



FOOD PREMISES INSPECTION AND DISCLOSURE SYSTEM

EVALUATION REPORT

December 17, 2002

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- ◆ Owner/ Operator Sub-committee

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- ◆ Toronto Food Premises Owners and Operators Interviewed in the Owner / Operator Survey

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EXECUTIVE SUMMARY

The Program Under Review

The Food Premises Inspection and Disclosure System referred to as the Disclosure Program, is aimed at reducing the incidence of foodborne illness among consumers in Toronto. The purpose of the inspection component is to establish a comprehensive method of conducting compliance inspections of food premises that is effective, efficient, and consistent throughout the City of Toronto. The disclosure aspects of the program are intended to provide the general public with easy access to the inspection results of all applicable food premises so that individuals are allowed to make informed decisions about which food premises they choose to visit. This is accomplished by way of onsite postings of Inspection Notices and provision of Inspection Reports at each particular food premises as required by Municipal By -Law 574-2000. In addition, inspection results can also be accessed on the DineSafe web site as well as via the Food Hotline (338-FOOD).

The Disclosure Program was implemented on January 8, 2001. The program uses standardized policies and procedures for inspection and enforcement activities and these are applied consistently by Public Health Inspectors and monitored by quality assurance mechanisms. The Toronto Healthy Environments Information System (THEIS) ensures that all necessary data components and reporting requirements are captured to assist management in program planning, time and activity tracking, external reporting and performance management. In order to assess the efficiency and effectiveness of the Disclosure Program, a comprehensive, multi-phase evaluation project was conducted and the results are presented in this report.

Comments

The Board of Health requested that an evaluation study be conducted when the Disclosure Program had been in place one year. The *Ontario Ministry of Health's Mandatory Program and Services Guidelines* further support the evaluation of mandated programs. As well, the evaluation is intended to identify problem areas and to determine how the program can be improved for future program planning.

Toronto Public Health (TPH) established an Advisory Committee which included food safety experts from external organizations to oversee the evaluation of the Disclosure Program. One of the external members served as chair of the committee. The evaluation involved four main components: i) Public Health Inspector (PHI) and manager consultations, ii) program data analysis, iii) a public opinion survey, and iv) an owner / operator survey. TPH also established sub-committees to address each of the four components and to report directly back to the Advisory Committee. Sub-committees extracted conclusions from each component. This report highlights the interconnections between these four studies since the conclusions and recommendations from the sub-committees need to be considered in their totality rather than in isolation. The Advisory Committee made both policy and operational recommendations based on findings from the analysis of the reports.

Five themes emerged from the report:

1. Value of the Program
2. General Support for the Program
3. Importance of the Certified Food Handler Training Program
4. Understanding of the Conditional Pass (yellow sign)
5. Consistency of the Inspection Process

Value of the Program

The public opinion survey indicated that the public feels safer in making food choices in Toronto since the inception of the program compared to eating in communities that do not have a similar program. This theme was echoed by owner /operators in their perception of how the public feels about safety. Increased compliance rates and a decrease in infractions, especially those that are likely to cause illness, indicate a trend to enhanced food safety. A decrease in the need to re-inspect premises was attributed to the increased cooperation of operators and their perception of the potential negative impact of the yellow and red signs.

Support for the Program

The strongest support came from the general public in which virtually all respondents (98%) indicated that it was important to maintain the current program. This is reiterated in how inspectors and owner/operators perceived public reaction to the program. A strong majority of operators (71%) also indicated that it was important to maintain the current program. The data analysis also demonstrates efficiencies and effectiveness in compliance and completion trends. A majority of inspectors agreed that the public response is a very positive feature of the program and that the role of the PHI is more appreciated due to this heightened awareness.

Importance of the Certified Food Handler Training Program

A review of existing data indicates that a food premises that has at least one certified food handler is 1.5 times more likely to receive the green pass notice/sign on initial inspection than premises without a certified food handler. This is statistically significant. Investment in food handler training programs will have long term positive implications that translate into cost savings due to efficiencies resulting from fewer re-inspections likely being required. Savings will also be realized from a decrease in infractions associated with food borne illness which is estimated to cost the Canadian economy 1 - 2 billion dollars per year in health care, industrial and social costs (Todd, 1989). Inspectors reported that there seems to be a correlation between understanding the requirements and increased compliance from operators that had attended Food Handler Certification programs offered by TPH. Inspector observations are compatible with the findings. They stress that Food Handler Certification strengthens the Disclosure program. Given the evidence of the efficacy of food handler training and certification, a mandatory food handler training and certification program should be implemented in Toronto as soon as possible.

Understanding the Conditional Pass (yellow sign)

The majority of operators perceive that the public does not understand the meaning of the conditional pass (yellow sign) and that it is interpreted as the same as the closed notice (red sign) i.e. unsafe. The public opinion survey indicated that most of the public (63%) understood the meaning of the yellow sign.

Operators expressed concerns about the economic impact of receiving a conditional pass (yellow sign). However, the vast majority (94%) of operators indicated that their business was either not affected or had experienced a positive effect from the Disclosure Program, while 26% indicated an actual increase in business. The results indicate that the program is not detrimental from a business standpoint but actually has a positive impact for a substantial number of operators. The vast majority of the respondents to the public opinion survey (95%) reported making patronage decisions based on sign colour. These interpretations and perceptions appear to have created an economic incentive for operators to comply with food safety and sanitary standards. There is however a need for TPH to increase awareness and reinforce the meaning of the yellow sign both for operators and the public to avoid misunderstanding and undue concern.

Consistency of the Inspection Process

The inspection process is standardized, timely and fair. The program data analysis indicated that Inspector error rates decreased over time and inspection and enforcement activities are consistent and adhere to the established policies and procedures. The majority of operators agreed with this analysis and maintained that Inspectors explained infractions, performed timely re-inspections, and that inspections were fair and impartial. However, recipients of yellow signs were less likely to agree that the process was fair and impartial.

The internal consultation provided an excellent opportunity for inspectors and managers to offer comments on operational aspects in a systematic and structured manner. This provides a crucial source of data that will be used in program planning and development to strengthen day to day operations. The Toronto Healthy Environments Information System (THEIS) and the Quality Assurance Program (QA) are effective administrative tools that support and enhance consistency in the Food Safety Program.

Conclusions

It is clear that the program is valued by most food premises owner/operators, the public and Public Health Inspectors. All trends are positive for increased compliance and a continuous improvement in food safety in Toronto. However, public and operator awareness of the intent and meaning of the conditional pass notice needs to be enhanced by TPH. The public as the end user of the program receives the benefit of feeling safer and better informed by the Disclosure Program. All indicators point to a successful implementation of the program and there is strong support for its continuance. The investment in developing and implementing the Food Premises Inspection and Disclosure System will continue to yield excellent results.

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INTRODUCTION

Background

The Food Premises Inspection and Disclosure System referred to as the Disclosure Program was developed and implemented with the intention of enhancing the effectiveness and efficiency of the food safety program in Toronto. The public's right to know and transparency are the underlying themes of the program.

The Disclosure Program is the first of its kind in Canada. The program was initially developed in response to the public's growing concern and frustration at not being able to access information regarding retail food premises inspection results. In keeping with a commitment to wide stakeholder consultation during the planning of the program, perspectives for this evaluation were sought from a broad base of clients, including the public in general, operators/owners of food establishments and public health staff.

A review of the literature in 2000 revealed that many jurisdictions in the USA were already providing retail inspection information via the internet, telephone or onsite postings. The Disclosure Program was designed after stakeholder consultations, extensive literature reviews, personal interviews, and conversations with an international selection of health professionals.

Several other searches conducted in 1996, 1997, 2000 and 2002 revealed few published scientific evaluation studies of food safety inspection programs. This is not by accident. Inspection services are complex and although the scientific basis for food borne illness is well developed, the reporting and collection of data across Canada is sporadic and not well co-ordinated. Access to good data across regions makes it difficult to determine causation of food borne illness, particularly in sporadic cases. As well, food borne illness may originate from many sources such as travel or the home setting, and not merely food premises. This makes the reduction of food borne illnesses an unsuitable indicator of effectiveness in a food safety inspection program, especially at the start of its implementation.

This is a multi dimensional and comprehensive evaluation. Data documenting activities during 2001 has been extracted from the Toronto Healthy Environments Information System (THEIS) for analysis in this study, and this will contribute to the building of baseline data for future comparisons.

Purpose of the Disclosure Program

The Disclosure Program was established as part of a comprehensive approach to conducting compliance inspections of food premises that is effective, efficient, and consistent throughout the City of Toronto with the ultimate aim of reducing foodborne illness among consumers in Toronto. The disclosure aspects of the program are intended to provide the general public with easy access to inspection results of food premises enabling people to make informed decisions about which food premises they choose to visit. This is accomplished by way of onsite postings of Inspection Notices and provision of Inspection Reports at each particular food premises as required by *Municipal By -Law 574-2000*. In addition, inspection results can also be accessed on the DineSafe web site as well as via the Food Hotline (338-FOOD).

Infraction Categories

“Minor” infractions are items that present a minimal health risk to the public and are expected to be corrected immediately and followed up on at the next inspection. “Significant” infractions present a potential health hazard to the public if left uncorrected and therefore must be corrected and re-inspected within 24 to 48 hours. “Crucial” infractions present an immediate health hazard to the public and require immediate corrective action or an order to close the premises. (Examples of these three categories of infractions can be found in Appendix A). At the conclusion of the inspection, the operators are provided with a copy of the Food Safety Inspection Report (FSIR) in which the Public Health Inspector's findings are cited and explained.

Inspection Notices

Each food premises is required to post one of three (3) notices as follows: “pass” (green sign), “conditional pass” (yellow sign) or “closed” (red sign), based on the infraction category cited. These inspection notices also indicate if enforcement action has been taken based on the last inspection. There is also an indication of the results of the previous inspection and date, thereby giving the public historical information regarding past compliance for the food premises. The Toronto Licensing By-law No. 574-2000 requires the notices to be posted in a conspicuous place clearly visible to the members of the public, at or near the entrance of the food premises. (See Appendix B for samples of these notices)

Toronto Healthy Environments Information System (THEIS)

Funding was approved in the Transition Capital Budget to develop a new Toronto Healthy Environments Information System (THEIS). Documentation, reporting, and disclosure of food premises inspection activities are carried out in THEIS. The system is able to support the DineSafe web site that runs on the City's internet server and is accessible to the public 24 hours a day. Compared to other means of disseminating information to the general public (such as TV, radio or print), the DineSafe web site is more economical and the information is updated every twelve to twenty-four hours. The system is linked with the DineSafe web site so that inspection and disclosure results are uploaded directly to the internet without duplicate data entry. It allows for flexibility in programming and the ability to generate inspection reminders and customized listings and reports.

Food Handler Certification Program

Food safety training is an integral part of any strategy to reduce the incidence of food borne illness. Food Handler Certification Programs have been integrated and standardized across the City. It provides food handlers with the essential food safety knowledge to safely prepare food. Upon successful completion of an examination, a certificate is issued to the food handler. Toronto Public Health is committed to working with other private and public sector partners to ensure the broadest possible reach of foodhandler education in the City. Partnerships to offer the course material have been developed with Pizza Pizza Limited, McDonalds Restaurants of Canada Limited, Tim Horton's operated by the TDL Group Ltd., 7 Eleven (Canada) Inc., Starbucks Corporation, Toronto District School Board – Central Technical School, Toronto Catholic District School Board – Notre Dame Catholic Secondary School, The Great Atlantic & Pacific Tea Company, Loblaws Supermarkets Ltd., Ontario Chinese Restaurant and Food Services Association, and Koreatown Business Improvement Association.

PROGRAM EVALUATION

Purpose of the Evaluation Study

The Board of Health and City Council approved the Food Premises Inspection and Disclosure System in August 2000. At that time, the Board of Health requested that an evaluation study be conducted starting when the Disclosure Program had been in place one year. The *Ontario Ministry of Health's Mandatory Program and Services Guidelines* further support the evaluation of mandated programs. The evaluation is intended to identify problem areas and to determine how the program can be improved for future program planning and implementation.

Evaluation Strategy / Methodology

Effective program evaluation involves a systematic investigation of the merit, worth or significance of an established program or project. Evaluation can be used to account for and improve program activities by ensuring that procedures are effective, efficient, ethical, feasible and reliable. Program evaluations determine whether a program or service has made a difference and whether observed results are linked to specific program objectives.

To oversee the evaluation, Toronto Public Health established an Advisory Committee which included food safety experts from external academic institutions (Ryerson University, University of Guelph). One of the external members served as chair of the Committee.

The evaluation included four main components as sources of information on program operations and outcomes; internal PHI and manager consultations, program data analysis, a public opinion survey, and an owner / operator survey. Sub-committees were established to address each of the four components and report directly back to the Advisory Committee. The four sub-committees developed conclusions and recommendations that need to be considered in their totality rather than in isolation. This final comprehensive report was prepared based on the four report results rather than on a reanalysis of the primary data. The processes and results of the Disclosure Program evaluation are presented and discussed in this report.

THE FOUR EVALUATION COMPONENTS

The four evaluation components are summarized in the following order;

- 1) Public Opinion Survey Component
- 2) Internal PHI and Manager Consultation Component
- 3) Existing Program Data Analysis Component
- 4) Owner/Operator Survey Component

The intent of this integrated report is to compare and contrast the four components and to extract themes and issues for final analysis.

Public Opinion Survey Component

Purpose

The main purpose of the Public Opinion Component was to (a) Consumer Awareness, (b) Knowledge (understanding), (c) Impact (utilization of disclosure components and resulting practices), and (d) Attitude (satisfaction and support).

Further, within these dimensions the following specific disclosure aspects were examined: (a) Inspection Notices (Pass, Conditional Pass, Closed), (b) Inspection Reports (Food Safety Inspection Report), (c) DineSafe Web Site, and (d) Food Safety Hotline (338-FOOD).

Method

In June 2002, Oraclepoll Research Limited was contracted to conduct a public opinion survey for Toronto Public Health in order to assess the opinions of Toronto residents on issues related to the Disclosure Program. The stratified random study sample consisted of 1001 respondents who were 18 years of age or older and who were asked to complete a standardized questionnaire. The survey screened for the person at the contact residence who was 18 years of age or older and who had the most recent birthday. In addition, the study sample was drawn using a modified method of "Random Digit Dialing" (Waksberg 1978). In terms of population representation, the study sample was in accordance with the City of Toronto Statistics Canada norms with respect to gender and age groups. The overall confidence level for this survey was +/- 3%, 19/20 times.

Results / Discussion of the Public Opinion Survey

(a) Public Awareness

The public opinion survey assessed the level of consumer awareness regarding the four methods of disclosing the food safety inspection results to the general public. The survey results show that, of the four methods used to disclose inspection results, the public is most aware of the inspection notices (75.4%) and, to a lesser degree, the inspection reports (21%). When those who were aware of the inspection notices were asked to list the colours, the majority of respondents (82.1%) were able to correctly identify green as one of the colours, followed by yellow (48.5%) and red (46.7%). The public was less aware of the DineSafe web site (10.5%) and the food safety hotline (9.9%).

(b) Public Knowledge

The public opinion survey assessed the extent to which consumers understand the meaning of the individual Food Safety Inspection Notices. The survey results show that, of the three coloured notices, the public is most knowledgeable about the green/pass sign (82.5%), followed by the red/closed sign (78.3%) and then the yellow/conditional pass sign (63.4%). Overall, a small proportion of the public either did not know, or had a different understanding of the actual meaning of the green (14.2%), the red (21.4%), and the yellow (35.5%) signs.

(c) Impact on the Public

The public opinion survey assessed the extent to which the Food Premises and Disclosure Program has an impact on the behaviour of consumers. More specifically, this refers to the utilization of the four methods of disclosing inspection results and the likelihood of dining out or making purchases based on the information provided. The survey results show that, of the four methods used to disclose the inspection results, the public is most likely to make use of the inspection notices (85.9%) as compared to the DineSafe web site (20.8%), the inspection reports (7.0%), or the food safety hotline (5.9%). Of those utilizing the inspection notices, the vast majority (95.5%) would tend to patronize food premises that are posted with a green/pass notice more so than those (21.8%) posted with a yellow/conditional pass. They are least likely to visit those food premises that have been reopened after receiving a red/closed notice (16.8%).

(d) Public Attitude

The public opinion survey assessed the general public's overall level of satisfaction with the Disclosure Program. This involved its accessibility, timeliness, and the usefulness of the food safety inspection results. It also asked the respondent their perception of safety and frequency of purchasing food through food premises in Toronto. In addition, the survey also examined the public's confidence level and overall support for the program.

In terms of the level of satisfaction with the releasing of the food safety inspection results, the vast majority (88.9%) of the public said that the information was useful to them personally and 58.2% indicated that it was accessible in a timely manner.

While close to three-quarters (73.7%) of respondents indicated that their frequency of eating at or purchasing food from restaurants or take-outs in Toronto had not changed since the implementation of the disclosure program, 16.7% reported an increase and 6.2% a decrease in frequency.

In terms of public perception on the safety of making food purchases in Toronto, the majority (84.1%) of people have experienced an increased sense of safety since the implementation of the new program. The majority (77.3%) of respondents also stated that they feel safer making food purchases in Toronto than in communities that do not have a disclosure program. Overall, the *Disclosure Program* is supported by the vast majority (97.4%) of the public who feel that it is important for Toronto Public Health to continue providing the program.

While the current Disclosure Program is strongly supported, 46.6% of the respondents also offered specific suggestions as to how Toronto Public Health could further improve the releasing of food safety inspection results. The largest proportion of verbatim responses from the survey participants (27%) focused on the implementation of strategies to increase the public's awareness and education regarding the disclosure program. The second largest proportion of responses (24%) suggested increasing the frequency and scope of food premises inspections.

Conclusion of the Public Opinion Survey

The Public Opinion Poll survey supports several conclusions including:

- 1) That TPH continue to provide the services under the Disclosure Program.
- 2) A campaign to increase the general public's awareness of the four methods of accessing the inspection results.
- 3) A campaign to increase the general public understanding of the three inspection notices.
- 4) The DineSafe web site, the inspection reports, and the food safety hotline be assessed and modified to increase public utilization.

2. Internal PHI and Manager Consultation Component

Purpose

The purpose of the consultation was to collect information from two target groups to inform program improvement. The objectives were to:

- identify experiences/perceptions both positive and negative in implementing the various components of the DineSafe program;
- identify experiences/perceptions both positive and negative regarding relationships/interactions with the various stakeholders during the implementation of the DineSafe Program;
- identify areas/suggestions for program improvement

An internal workgroup comprised of Managers, Public Health Inspectors (PHIs) and Program Evaluators' planned and oversaw the process.

Method

Four focus groups were held during April and May 2002, one for managers and three for inspectors. In all, thirty-one participants attended. Questions inquired about experiences implementing various program components and relationships with stakeholders. Participants were further asked to identify what is "working well," what "isn't working well" and to make suggestions for improvement. The same format and questions were used for all groups and the sessions lasted approximately 2 hours.

All participants were briefed as to their rights as research participants and then asked to sign consent forms detailing the confidentiality steps that would be taken. Experienced facilitators moderated the sessions and either audio recorders or note takers recorded the discussions.

Results of the Focus Groups

Views from Managers and PHIs

Participants in the focus groups agreed that public reaction was very positive towards the program particularly with respect to the signs posted at the premises. They directly attributed increased awareness of the Public Health Inspectors role to the Disclosure Program.

Inspectors reported an increase in compliance and a decrease in the need to re-inspect premises in the new program. This increased compliance/co-operation was attributed to improved understanding of food safety requirements and concerns among operators about the negative consequences of receiving a conditional pass (yellow notice). Participants also observed greater understanding and compliance when operators had attended Food Handler Certification Programs offered by Toronto Public Health.

Partnerships have been developed with other organizations to provide Food Handler Certification training. This permits greater accessibility and increases the languages used during instruction.

Managers and inspectors recognized that THEIS is a useful and necessary administrative tool while acknowledging that it is “a work in progress”. Enhancements such as pre-populated forms (inspection forms that contain pre-printed information about a food establishment) and liquor license approval letters generated by the system were identified as useful. Staff expressed a desire to be more involved and recommended that a THEIS User Committee be established to ensure that operational issues would be considered in the evolution of the information system.

The need for a review of resources within the Food Safety Program to better reflect actual workloads of both Inspectors and Managers across Toronto was identified as was the requirement for additional training and development in subjects other than food safety. There was consensus that standardized policies and procedures improved and ensured consistency while there was a caution about the need to preserve the professional judgement of inspectors in the conduct of their work

Quality assurance staff were seen by participants as helpful in sorting out specific problems and administrative details associated with recording information. Since Quality Assurance is a relatively new service, a number of suggestions were made to enhance the support that it can provide to inspectors and to improve the understanding of how that program operates.

Manager and PHI suggestions for Improvement

Inspectors and Managers made various suggestions for improvement including the following:

- A THEIS user group should be established
- Food Safety Policies and Procedures must be reviewed on an ongoing basis
- There should be a formal mechanism for regular performance reviews and workload distribution
- With standardized policies and policies in place care must be taken to ensure that inspectors are able to use professional judgement within well defined guidelines

Conclusions from the Internal PHI and Manager Consultation

Managers and PHIs saw many positive changes during the implementation of the program. Staff appreciated the opportunity to participate in a process that permitted input into program improvement. For some, this process in offering resolutions to the complex issues that arose during the discussions was new, but nevertheless, their positive efforts suggest that this approach was useful. Keeping the communications channels open and responsive will ensure continual opportunities to refine and improve service delivery.

3. Existing Program Data Analysis Component

Purpose

The Data Analysis component of the comprehensive evaluation was based on data collected from THEIS during 2001. The purpose of the data analysis was to determine the following:

- If the mandatory requirements are being met (i.e. completion rates)
- Level of compliance with the Food Premises Regulation (i.e. compliance rates)
- Impact of Food Handler Certification
- Assess the quality assurance activities
- Identify areas for improvements.

Method

Food premises inspection data for 2001 were extracted from the THEIS database and analysed using descriptive and/or chi square statistical techniques to provide the following:

- (a) Completion Rates
- (b) Compliance Rates
- (c) Impact of Food Handler Training
- (d) Quality Assurance Activities

Results and Discussion of the Existing Program Data Analysis

(a) Completion Rates

In 2001, a total of 22,202 of the required 33,706 inspections in 2001 were completed for an overall completion rate of 67.0%. The rate for High Risk food premises was 72.0%, Medium Risk 76.0% and Low Risk 35.0% (Table 1). Because it was projected that it was unlikely that mandatory requirements could be fulfilled a decision was made not to conduct routine compliance inspections of low risk premises unless there was a complaint about the premises. In addition to various operational factors, the completion rate computation was impacted by deficiencies in the initial data collection and the progressive development of THEIS. The analysis revealed completion rates increased in the final trimester for high and final half of the year for medium risk premises.

Table 1 - Inspections Completion Rates, by Risk Category, January 8 – December 31, 2001

	HIGH RISK	MEDIUM RISK	LOW RISK	TOTAL
NUMBER OF PREMISES	3,849	7,668	6,493	18,010
INSPECTIONS CONDUCTED	8,312	11,621	2,269	22,202
INSPECTIONS REQUIRED^Ψ	11,547	15,336	6,493	33,376
COMPLETION RATE	72.0%	76.0%	35.0%	67.0%

(b) Compliance Rate

The total compliance rate on the initial inspection resulting in the issuance of a green pass notice was 78.2% while the rate after the 1st re-inspection was 91.0%. Compliance rates increased with each successive mandated inspection to a high of 80.8% and 81.0% for high and medium risk premises respectively (see Table 2). The most frequently noted infraction was Maintenance / Sanitation of Non-Food Contact Surfaces / Equipment which constituted 16,445 (42.4 %) of the 38,795 total infractions recorded (see Figure 1). There was also a reduction in infractions per inspection in each quarter from a high of 2.0 to a low of 1.4 (Table 3). The reductions in the number of infractions and notably in those known to contribute to food borne illness should have a positive outcome in reducing such illness.

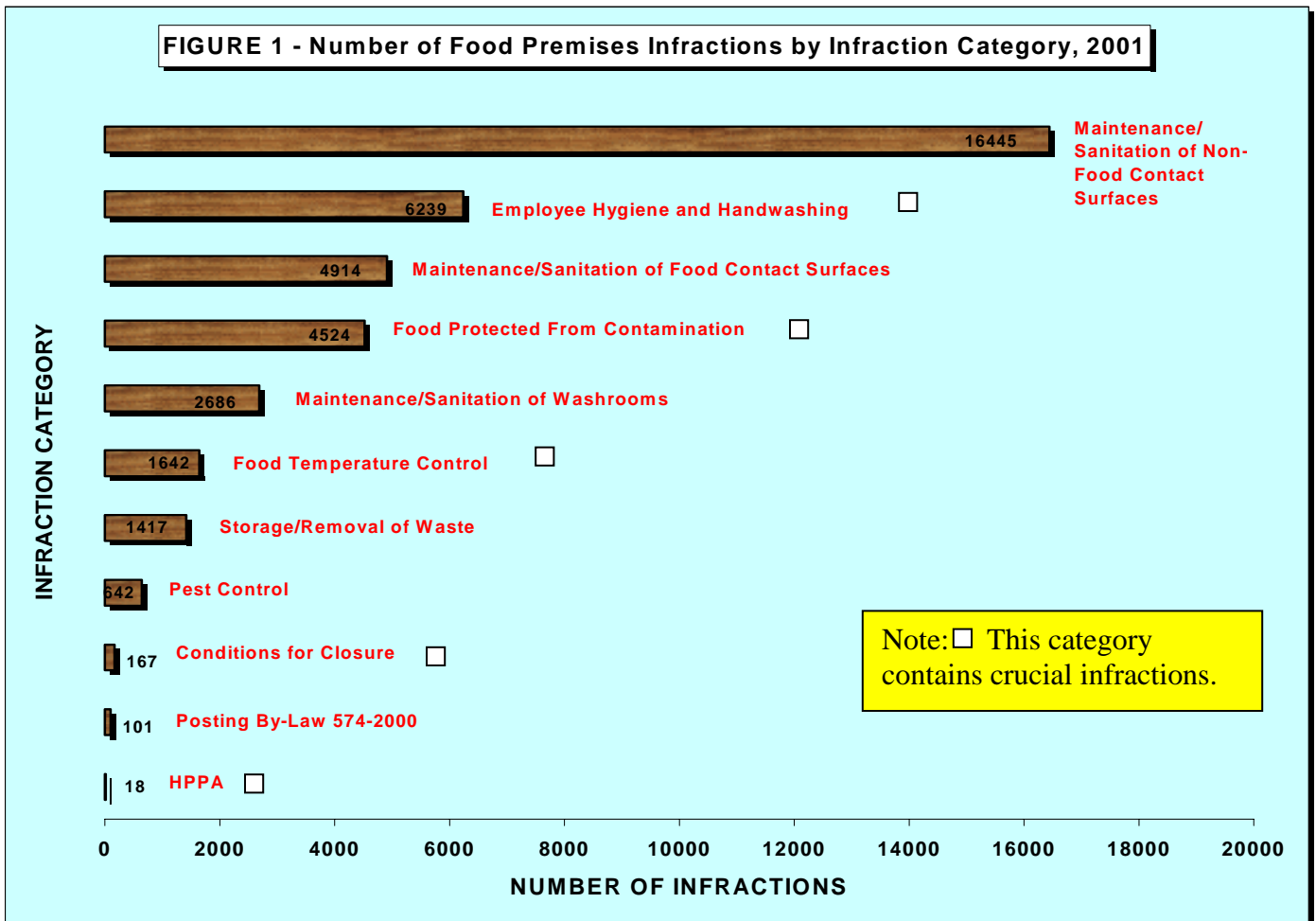
^Ψ Based on the number of High, Medium and Low Risk premises determined by the results of the Risk Assessments conducted on the existing Food Safety premises.

Table 2 - Inspection Compliance Rates by Risk Category & Inspection Period Jan 8 –Dec 31, '01

HIGH RISK				
	1st INSPECTION (JAN – APR)	2nd INSPECTION (MAY – AUG)	3rd INSPECTION (SEPT – DEC)	TOTAL (JAN – DEC)
PASS	1,869 (68.2%)	1,756 (73.0%)	2,560 (80.8%)	6,185 (74.4%)
CONDITIONAL PASS	849 (31.0%)	636 (26.4%)	600 (19.0%)	2,085 (25.1%)
CLOSED	22 (0.8%)	14 (0.6%)	6 (0.2%)	42 (0.5%)
TOTAL	2,740 (100%)	2,406 (100%)	3,166 (100%)	8,312 (100%)
COMPLIANCE RATE (%)	68.2	73.0	80.8	74.4
MEDIUM RISK				
	1st INSPECTION (JAN – JUNE)	2nd INSPECTION (JULY – DEC)	TOTAL (JAN – DEC)	
PASS	4,431 (78.0%)	4,813 (81.0%)	9,244 (79.5%)	
CONDITIONAL PASS	1,225 (21.6%)	1,119 (18.8%)	2,344 (20.2%)	
CLOSED	22 (0.4%)	11 (0.2%)	33 (0.3%)	
TOTAL	5,678 (100%)	5,943 (100%)	11,621 (100%)	
COMPLIANCE RATE (%)	78.0	81.0	79.5	
LOW RISK (JAN – DEC)				
PASS	1,933 (85.2%)			
CONDITIONAL PASS	332 (14.6%)			
CLOSED	4 (0.2%)			
TOTAL	2,269 (100%)			
COMPLIANCE RATE (%)	85.2			

Table 3 - Infractions per Quarter by Infraction Category, Jan. – Dec., '01

QUARTER	MINOR	SIGNIFICANT	CRUCIAL	TOTAL INFRACTIONS	NUMBER OF INSPECTIONS	TOTAL INFRACTION/INSPECTION RATIO
1 st	3,824	5,026	872	9,722	4,976	2.0
2 nd	4,633	4,707	960	10,300	5,418	1.9
3 rd	3,710	4,402	957	9,069	5,090	1.8
4 th	4,182	4,653	803	9,638	6,718	1.4
TOTAL	16,349 (42.2%)	18,788 (48.5%)	3,592 (9.3%)	38,729 (100%)	22,202 (100%)	1.7



(c) Certified Food Handler Training

Food premises with at least one certified food handler are 1.5 times more likely to receive pass notices on the initial inspection than premises without a certified food handler (see Table 4). This was statistically significant ($p < .0003$).

Table 4 - Relationship between Food Handler Certification and getting a Pass Inspection Notice, September 2001 – May 14, 2002

CERTIFIED FOOD HANDLER	PASS INSPECTION NOTICE				TOTAL	
	YES	%	NO	%		
YES	680	81.1	158	18.9	838	(32.0%)
NO	1,328	74.6	451	25.4	1,779	(68.0%)
TOTAL	2,008	76.7	609	23.3	2,617	(100.0%)

$$[\chi^2 (1 \text{ df}, n = 2617) = 13.1, p < .0003; \alpha = .05; OR = 1.5, 95\% \text{ C.I.: } 1.2 - 1.8]$$

(d) Quality Assurance Measures

Record review results indicated that the error rates among inspectors in completing reports decreased substantially over time. Operational/program enhancements and quality assurance activities were introduced during this period, consisting of reviewing 10,280 Inspection reports, 62 joint inspections and the reporting of errors. The aforementioned conductance of joint field audits showed that inspections and enforcement duties were being carried out in a consistent manner across the city and in adherence with established policy and procedures (Table 5).

Table 5 - Selected Quality Assurance Field Assessment Results, 2001

FIELD ASSESSMENT CRITERIA	YES (%)	NO (%)	COMMENT
1) Did the inspector have all the required resources to complete the inspection?	57 (92%)	5 (8.0%)	Light metre required; and Iodine test paper needed.
2) Were established policies and procedures followed?	58 (94%)	4 (6%)	Risk Assessment not done at 2 premises.
3) Was a thorough and comprehensive inspection done?	60 (97%)	2 (3%)	None
4) Were the findings of the Field Assessor consistent with those of the PHI?	61 (98%)	1 (2%)	PHI did not make note of some structural details.
5) Did the PHI discuss the findings of the inspection with the owner/operator?	62 (100%)	-	None
6) Did the PHI discuss possible solutions with the owner/operator?	62 (100%)	-	None
7) Did the PHI discuss timelines for action to remedy identified infractions?	62 (100%)	-	None
8) Was the premise posted with the appropriate <i>signage as required?</i>	62 (100%)	-	None
9) Was the posting and any enforcement action taken supported by the findings from the inspection?	62 (100%)	-	None
10) Were the written report(s) clear and related to the findings?	62 (100%)	-	None
11) Were all sections of the reports completed as required?	59 (95%)	3 (5%)	PHI did not complete By-law section municipal license.
NUMBER OF JOINT FIELD INSPECTIONS	62		

Program Data Analysis Conclusion

The completion rates indicate progressive efficiencies over time, which may be due to a number of factors such as staff effort and comfort with the program, user-friendly enhancements and support provided by Quality Assurance. Although a 100% completion rate for High and Medium risk premises was not met, the completion rate trends and the enhancements introduced point towards this end. The compliance rate indicated trends that owner / operators became more compliant and that the program

appears to have a positive effect on the knowledge, attitudes and practices of owners / operators with respect to food safety and sanitary standards in their operations. The analysis supports Quality Assurance enhancements as part of Continuous Quality Improvement of the Disclosure Program program. Furthermore, the data indicated that inspectors adhered to policies and procedures and performed inspection duties in a standardized fashion. The positive effect of having at least one certified food handler in food premises supports enhancement of the food handler certification program as a means towards improved compliance rates and more importantly reducing the risks related to food borne illness.

4. Owner / Operator Survey Component

Purpose

The purpose of the owner/operator survey was to assess the opinions of food establishment operators on a series of issues related to the Disclosure Program in the following areas.

- Attitude (satisfaction and support for the program)
- Impact (Administration of the Program)
- Understanding (Program-Related Knowledge)
- Signage Issues (Disclosure program notices)

Method

In August 2002, Oraclepoll Research Limited was hired to conduct a owner / operator survey for Toronto Public Health in order to assess the opinions of food establishment operators on a series of issues related to the Disclosure Program. The study sample was drawn randomly from lists of 1265 high risk and 2484 medium risk food establishments provided by TPH to map on to four areas in the City of Toronto (i.e.; North, South, East and West). The survey was conducted between August 26th and September 16th, 2002. The stratified random study sample consisted of a total of 103 restaurant owners/operators who were required to complete a standardized face to face interview/survey. The survey screened owner/operators who had at least 3 inspections under the new Disclosure Program. It should be noted that low risk food establishments were not included because they were not being routinely inspected prior to the survey. The overall confidence level for this survey was +/- 10%, 19/20 times.

Results / Discussion from the Owner / Operator Survey

(a) Attitude

The owner/operator survey assessed the level of food premise operator satisfaction and support for the Disclosure Program. The survey results show that the majority of respondents (71%) believed that it is important for TPH to maintain the current disclosure program. The majority of operators (73%) also perceived that the public feels that it is important to maintain the program. The majority of operators (59%) agreed that the public feels safer now with the current program than before the introduction of the program.

(b) Impact

The owner/operator survey assessed the administration of the program and the impacts of the program on the food service industry. The survey results show that the majority of operators (77%) reported that the program has led to little change in food handling practices. However, respondents who had received a yellow sign reported greater change in food handling practices than operators that had not received a yellow sign. This shows that the yellow sign is an effective tool at improving food handling practices. Most respondents attribute the lack of change due to compliance historically. To a greater extent 84% reported little change in compliance with the *Ontario Regulation 562/90, Food Premises* for similar reasons.

The majority of operators (89%) felt that Inspectors always explain why an infraction is a concern and (82%) indicated that inspections are conducted in a fair and impartial manner. Operators who had received a yellow sign were less likely to agree that inspections were fair and impartial. Only half of the respondents (52%) knew that they could contact a manager from TPH to voice concerns, discuss inspection results or receive additional information.

Most respondents (68%) indicated that the disclosure of results had no effect on business while 26% reported a positive effect on business. The majority of operators (81%) indicated that re-inspections of establishments that receive yellow signs are conducted in a timely manner. Similarly, of the 28% of operators who indicated receipt of a yellow sign at one time, 82 % reported that re-inspections were conducted in a timely manner.

(c) Understanding

The owner/operator survey assessed the program-related knowledge of food premise owners / operators and assessed the extent to which the Disclosure Program is understood and followed. The survey results show that virtually all operators (99%) are aware of the posting requirement and 79% are aware that the public must be given full access to their report upon request. Only half (51%) however are aware that all inspection results are posted on the city web site. The vast majority (91%) are aware of re-inspection issues such as the 24-48 hours follow-up for a yellow sign and approximately three quarters of the respondents (74%) are aware that minor infractions and issuance of a green will be re-inspected on the next scheduled inspection as mandated. The majority of operators (87%) are aware that previous inspection results are posted on their current sign.

(d) Signage Issues

The owner/operator survey assessed the issues surrounding the Disclosure Program notices/signs. This involved illuminating the owner / operator perceptions, understanding, and interpretations of the program notices/signs. The survey results show that the majority of operators (77%) perceive that the public understands the meaning of a green sign while only 18% believe the same for the yellow sign. While 68% of operators do not agree that the public understands the yellow sign, operators of high risk restaurants perceive this to be the case more so than their medium risk cohorts. Most operators (73%) indicated that the general public understands the red sign. Most operators (68%) also said that the general public interprets that establishments that have received a red sign and reopen are not safe. The red closed sign is mandated through the *Ontario Health Protection and Promotion Act, 1990* and not

through the Disclosure Program. Only 17% of operators perceive that the general public feels safe eating at an establishment that has reopened after receiving a red sign. With respect to the green sign, 29% of operators believed that the general public misperceives green signs as indicating universal safety while ignoring items such as the date on the signs.

In terms of the yellow sign, the operators (63%) believe that the general public does not discriminate between yellow and red signs and perceive them in the same way. Furthermore, 92% believe that the public interprets yellow signs as indicating that an establishment is unsafe. It must be noted that these are operator perceptions of the public's understanding of the signs.

Conclusion from the Owner / Operator Survey

The Owner/Operator survey supports the following conclusions:

The Disclosure program is well received by operators. They support the program and believe that Toronto Public Health should maintain and continue to provide the services under the Disclosure Program. Operator perceptions that the public want to maintain the program and feel safer after program inception supports this view.

The vast majority 94% of operators indicated that their business was either not affected or had experienced a positive affect, while 26% indicated an actual increase in business. This illustrates that the program was not detrimental from a business standpoint in the first year of implementation and actually showed positive results for a substantial number of operators.

The operators perceive that there is a misinterpretation of the signs by the public and this requires clarification.

In terms of program related knowledge, the survey revealed positive outcomes in all areas with the exception of operator awareness of the web site component of the program.

OVERALL RESULTS / DISCUSSION

This discussion intends to explore, compare and contrast the four evaluation components that make up this comprehensive report by identifying the themes and issues that echo across each of the components. There were five themes that emerged and the results are discussed in the following.

- 1) Value of the Program
- 2) Support for the Program
- 3) Importance of the Certified Food Handler Training Program
- 4) Understanding of the Conditional Pass (yellow sign)
- 5) Consistency of the Inspection Process

Value of the Program

The public opinion survey indicated that the public feels safer in making food choices in Toronto since the inception of the program, compared to eating in communities that do not have a similar program. This theme is echoed by owner /operators in their perception of how the public feels about food safety.

Increased compliance rates and a decrease in infractions, especially those that are likely to cause illness, indicate a trend to enhanced food safety. A decrease in the need to re-inspect premises is attributed to the increased cooperation of operators and their perception of the yellow and red signs and their potential negative impact.

Support for the Program

The strongest support came from the general public in which virtually all respondents (98%) indicated that it was important to maintain the current program. This is reiterated in how inspectors and owner/operators perceived public reaction to the program. A strong majority of operators (71%) also indicated that it was important to maintain the current program. The data analysis also demonstrates improvements in compliance and inspection completion trends. A majority of inspectors agreed that the public response is a very positive feature of the program and that the role of the PHI is more appreciated due to this heightened awareness.

Importance of the Certified Food Handler Training Program

A review of existing data indicates that a food premises that has at least one certified food handler is 1.5 times more likely to receive the green pass notice/sign on initial inspection than premises without a certified food handler, an effect that is statistically significant. Investment in food handler training programs have long term positive implications that translate into internal efficiencies for Public Health because fewer re-inspections are required enabling staff time to be re-deployed to other mandated or complaints-based abilities. Societal cost-savings will also be realized from a decrease in infractions associated with food borne illness which is estimated to cost the Canadian economy 1 to 2 billion dollars per year in health care, industrial and social costs (Todd, 1989). Public Health Inspectors (PHIs) perceived a correlation between understanding the requirements and increased compliance among the operators who had attended Food Handler Certification programs offered by TPH. They stress that Food Handler Certification strengthens the Disclosure Program. Given the evidence of the importance of food handler training and certification, a mandatory food handler training and certification program should be implemented in Toronto as soon as possible.

Understanding the Conditional Pass (Yellow Sign)

The majority of operators believe that the public does not understand the meaning of the conditional pass notice (yellow sign) and that it is interpreted as the same as the closed notice (red sign), i.e. unsafe. However, the public opinion survey indicated that most of the public (63%) understood the meaning of the yellow sign as it was intended by TPH, i.e. that it is okay to eat there.

Operators expressed concerns about the economic impact of receiving a conditional pass (yellow notice). The results indicate that the program is not detrimental from a business standpoint but actually has a positive impact for a substantial number of operators. The vast majority (94%) of operators reported that their business was either not affected or had experienced a positive effect from the DineSafe Program. More specifically, 26% indicated an actual increase in business. The vast majority of the respondents to the public opinion survey (95%) reported choosing a place to eat based on sign colour. These interpretations and perceptions appear to have created an economic incentive for operators to comply with food safety and sanitary standards. Nonetheless, it will be helpful for TPH to increase awareness and reinforce the meaning of the yellow sign both for operators and the public to avoid misunderstanding and undue concern.

Consistency of the Inspection Process

The evaluation results showed that the inspection process is standardized, timely and fair. The majority of operators (89%) reported that inspectors explained why infractions were of concern, 81% of them reported timely re-inspections, and 82% reported that inspections were fair and impartial. However, recipients of yellow signs were less likely to agree that the process was fair and impartial. The analysis of program data also indicated that inspector error rates decreased over time and that inspection and enforcement activities are consistent and adhere to the established policies and procedures.

The internal consultation provided an excellent opportunity for inspectors and managers to offer comments on operational aspects of the program in a systematic and structured manner. This provided a crucial source of data that will be used in program planning and development to strengthen day to day operations. The data analysis and internal consultation indicated that the Toronto Healthy Environments Information System (THEIS) and the Quality Assurance Program are effective administrative tools that support and enhance consistency in the Food Safety Program.

OVERALL CONCLUSIONS

It is clear that the Food Premises Inspection and Disclosure System is valued by most food premises owner/operators, the general public and by Public Health Inspectors. The analysis of program data shows increased compliance and continuous improvement in food safety in Toronto as a result of the program. However, TPH can improve public and operator awareness of the intent and meaning of the conditional pass notice. The public opinion survey shows that people feel safer and better informed as the result of the Disclosure Program. All indicators point toward a successful implementation of the program and there is strong support for its continuation. The investment in the program has and should continue to yield excellent results.

RECOMMENDATIONS

Based on the findings in this report, it is recommended that:

1. The Board of Health reaffirm support for the current Food Premises Inspection and Disclosure System (DineSafe Program);
2. The mandatory food handler training and certification program be as soon as possible;
3. The Quality Assurance Program continue to monitor consistency and provide integrity to all programs within the Healthy Environment Service, including the food safety program;
4. A process should be implemented to increase awareness and reinforce the meaning of the yellow sign both for operators and the public to avoid misunderstanding and undue concern;

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APPENDIX A

Infraction Category Table

FACTOR	INFRACTION CATEGORY		
	MINOR	SIGNIFICANT	CRUCIAL
RISK	Infractions that are <i>unlikely</i> to present a health hazard.	Infractions that present a <i>potential</i> health hazard if not corrected.	Infractions that present an <i>immediate</i> health hazard(s) at the time of inspection.
REASON	Infractions mostly involve the physical structure of the premises (floors, walls, ceilings) without impact on any aspect of food.	Infractions <i>indirectly</i> impact on <i>food</i> and/or it's <i>handling</i> , and/or <i>preparation</i> , and/or <i>storage</i> , and/or <i>service</i> .	Infractions <i>directly</i> impact on <i>food</i> through time and temperature abuse, and/or contamination, and/or the lack of <i>potable water</i> .
TIME	Noted infraction(s) will be followed up on <i>next inspection</i> .	Noted infraction(s) will be followed up with a re-inspection within <i>24 to 48 hours</i> .	Noted infraction(s) will be corrected immediately and followed up with a re-inspection within <i>24 to 48 hours</i> or a re-opening inspection upon elimination of the health hazard(s).
LEGAL ACTION	TICKET (Outstanding infractions)	TICKET and/or ORDER and/or SUMMONS	ORDER and/or SUMMONS and/or CLOSURE
STATUS	PASS	CONDITIONAL PASS	CONDITIONAL PASS or CLOSED

APPENDIX B

INSPECTION NOTICES:

PASS

CONDITIONAL PASS

CLOSED

TORONTO PUBLIC HEALTH

PASS

NAME _____

ADDRESS _____

*This establishment was inspected by Toronto Public Health
in accordance with the Ontario Food Premises Regulation, and
passed the inspection on:*

Results of previous inspection on _____ DATE

PASS **CONDITIONAL PASS** **CLOSED**

Enforcement action taken



PUBLIC HEALTH
FOOD SAFETY PROGRAM

DR. SHEELA V. BASRUR
*Medical Officer of Health for the
City of Toronto Health Unit*

*For further information contact Toronto Public Health, at (416) 338-FOOD (3663)
or visit the Public Health web site at www.city.toronto.on.ca/health
E-mail: dinesafe@city.toronto.on.ca*

TORONTO PUBLIC HEALTH

CONDITIONAL PASS

NAME _____

ADDRESS _____

*This establishment was inspected by Toronto Public Health
in accordance with the Ontario Food Premises Regulation on:*

*At the time of this inspection, this establishment was directed
to correct the following infractions within 24 to 48 hours:*

- | | |
|--|---|
| <input type="checkbox"/> Inadequate food temperature control | <input type="checkbox"/> Improper maintenance/sanitation
of non-food contact surfaces/
equipment |
| <input type="checkbox"/> Failure to protect food from
contamination | <input type="checkbox"/> Improper maintenance/sanitation
of washrooms |
| <input type="checkbox"/> Failure to ensure/provide for proper
employee hygiene/handwashing | <input type="checkbox"/> Improper storage/removal of waste |
| <input type="checkbox"/> Improper maintenance/sanitation
of food contact surfaces/utensils/
equipment | <input type="checkbox"/> Inadequate pest control |

Results of previous inspection on _____ DATE _____

PASS **CONDITIONAL PASS** **CLOSED**

Enforcement action taken



PUBLIC HEALTH
FOOD SAFETY PROGRAM

DR. SHEELA V. BASRUR
Medical Officer of Health for the
City of Toronto Health Unit

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or visit the Public Health web site at www.city.toronto.on.ca/health
E-mail: dinesafe@city.toronto.on.ca*

TORONTO PUBLIC HEALTH

CLOSED

THIS FOOD PREMISES IS CLOSED

NAME_____
ADDRESS

BY ORDER OF THE MEDICAL OFFICER OF HEALTH
under the authority of Section 13 of the Health Protection and Promotion Act

Results of previous inspection on _____
DATE

PASS **CONDITIONAL PASS** **CLOSED**

Enforcement action taken



PUBLIC HEALTH
FOOD SAFETY PROGRAM

DR. SHEELA V. BASRUR
*Medical Officer of Health for the
City of Toronto Health Unit*

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