producer's product in the marketplace and preventing sale of non-approved eggs. At least two egg producers in Tasmania have already taken on this initiative. We note that in Queensland, stamping of eggs is mandatory.

**Recommendation 1**

**To ensure that eggs can be traced back to producers, we recommend the introduction of egg stamping in Tasmania.**

**1.3** *Is there an adequate plan for food safety audits?*

DPIW ensures that its Food Safety Auditors (two based in Launceston and two in Hobart) or accredited third party auditors inspect approved egg production facilities each year. Food Safety Auditors have similar responsibilities for other kinds of produce such as meat, dairy and seafood.

We found that DPIW had an annual program for Food Safety Auditors and that it had conducted annual inspections of Tasmania's 14 approved egg producers and had done so since the *Egg Industry Act 2002* came into force as mentioned in Section 1.1.

In addition to regulation by government, there is an accreditation process within the industry. At the time of this audit, Tasmania's largest egg producer was undergoing audit by the Australian Egg Corporation Limited for its ongoing 'Egg Corp Assured' certification.

**1.4** *Quality of inspections*

Egg producers and DPIW have a common interest in ensuring the safety of eggs. From that department's perspective, its role is to ensure food safety by confirming that the conditions of egg production plans in place at farms are met.

In the first instance, producers are responsible for safety of eggs and do so by adopting safe practices as required by the *Egg Industry Act 2002*. They are also required to maintain documentation such as:

- daily production
- bird mortality
- feed and water
- egg washing and grading
- verification of deliveries.

To conduct an inspection, Food Safety Auditors use an extensive checklist incorporating elements of the *Egg Industry Act 2002*, the *Animal Welfare Act 1993* and the industry code of practice. Food Safety Auditors assign points covering every facet of egg production (e.g. hygiene, good farming practice, animal welfare, egg handling, etc.).

Areas of the operation identified as deficient give rise to Corrective Action Requests that are scheduled to be followed up by Food Safety Auditors. We observed the conduct of a food safety audit and were satisfied that the process was rigorous and comprehensive.

We also reviewed the role of DPIW in relation to the large commercial producer whose eggs had been implicated in outbreaks of salmonella. The producer had an egg production program that had been approved in March 2006 following representations from DPIW of required improvements to farm practices. We found that the program had passed food safety audits in May 2006 and January 2007 as well as ad hoc inspections. No defective eggs were found during these visits.

The DPIW approval was revoked in March 2007 following the discovery of cracked and dirty eggs in the market place during the course of investigations into the North West Coast outbreak (see Chapter 4). The producer was only able to obtain a further approval after submitting a revised egg production program that included procedures for the washing, grading and packing of his eggs by another approved producer.

There is an apparent contradiction of the previous food safety audit in January 2007 and the revocation following the March 2007 outbreak. However, based on our observations of procedures, standards of farm hygiene and review of documentation, we stand by our view that DPIW inspections are reliable.

## 1.5 *Is there adequate monitoring and reporting?*

In the interests of accountability, there needs to be adequate monitoring of the inspection program and reporting to egg producers, the egg industry and the public.

DPIW had a program for inspections of approved egg production facilities and an overall program for food safety audits. We found that the department effectively monitored its food safety audit program.

The checklist used by Food Safety Auditors during their audits is used to generate a comprehensive report for the producer after each inspection visit.

There was some public reporting about food safety audits in the DPIW Annual Report. Total food safety audits performed by the department and other external auditors were noted.

## 1.6 *Conclusion*

DPIW has egg production plans for the 14 producers in Tasmania and maintains an annual inspection program. Audit testing confirmed that food safety audits were comprehensive, thorough and up-to-date. Accordingly, eggs from these approved producers can be expected to conform to national standards of quality.

However, it is possible for eggs to enter the market from non-approved suppliers. In the event of an egg-related food outbreak, identification of the producer is imperative to reduce the spread of disease. We believe that being able to identify eggs back to the producer would contribute to food safety.





## 2 Inspections of retail outlets

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## 2 Inspections of retail outlets

### 2.1 *Background*

The people of Tasmania enjoy a range of restaurants and eateries, and purchase food for their homes. The expectation is that this food is safe to eat. Food retailers are required to register as food businesses with local councils and then become subject to regular inspections by EHOs.

There is no guarantee that food businesses will maintain standards between inspections and it follows that deciding on the frequency of inspections is an important determinant of the level of safety. For that purpose, EHOs perform a risk assessment of each new business, considering such aspects as:

- food type
- method of processing food
- type and number of consumers at risk.

The frequency of food safety inspections required depends on the risk assessment: the higher the risk, the more frequent the inspections. The risk rating process applies to all licensed food businesses, i.e. all those who sell food.

We noted that only a small percentage of food businesses prepared raw egg products (mayonnaise, hollandaise sauce, etc.). The Director of Public Health has required all councils to distribute guidelines to and record details of those businesses so that they can be closely monitored when inspected.

### 2.2 *Are councils aware of all food businesses?*

Food businesses (such as restaurants and shops) are required to apply for a licence, upon commencing operation or changing hands and, that must be renewed annually. Casual food sellers may be less inclined to notify or may be unaware of the need to do so. Councils issue temporary licences in these cases when they are aware of casual food sales.

For councils that are geographically compact, such as Latrobe and Devonport City, there was less likelihood of new food businesses bypassing council or of unlicensed activity. Despite this, it is possible for oversights to occur, at least in the short-term.

Huon Valley Council, a larger and more diverse municipality, had improved communication between its divisions through a Developmental Control Unit. The function of that unit, that had representatives from all council divisions including environmental,

was to coordinate council's response to planning and building applications. In that way, applications regarding new food businesses or those changing the nature of their existing operation would routinely come to the notice of EHOs.

Under the *Food Act 2003*, EHOs are responsible to ensure the safety of food sold in their municipalities. Where eggs are sold intermittently from the roadside, at charity stands, markets or donated as raffle prizes there is a challenge for EHOs. Unreliable carton labelling, misleading best-by dates and the absence of food safety inspections heighten the level of risk for consumers. For people who obtain eggs from these sources, it is a case of 'let the buyer beware'.

**Recommendation 2**

**We recommend that all councils ensure that development applications related to food businesses are brought to the attention of the EHO.**

**2.3** *Are inspections adequately planned?*

We tested whether councils had an inspection program, mapping out the inspections of food businesses required to adequately meet national standards. An inspection program should be based on the principle that those businesses with the highest risks will be inspected more frequently.

**2.3.1** *Is there a plan?*

We would expect councils to have a program specifying the inspections required to meet their food safety obligations. Such a program would also provide a mechanism to measure progress to date at any point. An adequate inspection program would be the basis of reporting and also be a guide in the event of staff turnover.

Provision should also exist for unscheduled follow-up visits to verify corrective action arising from non-compliance detected from a programmed inspection. While inspections are scheduled they should be unannounced to operators.

We found little evidence of documented forward programs at any councils other than Brighton and Latrobe. At the remaining councils there were recorded details of past inspections but no prospective inspections were noted.

**Recommendation 3**

**We recommend that councils maintain forward inspection programs for all food businesses.**

### 2.3.2 Is the plan risk-based?

Licensed food businesses should be risk-rated to determine the frequency of inspection visits by EHOs. In order to strengthen national uniformity with food safety, FSANZ has published an information paper for local government: *The priority classification system for food businesses*<sup>6</sup>. We found only two of the five reviewed councils used the FSANZ system. The remaining three councils each had a different approach.

For example, Devonport City did not use a risk rating form, assessing risk on a case-by-case basis but without supporting documentation. While Devonport City is a condensed municipality, and the EHOs have a strong working relationship with food businesses, we were concerned about the lack of documented risk assessment to justify the frequency of inspections. In the event of staff turnover, new risk assessments would be required.

Comparison of risk rating forms in use showed that councils that varied from the FSANZ model. The four risk classifications in the FSANZ standards are:

- food type and intended use by customer
- activity of the food business
- method of processing
- customer base.

Brighton, Huon Valley and Latrobe considered additional classifications such as:

- hours of operation
- structural considerations that affect food preparation.

Inclusion of extra factors diluted the significance of the FSANZ classifications when assessing food businesses. Variation in risk assessment also raises issues of equity in that a given food business might be assessed differently in different municipalities.

The planning of inspection frequency in relation to the assessed risk rating should be consistent and adequate. Food businesses assessed as high-, medium- or low-risk would have an inspection frequency assigned according to the FSANZ model in *The priority classification system for food businesses*<sup>7</sup>.

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<sup>6</sup> Available at [http://www.foodstandards.gov.au/\\_srcfiles/ANZFA\\_1578\\_Info\\_Paper\\_final.pdf](http://www.foodstandards.gov.au/_srcfiles/ANZFA_1578_Info_Paper_final.pdf)

<sup>7</sup> The priority classification for food businesses, ANZFA, p.4

**Recommendation 4**

**We recommend that *The priority classification system for food businesses*, published by FSANZ, be used to assess all Tasmanian food businesses.**

## 2.4 *Are inspection programs up-to-date?*

From the risk ratings referred to in Section 2.3.2, the total number of inspections required annually depends on the number and type of food premises in a municipality. The combination of these two factors, i.e. number of premises and their risk-ratings, decides the inspection program for the year. Those inspections that later reveal areas of non-compliance may result in extra follow-up visits that EHOs will need to accommodate.

### 2.4.1 *Compliance with inspection program*

Brighton was the only council we reviewed that was completely up-to-date with its inspection program. Food businesses assessed as high-risk were inspected every four months, medium-risk every six months and low-risk businesses received an annual inspection. There were 62 food premises in the municipality and one full-time EHO.

After a period without a full-time EHO the Latrobe inspection program had fallen behind. Our review of council's property files revealed that, for example, one food business had only received three inspections in five years. However, it was pleasing to note that since the commencement of the current EHO in November 2007, Latrobe was on track to bring the program of inspections up-to-date.

Devonport City did not use a risk rating form for each of its 169 food business and there was no documented support for the inspection frequency applied. As noted in Section 2.3.1, there was no forward program. So, to assess performance in 2007, we counted the number of food inspections conducted. Due to staffing difficulties as described in Section 2.4.2, the total according to Devonport City's spreadsheet was 98. Inspections of property files verified that food businesses were getting inspected annually at best, with the exception of businesses that required follow-up inspections.

Kingborough used the FSANZ classification system for food businesses and sets its inspection frequency at six, twelve and eighteen months for high-, medium- and low-risk businesses respectively. Kingborough had 258 licensed food businesses that received 137 inspections in 2006–07. It follows that the average rate of inspections per business is 1.88 years. We concluded that the intended inspection frequency is not being achieved.

Huon Valley had experienced staffing difficulties and was using a contractor two days a week (refer Section 2.4.2). Our property file inspection and examination of council's computerised record system, found evidence of infrequent or no inspections for our sample of the 138 licenses food businesses in the municipality. We were unable to quantify the extent of the gap in inspections due to incomplete record keeping that is described further in Section 2.4.3.

#### 2.4.2 *Is there adequate staffing of EHO positions?*

Of the councils reviewed, only Latrobe and Brighton had adequate EHO staffing. In contrast, Huon Valley was without a full-time EHO since March 2008 and was having difficulty filling the vacancy. According to the 2005 DHHS survey of the state's EHO workforce<sup>8</sup>, 18 of Tasmania's 29 local councils had an EHO to population ratio of less than the benchmark of 1:10 000 as recommended by the Director of Public Health.

To reduce the effect of understaffing, external contractors were used in two of the councils to help meet the workload. Some EHOs accepted that a lower rate of inspection of food premises was unavoidable and worked hard to maximize the effectiveness of the inspections conducted. Examples of ways EHOs reduce the food safety risk when the appropriate number of inspections cannot be achieved were:

- encouraging food businesses to have food safety accreditation and train their staff in safe food-handling
- EHOs themselves providing food-handling training to staff in food businesses
- EHOs insisting that food business proprietors keep logs of food storage temperatures, cleaning regimes etc.
- keeping close communication with local food businesses via emails, letters and newsletters.

Some councils had cadet EHOs who are a useful extra resource. However, under the *Food Act 2003*, cadets are not authorised to sign off food premises inspections.

Most councils have experienced difficulties, some of them chronic, in attracting EHOs. We were encouraged to see resource-sharing between councils. An example is the arrangement between Latrobe and Kentish, with a Senior EHO working at Latrobe one day a week. While use of external contractors can alleviate EHO shortages, as we observed at Huon Valley and Devonport City, they are a stop-gap measure. Full-time EHOs are better able to develop constructive

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<sup>8</sup> Local Government Environmental Health Workforce Survey 2005 Report, DHHS

relations with food business operators and have ownership of councils' food safety inspection program.

**Recommendation 5**

**We recommend that councils give greater priority to adequately staffing EHO positions. Consideration should be given to use of contractors or sharing of staff with other municipalities to address short-term shortages.**

*2.4.3 Record keeping*

We noted problems with record keeping at a majority of councils that we audited. No council had just one system and it was common for there to be three record systems (i.e. paper-based property files, electronic workflow systems and electronic document storage systems). Where that was the case, a complete history of food inspections required accessing each system. We also found that in some cases, EHOs maintained their own spreadsheet records that proved useful but were inaccessible to other council staff.

Where long-term staffing of EHO positions was a problem, it made the situation described above worse. High staff turnover resulted in different people working in different ways or record keeping became a low priority in the face of an increasing workload of inspections. The lack of consistent and reliable records about food premises was reflected by:

- no analysis of systemic issues
- inconsistent inspection records
- missing risk-rating sheets
- inability to accurately monitor progress of the inspection program
- difficulty in responding to queries from business operators.

Huon Valley has had long-term problems with recruiting a full-time EHO and used a contract EHO two days a week. To maximise the effectiveness of the EHO, council had taken the initiative to provide administrative support to the EHO position. Relieving the EHO of time-consuming record-keeping and programming functions had increased the time the EHO can spend on inspections and other areas of technical expertise.

**Recommendation 6**

**We recommend that, wherever necessary, councils provide administrative support to EHOs to maximize their effectiveness.**

## 2.5 *Quality of inspections*

When an EHO visits a food business to conduct an inspection, the process requires:

- thoroughness, using a checklist that ensured compliance with FSANZ standards
- conduct by EHOs
- consistent application across the entire range of food businesses
- cooperation with (and, if appropriate, education of) the food business operator.

### 2.5.1 *Conduct of inspections*

We accompanied EHOs on food safety inspections at different councils to varying food businesses. We were satisfied in each instance with the thoroughness and professionalism of the inspections. EHOs displayed excellent technical knowledge, showed independence and exhibited good working relationships with food business operators.

However, we noted inconsistencies in the checklists used. Two councils used the FSANZ inspection checklists. Kingborough used its own checklist, but was planning to use the FSANZ model in the future. Latrobe and Devonport City used checklists of their own.

Although these checklists seemed adequate to support the EHO in performing an inspection, the Food Safety Standard of Practice incorporates the Australian Food Safety Assessment and provides procedures and guidelines for conducting assessments, assessment frequency and non-conformance<sup>9</sup>.

We noted that the use of monitoring schedules by food business proprietors was an effective way of improving the standards of food temperature monitoring, cleanliness, stock control and maintenance activities.

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<sup>9</sup> This is available at the Australian Institute of Environmental Health website ([www.aieh.org.au/afsa/Practicestandard.pdf](http://www.aieh.org.au/afsa/Practicestandard.pdf)).



**Recommendation 7**

**We recommend that EHOs use a FSANZ-compliant checklist and standard of practice in the interest of consistency.**

**Recommendation 8**

**We recommend that EHOs further encourage food business operators to use monitoring schedules to improve food safety.**

*2.5.2 Feedback for food business proprietors*

We found inconsistency at the reviewed councils regarding feedback to the food operator at the time of the EHO's inspection. Two of the councils used the FSANZ inspection checklist and:

- completed it on-site
- discussed the findings with the operator
- had the operator sign the completed checklist
- gave the operator the master copy as a record.

If there were areas of non-compliance that required a follow-up visit, the EHO would send a confirming letter.

Other EHOs varied from the above process by not having the operator — or their agent — sign the checklist. Instead, they preferred to send a letter to verify the results of the inspection and, if required, to address areas of non-conformity.

The design of the Australian Food Safety Assessment checklist anticipates that the EHO will require the food business operator to sign the document and retain the master copy at the time of the inspection. This requirement is a component of the best practice guide mentioned in Section 2.5.1.

In addition to maintaining best practice, we believe that leaving a copy of the checklist with the operator assures transparency of the inspection process. Moreover, it reduces the consequent administrative workload involved in writing and sending letters.

**Recommendation 9**

**We recommend that EHOs have food business operators sign checklists at the time of the inspection and leave a copy with them.**

## 2.6 *Is monitoring and reporting adequate?*

We were interested to see whether council management was adequately monitoring food safety inspections against the planned program.

### *Monitoring and internal reporting*

Monitoring and internal reporting of progress of food premises inspection plans did not consistently occur at any of the reviewed councils.

Huon Valley had a monthly status report that showed the number of food business inspections conducted in that month (e.g. 10 inspections conducted in July 2008 out of 138 food businesses). However, the report was a statement of activity that did not compare actual performance with the number of inspections required to complete the program. No other reviewed councils monitored the progress of food safety inspections with the annual program.

#### **Recommendation 10**

**We recommend that council management monitors progress on food premises inspections and reports to council.**

We noted that Kingborough and Latrobe had data management systems that categorised food businesses by type — bakeries, bed and breakfasts, restaurants, etc..

There may be situations where access to this kind of information may prove useful. One example could be in the case of product recalls, where having ready access to that data would increase responsiveness. In addition, councils could use this information to provide systemic analysis of issues across food businesses. In outbreaks of food-related illness, it may be necessary to contact all butcheries or bakeries urgently, for example.

#### **Recommendation 11**

**We recommend that councils implement information about food business types into data management systems to improve systemic analysis of food safety issues.**

### Reporting to the public

The *Local Government Act 1993* requires councils to undertake a level of public reporting on public health<sup>10</sup>. Annual reports should contain:

- a statement of goals and objectives in relation to public health for the preceding financial year
- the extent to which the council has carried out its functions under the *Public Health Act 1997* and the *Food Act 2003*
- the resources allocated to public health
- the extent to which its goals, objectives, policies and programs in relation to public health met the needs of persons within its municipal area
- details of the completion of any strategies.

We examined the 2006–07 annual reports of the councils under review and found only partial compliance and that no council was meeting its reporting obligations as outlined in Table 1.

**Table 1: Local Government Act 1993 reporting requirements**

Requirement	Brighton	D'port City	Huon Valley	King-borough	Latrobe
A statement of goals and objectives	✓	P	✓	P	✓
The extent to which the council has carried out its functions	✓	✗	P	✓	P
The resources allocated to public health	✗	✗	✗	✓	✓
The extent to which it met the needs of residents;	✓	P	✗	✓	P
Details of the completion of strategies.	N/A	N/A	P	N/A	N/A

Key:

P = partial compliance

N/A = not applicable

<sup>10</sup> Section 72 *Local Government Act 1993*

**Recommendation 12**

**We recommend that councils report fully in Annual Reports to ensure compliance with *Local Government Act 1993* (section 72).**

**2.7** *Conclusion*

The inspections, when performed, were generally of high quality, notwithstanding inconsistencies in use of checklists and provision of feedback to food premises that deviated from the national standard. Unfortunately, shortages of EHOs contributed to inability of most councils to provide inspections at the required frequency that limited the effectiveness of the inspection program. Exceptions were Brighton that was fully up-to-date and Latrobe, which had shown a substantial improvement in the past 12 months.

Management of the inspection programs was poor, with a lack of forward programs, inconsistent approaches to risk rating, poor record keeping and a lack of monitoring and reporting.

### **3 Coordination within government**

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## 3 Coordination within government

### 3.1 Background

Traditionally, those responsible for government's food safety role have regarded the demarcation point between primary industry and local government (who both have separate inspection roles) as being 'the back door of retail'. However, changes in product development and consumers' buying patterns have led to a situation where the distinction between retail and primary production is no longer as clear-cut. An example that was often cited was the case of suburban butchers producing smallgoods — a product in the high-risk category.

The primary objective of the *Food Act 2003* is 'to ensure food for sale is both safe and suitable for human consumption'<sup>11</sup>. We wanted to determine whether there was coordination between the various government agencies and that administrative boundaries did not hinder food safety.

### 3.2 High-level coordination

In 2004, DPIW commissioned an industry expert to report on potential risks in various commodity areas of primary production<sup>12</sup>. The project had a broad scope and encompassed local government, DHHS, industry and consumers. Presented in November 2004, the Sumner Report contained recommendations that aimed to improve the management of risk around primary production.

Government took two and half years to produce a formal response to the Sumner Report. A significant recommendation concerned a memorandum of understanding (MOU) that would be used to codify regulatory and operational roles<sup>13</sup>:

... develop an MOU between controlling authorities. The MOU will include formalisation of a requirement for DPIW to alert DHHS and EHOs of major and critical non-conformances detected during audits of egg production programs.

Development of the MOU is the responsibility of the Food Safety Forum, a body chaired by DPIW and comprising representatives from the following areas:

- Department of Primary Industries and Water

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<sup>11</sup> Section 3 *Food Act 2003*

<sup>12</sup> *Management of food safety risk in Tasmanian primary industries*, Dr John Sumner, November 2004

<sup>13</sup> *Tasmanian Government Response to the — Management of Food Safety Risk in Tasmanian Primary Industries Report (The Sumner Report)*, Department of Primary Industries and Water, May 2007, p.17

- Director of Public Health
- Local Government Association of Tasmania
- Environmental Health Australia — Tasmanian Branch<sup>14</sup>
- Tasmanian Dairy Industry Authority.

At the time of writing this Report, negotiations over the MOU had been ongoing for more than a year and Version 8 of the document was under consideration. There appeared to be clear understanding of the importance of cooperation and participants have articulated views supporting it<sup>15</sup>. Nonetheless, progress — as exemplified by the failure to conclude the MOU — has been unacceptably slow.

**Recommendation 13**

**Participants in the Food Safety Forum should complete the Draft Food Safety Memorandum of Understanding as soon as possible.**

**3.3** *Was there feedback to DPIW from DHHS?*

In January 2006, the Director of Public Health wrote to egg producers (as well as to DPIW) with recommendations on ways to reduce salmonella contamination of eggs.

The letter pointed out that previously, salmonella had only rarely been a major cause of human illness in Tasmania. However, since September 2005, four separate point-source outbreaks had affected a large number of people. Crucially, epidemiological data linked each outbreak to ready-to-eat products with raw egg ingredients.

As a precaution, DHHS issued media releases advising the community not to consume raw or under-cooked eggs. In a separate letter to all Tasmanian food businesses, DHHS made recommendations regarding the use of clean eggs (‘free of visible external contamination’), refrigerated storage of eggs, and the safe preparation and handling of foods containing raw eggs.

At the operational level, the exchange of information or feedback from the Director of Public Health to DPIW was satisfactory.

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<sup>14</sup> Environmental Health Australia is the peak national organisation in Australia that advocates environmental health issues and represents the professional interests of environmental health practitioners.

<sup>15</sup> Letter from DHHS to DPIW on 21 March 2007: “The way forward to enhancing Tasmania’s well deserved reputation as a supplier of safe, quality food will require a high level of cooperation and collaboration across all levels of government, the food industry and consumers.”

### 3.4 *Was there feedback to EHOs from DHHS?*

Regarding food safety matters, advice from the Director of Public Health to local government can be either specific or general. In the former category are interactions that arise from outbreaks of food-related illnesses and these are covered in Chapter 4 of this Report. The latter category, that is general matters of food safety, can be exemplified by initiatives taken by the Director of Public Health to improve awareness of the risks posed by raw egg products.

In May 2008, the Director of Public Health released information on its web site dealing with egg safety for:

- backyard producers
- restaurants, takeaways and delicatessens
- supermarkets and convenience stores
- home consumption.

With most salmonella outbreaks, there have been reported deficiencies in food safety practices by food businesses. Those shortcomings have helped to explain why more cases occurred. Consequently, the Director of Public Health has made it clear in a number of media statements that, whilst continuing efforts at the primary production phase are important, they will not by themselves prevent the risk of future salmonella outbreaks associated with raw egg products if those products are handled in an unhygienic manner.

Hence, the Director decided to further minimise the risk to the public by requiring that all food businesses choosing to make raw egg products follow strict and auditable procedures (i.e. improved record keeping by businesses) governing egg receipt, product preparation, storage and handling. As an example, each batch of raw egg product must be kept under refrigeration and used within 24 hours, after which it must be discarded.

In July 2008, staff of the Director's office sent advice of the new measures to councils for distribution to food businesses. For those food businesses that notified that they would produce raw egg products, the measures became legally enforceable by EHOs as part of their inspection regimes.

There was evidence of close interaction between the Director and councils concerning notifiable food-borne illnesses (see Section 4.21 for a case study). We concluded that the level of cooperation, and information sharing, from the Director to local government was satisfactory.



### 3.5 Was there contact between EHOs and DPIW?

Usually, in situations where local government EHOs need professional support, their first recourse would be to the Director of Public Health. However, increasingly there are situations where technical expertise resides with DPIW and the support or advice that EHOs need to access has to come from DPIW (e.g. high-risk food operations such as manufacture of smallgoods and aspects of production of shellfish and eggs).

At present, there are ad hoc arrangements between EHOs and DPIW and these appear to be practical. It is envisaged that the MOU referred to in Section 3.2 will not preclude these arrangements.

### 3.6 Consistency in local government: were fee structures comparable?

We compared fee structures for the five councils and made an analysis, including unit costs for services offered. As stated in Section 2.1, the frequency of inspection visits depends on the risk rating assigned: the higher the risk the more frequent the inspections. In Table 2, we compare the schedules for high-, medium- and low-risk food premises and the fees levied.

**Table 2: Food premises – Annual frequency and cost of inspections**

Risk	Attribute	Brighton	D'port City	Huon Valley*	King-borough	Latrobe
High	Frequency	3	2	3	2	3
	Annual fee	\$205	\$110	\$150	\$175	\$200
	Unit cost	\$68.33	\$55.00	\$50.00	\$87.50	\$66.66
Medium	Frequency	2	2	2	1	2
	Annual fee	\$154	\$110	\$110	\$125	\$150
	Unit cost	\$77.00	\$55.00	\$55.00	\$125.00	\$75.00
Low	Frequency	1	2	1	0.66	1
	Annual fee	\$102	\$110	\$50	\$75	\$100
	Unit cost	\$102.00	\$55.00	\$50.00	\$113.64	\$100.00
Follow up visit(s)	Frequency	N/a	N/a	N/a	N/a	N/a
	Unit cost	\$51.00	\$50.00	\$40.00	\$80.00	\$100.00

\* If an approved Food Safety Plan is in place then a 50% reduction in fees applies.

As to the adequacy of the number of visits for particular risk ratings, we sought the views of the Director of Public Health. Advice that we received indicated:

Councils determine their own fees and whilst they should adhere to the recommendations of national protocols/guidelines, they can vary if they wish to. Lesser frequency of inspection than that which is recommended could also be a reflection of the resources available to police the legislation. The [Food] Act is essentially silent on this aspect of food regulation.

The unit costs for high-, medium- and low-risk food premises vary but not widely. We concluded that while fees (and unit costs) vary, the range of variation was not great.

### 3.7 *Conclusion*

High-level strategic cooperation needs to be agreed to the satisfaction of all stakeholders. More needs to be done so that the MOU recommended in government's own response to the 2004 Sumner report can be concluded.

At an operational level, we found that staff across the public sector communicate well to achieve good food safety outcomes.

## 4 Response to outbreaks

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## 4 Response to salmonella outbreaks

### 4.1 Background

In Australia, an estimated 32% of gastroenteritis is food borne, causing around 5 million illnesses, 4 000 hospitalisations and approximately 76 deaths annually. A number of pathogens are associated with gastroenteritis and these include E coli, campylobacter and salmonella<sup>16</sup>.

During the period 2001–04, the average yearly rate of laboratory-confirmed salmonella infections in Tasmania was less than that for Australia as a whole: 31.2 versus 37.6 cases per 100 000 population respectively.

From January 2005 to March 2008, there have been 57 egg-related outbreaks nationally and of those, six substantial salmonella outbreaks involving eggs or egg-based products occurred across Tasmania. Table 3 indicates the extent and severity of those outbreaks.

**Table 3: Egg-related salmonella outbreaks in Tasmania: 2005–08\***

Date	Region	Laboratory confirmed cases	Known hospital admissions
Oct 05	North	63	6
Oct 05	South	10	0
Nov 05	North	5	0
Dec 05	South	36	3
Mar 07	North	20	2
Jan 08	South	47	9
<b>Total</b>		<b>181</b>	<b>20</b>

\*Statistics sourced from Director of Public Health

In a 2006 report, the Australian Government Department of Health and Ageing estimated the total annual cost of food borne illness (encompassing productivity, lifestyle, premature mortality and health care services) in Australia of \$1 249 million<sup>17</sup>. Given the magnitude of the problem, health authorities need to act quickly to respond to food outbreaks when they occur.

<sup>16</sup> *Large outbreaks of Salmonella Typhimurium phage type 135 infections associated with the consumption of products containing raw egg in Tasmania.* Stephens N, Sault C, Firestone S M, Lightfoot D, Bell C. Communicable Disease Intelligence 2007; Vol 31: pp 118–124

<sup>17</sup> *The annual cost of foodborne illness in Australia,* Australian Government Department of Health and Ageing, March 2006

As noted in the Introduction, salmonella is a notifiable disease and DHHS guidelines require reporting to the Director of Public Health within one working day.

#### 4.2 *How well has the department responded to salmonella outbreaks?*

The Communicable Diseases Prevention Unit routinely follows up all cases of salmonellosis notified to the office of the Director of Public Health. With previous outbreaks, the Director has assembled a team within his office to coordinate and manage investigation activities. The team may meet several times per day to review information as it accumulates and to ensure the quickest and most effective course of action.

Usually, the Director's staff contact the referring doctor before attempting to interview a case. Additionally, an EHO from the relevant municipality conducts an interview with each of those cases. The Communicable Diseases Prevention Unit provides central analysis of all completed Case Investigation Questionnaires (a standardised survey instrument).

Staff then compare information obtained with other case investigations to check for any common sources of infection. In conjunction with the Director of Public Health's team, local government EHOs investigate implicated food premises and food products. Laboratory testing of samples supports these activities by seeking to confirm links between cases and to eliminate from the investigation those cases that may be salmonella but not related to the reported food outbreak.

Afterwards, to assist with public health management at the national level, the Director's staff compile de-identified summary information from case interviews to further help monitor changes in trends and patterns of illness.

Worldwide there are around 2 000 different types of salmonella that are known to cause human disease. There is no Tasmanian laboratory that can confirm every possible type. That level of testing requires interstate involvement and takes time. However, local laboratories use a method of testing that groups salmonella samples. That initial grouping is linked with data gained from interviews and ultimately seeks to find common sources of exposure and infection.

### 4.2.1 March 2007 outbreak

We interviewed staff and examined reports that DHHS published regarding investigation of a food outbreak in March 2007 and summarised it to outline the course of a typical incident.

#### **DAY 1 MONDAY 19 MARCH 2007**

The Communicable Diseases Prevention Unit DHHS received four notifications of salmonella in Group “B” from individuals from the North West. Following contact with referring doctors, officers tried to contact the four cases on the same day but were unsuccessful at that stage.

#### **DAY 2 TUESDAY 20 MARCH 2007**

Officers contacted three of the cases to conduct interviews. Staff questioned the cases about foods consumed as far back as seven days prior to the onset of symptoms to allow for long incubation periods. Note that the incubation period for salmonellosis is in the range of six hours to three days.

On the same day, two more salmonella notifications came in, one in northern Tasmania and another in the North West (after the investigation one was found to be unrelated to the outbreak and one had eaten runny eggs from the same egg supplier).

#### **DAY 4 THURSDAY 22 MARCH 2007**

Frustrated in their attempts to do so earlier, the Director’s staff were finally able to interview the two outstanding cases. During the incubation period, one had a salad roll from a retail outlet. However, at this point of the investigation, and with a very small sample that made establishing connections difficult, the most likely cause appeared to be meat products.

#### **DAY 5 FRIDAY 23 MARCH 2007**

Two further salmonella notifications cases advised. One case could not be contacted until the following day. At this point of the investigation, common factors shown in food histories were smallgoods, meat and poultry.

DHHS contacted all general practitioner surgeries in the north and North West, as well as the hospitals (i.e. Launceston General and both campuses of the North Western Regional), to increase awareness of the current issue and encourage testing of symptomatic patients. Advice was also given to local councils.

#### **DAY 6 SATURDAY 24 MARCH 2007**

DHHS contacted the outstanding case from the previous day but, from interview, there was no linkage to the cases in the North West.

Staff continued to analyse data and perform laboratory testing, searching for common links.

**DAYS 7–8      SUNDAY 25–MONDAY 26 MARCH 2007**

The Communicable Diseases Prevention Unit received a further six notifications about North West residents regarding salmonella. All were interviewed on 26 March.

Local government EHOs and food safety officers from the office of the Director of Public Health investigated businesses appearing in the food histories of more than one case.

A range of businesses were initially investigated. Following a series of case interviews, it became apparent that a bakery was the only food business reported by all 18 cases. There was a review of food-handling practices at that business and a large number of samples taken for microbiological investigation from food products, raw ingredients, food preparation surfaces and equipment.

Based on the evidence available, the Director of Public Health decided to request the bakery to close voluntarily in order to facilitate further investigations and to reduce the potential for further cases in the community. Following discussions, the proprietor agreed to close the business voluntarily while investigations continued.

**DAY 9      TUESDAY 27 MARCH 2007**

On a precautionary basis, DHHS issued media releases advising the community and food businesses not to consume or to provide raw or undercooked egg products. Further advice covered selecting clean and crack-free eggs, storing eggs correctly and ensuring egg containers were clean and appropriately labelled.

At no stage did the department disclose the identity of the premises to the media. However, a local newspaper ran a front-page story that included the name of the business and details of an interview with the manager. Some other media reports then included the name of the premises.

**DAYS 11–15      29 MARCH–2 APRIL 2007**

A further ten North West cases were notified. From interview, it was determined that nine out of ten had eaten products from the bakery during their incubation periods. The remaining case reported eating eggs purchased from a retail premise supplied by the same egg supplier as that which supplied the bakery.

***Point source investigations***

Investigators found dirty, cracked eggs at the bakery and could trace those eggs to a particular supplier. That supplier mixed eggs from the producer referred to in Section 1.2, with those from a non-approved

source. Mixing eggs from different sources exacerbated trace back analysis and resulted in prosecution of the non-approved egg supplier (see Recommendation 1).

In February 2008, Mr. Nick McKim MP, Member for Franklin, privately commissioned a report (*Bad Eggs: Implementing Food Safety Standards from the Farm to the Consumer*) that later became publicly available. That report advised that cracked and dirty eggs are clearly hazardous and went on to implicate a large commercial producer. The Director of Public Health advised that epidemiological and circumstantial evidence linked the series of salmonella outbreaks to a single egg producer. However, definitive microbiological proof involves scientific techniques currently regarded as being of a research nature not yet validated.

In Section 1.2 of this report, we discussed the introduction of food safety audits by DPIW (under the auspices of the *Egg Industry Act 2002*) and findings relating to egg hygiene in respect of that egg producer since then.

### *Food handling investigations*

After investigation by the council EHO, some possible food handling breaches emerged including cross contamination between food preparation and counters. In the DHHS report, the following observation was stated:

Staff also seemed to have a poor understanding of the rationales behind food handling methods and while they were well intentioned, they did not understand the possible sources of contamination and the impact that this may have on themselves and customers

The EHO brought these matters to the proprietor's attention at the time of the investigation.

### *Discussion*

On detailed review of this salmonella outbreak, we noted:

- Initial testing only allowed identification of the salmonella grouping. This meant that possible connections between cases or clues as to the type of food involved could not be confirmed without further testing. Detailed laboratory testing may take a number of weeks.
- Pinpointing the source of the outbreak required enough reported cases for links to be established between food histories.
- At any time there are people reporting with symptoms who are unrelated to an incident that might be



occurring. Eliminating these cases complicates the investigation.

- Mixing of eggs from different producers, combined with inconclusive scientific evidence, made it impossible to be completely sure as to where the contamination had come from.

We were satisfied that the investigation of this incident was conducted in a timely and effective manner.

### 4.3 *Conclusion*

When outbreaks of food borne illness have occurred, the Director of Public Health has responded quickly and effectively, in line with the department's guidelines, to investigate incidents and eliminate sources of contamination.



## 5 Recent reports

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## 5 Recent reports

<b>Year</b>	<b>Special Report No.</b>	<b>Title</b>
2005	53	Follow-up audits
2005	54	Compliance audits
2005	55	Gun control in Tasmania
2005	56	TT-Line: Governance review
2005	57	Public housing: Meeting the need?
2005	58	FBT Payment of accounts Asset management: Bridges
2006	59	Delegations in government agencies Local government delegations Overseas Travel
2006	60	Building security Contracts appointing Global Value Management
2006	61	Elective surgery in public hospitals
2006	62	Training and development
2006	63	Environmental management and pollution control act by local government
2006	64	Implementation of aspects of the <i>Building Act 2000</i>
2007	65	Management of an award breach Selected allowances and nurses' overtime
2007	66	Follow-up audits
2007	67	Corporate credit cards
2007	68	Risdon Prison: Business case
2007	69	Public building security
2007	70	Procurement in government departments Payment of accounts by government departments
2007	71	Property in police possession Control of assets: Portable and attractive items
2008	72	Public sector performance information
2008	73	Timeliness in the Magistrates Court
2008	74	Follow up of performance audits April – October 2005
2008	75	Executive termination payments

## 6 Current projects

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## 6 Current projects

Performance and compliance audits that the Auditor-General is currently conducting:

<b>Management of threatened species</b>	Examines the measures in place to protect native species and biodiversity in Tasmania.
<b>Hydro hedges</b>	Examines processes for approving currency and interest hedges.
<b>Profitability, and economic benefits to Tasmania, of Forestry Tasmania</b>	Evaluates Forestry Tasmania's long-term financial and economic performance.
<b>Contract management</b>	Examines the effectiveness of contract management processes of a number of selected contracts.
<b>Follow-up of previous performance audits</b>	Examines the degree of implementation of recommendations in selected performance audits tabled in 2006.