



Canadian Institute of Public Health Inspectors



Competencies for Ongoing Development

Continuing Professional Competencies (CPC) Project

Prepared by:
The CPC Working Group

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The Vision of CIPHI:
Health Protection: Cornerstone of Public Health

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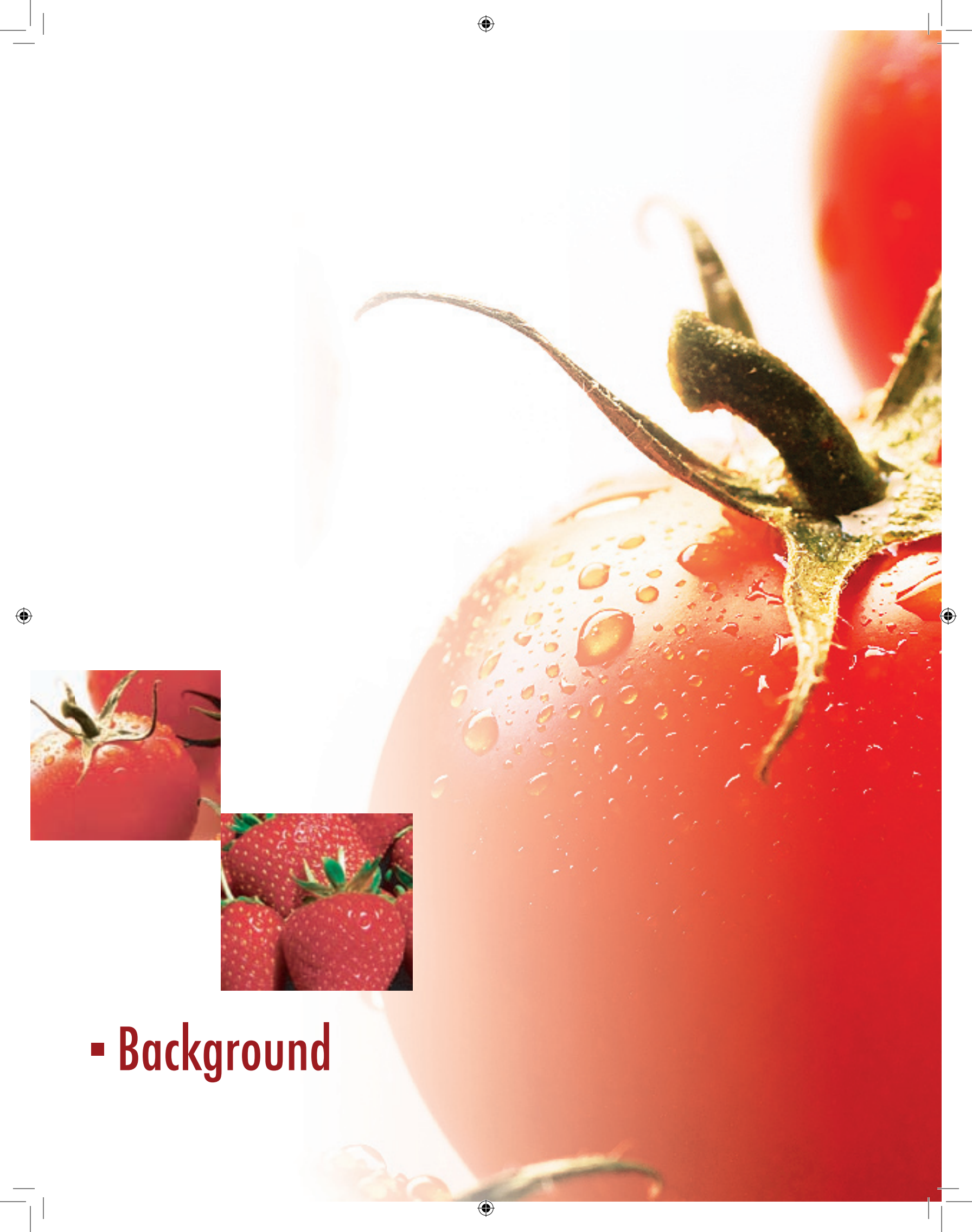
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▪ Background

Background

For many years, the Canadian Institute of Public Health Inspectors (CIPHI) has directed and managed the certification of Environmental Public Health Professionals¹ through its Certificate in Public Health Inspection (Canada), CPHI(C), credential. This certification is an important step for any individual entering the field, to ensure that he/she has the requisite experience to be able to function in the field. Until now, there has been no obligation to demonstrate continued competency improvement following certification. Any CPHI(C) holder remained certified regardless of whether he/she still practiced in the field and stayed current.

CIPHI has wanted to develop a professional recognition and continued development program for a long time now. Following public health incidents such as the E.coli outbreak in Walkerton in 2000, the waterborne cryptosporidiosis outbreak in North Battleford in 2001 and the SARS crisis in 2003, CIPHI and other health organizations identified a direct need to monitor the continued development of public health professionals. During the SARS crisis, for example, CPHI(C) holders were brought in from other regions to provide front line work. At the time, it was difficult to identify whether these individuals possessed the adequate level of competency to address such challenges. If there is another pandemic type emergency, there needs to be a method to guarantee that similar standards are maintained across Canada. As a result, CIPHI launched a program to develop a Continuing Professional Competency (CPC) model and framework.

Through the CPC project, CIPHI will develop a national standard for all holders of the CPHI(C), to encourage anyone with the certification to engage in continued and ongoing development of knowledge and practice throughout Canada. This standard will contain the following components:

- A set of competencies to serve as a basis for self-assessment
- A professional development model to guide continued learning and uphold certification
- A code of ethics to identify essential professionalism for all CPHI(C) holders

¹ During the preparation of this document, there was an in depth discussion regarding the preferred label for persons working in the field/science/profession of Environmental Public Health. Various different working titles are in use across Canada (e.g. Public Health Inspector and Environmental Health Officer). The National Executive Committee coined the term “Environmental Public Health Professional” during its 5-year strategic planning session to be consistent with US initiatives and make the subtle distinction between human health protection work conducted by health agencies and the ecological protection and pollution prevention work conducted by environmental agencies.

The process to develop this standard will provide CIPHI members from across the country with the opportunity to join together to shape the profession. Through this process, we can demonstrate what makes the Environmental Public Health practice unique among health professions and build a consensus for the continued development of ourselves and our profession.

This document, *Competencies for Ongoing Development* is the foundation for the CIPHI standard. The document is divided into two sections: an introduction explaining how to read the competencies and the competencies themselves. If you are unfamiliar with the competencies, we recommend you read through the introduction, otherwise feel free to skip to the Discipline Specific Competencies on page 20.







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- Introduction

Introduction

This document contains a list of competency statements which apply to individuals who have the Certificate of Public Health Inspection (Canada), CPHI(C)², credential. This introduction answers the following questions:

1. How were these competencies developed?
2. What are competencies?
3. How do you read a competency statement?
4. When and how do these competencies apply to you?
5. What are some real life examples of the specific competencies?

1.1 Before you begin ...

Before you read on, we would like to clarify the following:

- **Competencies are not job descriptions:** A competency does not replace or augment your job description. It is not necessarily something that relates to your day-to-day job and performance all the time.
- **This is a guide, not a checklist:** There are 133 competencies in this document. At no point are you expected to know, show or demonstrate competency in all 133 areas. CIPHI assumes that at any given time you are able to comfortably and clearly demonstrate the competencies that apply to you. For CPHI(C) holders working as generalists across several practice areas, this may translate to 70-90% of the 133 (or approximately 93-120 specific competencies). For those of you with a very specialized focus, this may translate into more in depth understanding of, and ability in, a much smaller number of the specific competencies.
- **You assess your own competency:** CIPHI does not use this document to assess your competency. That task is up to you. Whatever benefit you get from this document is based on your own honest assessment of your capabilities. CIPHI will provide you with tools to record your own development, and will provide you with some guidelines and tips for your assessment and continuing education planning efforts.
- **By the profession, for the profession:** CIPHI is a self-regulated organization representing your profession. That means you are not legally obligated to participate. So, the strength of this document, the Continuing Professional Competency (CPC) project, and the entire organization is built directly on your willingness to regulate your own profession and your continued commitment and active contribution to your profession.
- **You want to do this:** This is our big assumption. CIPHI has assumed that anyone who has gone through all the work of acquiring the CPHI(C) will be interested in continuing his/her professional development, as well as protecting the credential from deterioration.

² For more information about the CPHI(C), please see Appendix E.

1.2 How were these competencies developed?

With the support of the Public Health Agency of Canada (PHAC), in April 2008 CIPHI contracted Klaus Seeger³ to develop the first draft of the environmental public health competencies. This draft was then revised by consultants from Meyers Norris Penny LLP (MNP), who had been contracted to facilitate the review process with CIPHI members.

MNP's initial revision was presented to the CPC Steering Committee, Working Group, and CIPHI National Executive Council in November 2008. A subsequent revision was produced and distributed for an initial consultation with CPHI(C) holders in a series of focus groups held across Canada in January 2009. Attendees at these focus groups included a wide variety of individuals from generalists to specialists, students to directors, and both urban and rural professionals.

MNP produced this draft based on all the feedback to present at the Annual Educational Conference in Kananaskis, Alberta in May 2009. The feedback from the conference will be incorporated in the next revision of the document.

1.2.1 How will this document continue to develop?

This is a living document, and it will continue to be updated and adjusted. Over time, CIPHI members and non-CPHI(C) holders will be invited to continue to inform the ongoing development of the document. We expect to potentially implement a national survey and conduct focus groups and one-on-one consultations at our annual conferences.

1.3 What are competencies?

The competencies listed in this document describe the essential knowledge, skills, and aptitudes necessary for continued development after receiving the CPHI(C) certification in the field of environmental public health. Each competency is described by a competency statement, such as:

T1-8 Explain the control measures used to prevent or reduce exposure to hazards related to the practice.

A competency statement requires a fair amount of interpretation. Each competency statement may initially appear vague and confusing. After all, you may have expected to look through this document to find the competencies that explicitly refer to food safety, or the specific skills that you employ in your day-to-day practice. Such a document can be created, but in a profession that is as broad as environmental public health, the 133 competencies listed would quickly balloon to thousands of statements. So, to keep the number of competencies at a manageable level, they have been left intentionally general.

Note: These competencies are not to be confused with the certification requirements to obtain the CPHI(C). Those requirements are administered and tested by the Board of Certification. The competencies listed in this document are designed for anyone who already has the CPHI(C).

³ From Seeger and Associates – Environmental Public Health Service

Competency statements have been grouped into eight categories. No category takes precedence over another, nor are you expected to know a minimum number of competencies from any one category. This grouping reflects the categories listed in the PHAC's *Core Competencies for Public Health Release: 1.0*⁴.

1.3.1 How do the competencies relate to the Public Health Agency of Canada's core competencies?

PHAC has led the development of competencies for all public health professions in Canada and the competencies listed in this document parallel with the core competencies developed by the PHAC. CPHI(C) holders who work in a public health environment should refer to both the PHAC core competencies and this set of competencies for continued development after receiving the CPHI(C). In this case, the competencies for continued development can be considered as discipline specific competencies for the environmental public health profession. The PHAC core competencies can be found in Appendix D.

Note: CPHI(C) holders who work in private industry are also encouraged to read the PHAC core competencies.

1.4 How do you read a competency statement?

Here is an example of how to interpret a competency statement. To use the example from above:

T1-8 Explain the control measures used to prevent or reduce exposure to hazards related to the practice.

There are several key terms in the statement:

1. **Explain:** Each statement starts with one or more action verbs that identify an activity that you should be able to perform with regard to the competency. In this case, you are asked to **Explain** something, which means:

To make something plain or understandable, to give the reason for or cause of, to show the logical development or relationships of. Using knowledge of subject to provide information that helps to understand something.

A definition for every action verb can be found in the Glossary on page 35.

2. **Practice:** The field of environmental public health includes a wide range of practice areas. Some are very traditional and some are emerging. Whether you are a generalist or a specialist, you likely work within a set number of practice areas based on your own experience or job requirements. For example, you may work wholly in a practice area such as Safe Food, or you may work as more of a generalist covering a wide variety of practice areas.

Each time you see the word *practice* in a competency statement, it is referring to the practice area(s) you have knowledge in. So, you would substitute your own practice area(s) into the statement. Depending on how many practice areas you are involved in, you may have to read the statement several times over with each practice area substituted for the term *practice*.

⁴ PHAC, 2008: <http://www.phac-aspc.gc.ca/ccph-cesp/pdfs/cc-manual-eng090407.pdf>

For example, you may read the example statement as follows:

- Explain the control measures used to prevent or reduce exposure to hazards related to Safe Food.
- Explain the control measures used to prevent or reduce exposure to hazards related to Health Hazard Management.
- Explain the control measures used to prevent or reduce exposure to hazards related to Healthy Living and Healthy Community Environments.

This document contains a list of six practice areas, which can be found in Appendix C. These six practice areas are purposefully broad and inclusive enough to cover all of the specializations and areas of expertise that CPHI(C) holders in Canada work in. There are many more actual practice areas and they vary from region to region. Rather than explicitly naming all possible areas, we have created an inclusive list of six practice areas. You are not obligated to use the categories we have suggested. Instead, use the term that best applies to your area of practice.

Note: You are not expected to apply these statements for every practice area that exists, but only for the areas you are familiar with or practice in.

- 3. Health Controls and Hazards:** There are key nouns and/or phrases in each competency statement. These phrases are often specific to the practice area you are familiar with, and would change depending on your experience and/or job requirements. For this example, you may be familiar with the following controls and hazards:

If your practice area is...	A hazard may be...	Which could be controlled by...
Safe Food	Clostridium botulinum growth leading to paralysis and potential death	Ensuring anaerobic conditions are not created for C. botulinum to sporulate and grow.
Safe Water	Nitrate contamination leading to methaemoglobinemia	Ensuring wells are properly constructed to minimize risk of surface contamination.
Healthy Living and Healthy Community Environments	Indoor mould growth leading to respiratory irritation	Respiratory symptoms and conditions for mold growth are controlled and remediated.

Putting it all together, any one statement may describe several different activities or skills, for a variety of practice areas. You can read the statement, “*Explain the control measures used to prevent or reduce exposure to hazards related to the practice,*” as:

- Explain how to ensure anaerobic conditions are not created to prevent or reduce Clostridium botulinum from sporulating and growing within food.
- Explain how to ensure wells are properly constructed to prevent or reduce nitrate contamination of drinking water.
- Explain how to control conditions of mould growth to prevent or reduce indoor mould growth, which can lead to respiratory aeration and aggravations of asthma.

For more real life examples, please refer to Section 1.6 on page 17.

Because these statements are left open to such interpretation, we cannot objectively measure them, nor is that the point. As mentioned earlier, these statements are not job descriptions. They are best considered as markers to demonstrate the qualifications of a CPHI(C) holder, and as guides for your future professional development. You will be responsible for assessing your own competency, and the value you gain from this process is based on your own approach to this assessment.

Note: CIPHI will develop worksheets and other tools, if applicable, to help you conduct a self-assessment.

1.5 When and how do these competencies apply to you?

In an industry which relies on precision, a set of general competency statements can seem counter-intuitive, and even strange. However, these competencies, as they are written, serve a purpose both for your own development and for the enhanced recognition of the CPHI(C) credential.

1.5.1 How can these competencies be applied to your career?

At various points in your career, you reflect on your skills and abilities. You have performance reviews, interviews, and many other official activities, but those are tied in directly to your job descriptions, and are not necessarily representative of your competency in the environmental public health profession as a whole. This competency document provides a means for you to reflect on your abilities as a professional within your chosen field. Here are three possible ways that the competency document can be applied:

- **As an employee:** This competency document enables you to track your progression throughout your career. When you first start out, you may find that you are strong in competencies that require you to identify and explain health policy. As you progress you may become more adept at developing policy. You may reach a point where you have to manage teams, and your competencies will tend towards building groups of environmental public health professionals.

Whichever way you direct your career, you can use this list of competencies as a marker. Periodically, take time to review these competencies and assess where you stand. You should be able to identify competencies you are strong in, as well as competencies you should be strong in, but need to improve.

Note: This document contains competency statements referring to all the discussed skills, which is why you are not expected to be adept at absolutely every competency. Depending on your specialty, you may find it difficult to assess professional competency in most of those listed.

- **As an employer:** The competencies listed in this document describe skills and abilities that could be covered by an entire team of health professionals. Use this document to identify your team's strength and weaknesses. Use this assessment to support or develop a business case for either:
 - Employee training
 - New hires
- **As an educational provider:** The competency statements in this document describe skills and abilities that could form the basis for continuing education programs that can be offered by any of the affiliated post-secondary institutions, by CIPHI, or through partnerships with other professional organizations.

1.5.2 How do these competencies relate to the CIPHI professional development program?

The second step in the CPC project is the implementation of a professional development model. This model sets a certain number of professional development hours, which a CPHI(C) holder is obligated to complete annually. Unlike the competencies, professional development is actively monitored and audited by CIPHI.

Both informal and formal training can be accepted as professional development. The competencies in this document can be used to select the appropriate professional development for you.

1. Take some time to review your competencies using this document.
2. Identify competencies that you would like to develop.
3. Find courses/material to help develop the competency.
4. Use the course/material as part of your required professional development hours.

1.5.3 How can these competencies be used to promote the profession?

The competencies are a base for the development of the national standard. Regardless of whether you work in British Columbia or Newfoundland or anywhere in between, the competencies are the same and apply to holders of the CPHI(C). Not only do they indicate what is expected of professionals with the CPHI(C) designation, but they also identify why a CPHI(C) cannot be easily replaced by other professionals. As a result, the competencies help strengthen the designation. If an employer, colleague, or even the general public can see the value of the CPHI(C), then anyone who has earned this credential will be preferred over a professional who lacks the designation. This is a major goal of the entire CPC project, and the competency statements are the first step to achieving this improved professionalism.

1.5.4 Summary of applications of the competency statements

Individual/Group	Which could be controlled by...
CPHI(C) HOLDERS	<ul style="list-style-type: none"> ✓ Self-assess their technical knowledge, skills, abilities, and aptitudes ✓ Identify professional development needs ✓ Identify training for CIPHI professional development hours
EMPLOYERS	<ul style="list-style-type: none"> ✓ Identify staff development and training needs ✓ Support staff recruitment, development, and retention ✓ Assist in the development of job descriptions and interview questions ✓ Provide a rationale for securing funds to support workforce development and staffing ✓ Ensure that staff members are engaged and interested
EDUCATIONAL INSTITUTIONS	<ul style="list-style-type: none"> ✓ Develop, coordinate, and offer sustainable courses that meet employers' and professionals' needs
CIPHI	<ul style="list-style-type: none"> ✓ Promote the skills and aptitudes of CPHI(C) holders

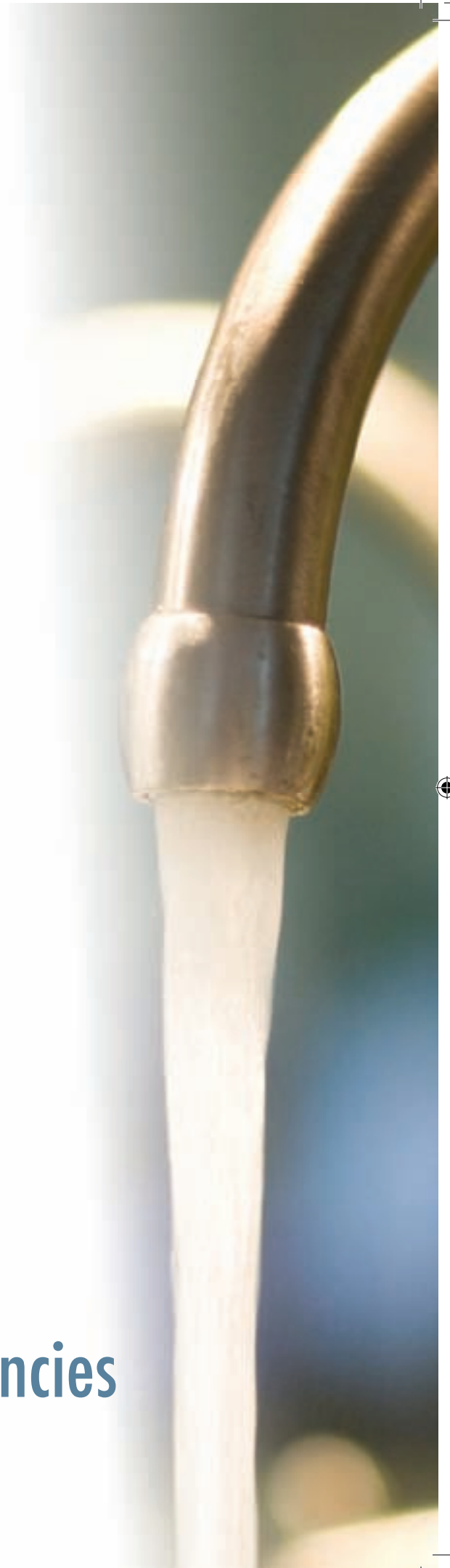
1.6 What are some real life examples of the specific competencies?

This section contains real life examples of the specific competencies that have been collected from CIPHI members. Just like the remainder of this document, the real life examples will be updated and adjusted. In the future, we will collect additional stakeholder input and add more examples to this list.

Discipline Specific Competency	Real Life Example:
T1-1. Identify, explain, and assess <i>practice</i> principles	<ul style="list-style-type: none"> ✓ In the area of Safe Water, discuss the parameters of public health interest: microbial pathogens and chemical parameters such as lead, arsenic, and uranium
T1-2. Using resources available, identify potential incident causes	<ul style="list-style-type: none"> ✓ Identify the possible causes of a notifiable enteric infection ✓ Identify the possible causes of an outbreak of gastrointestinal illness using information gathered during a disease outbreak investigation
T1-3. Describe and explain procedures for investigating an incident such as an outbreak	<ul style="list-style-type: none"> ✓ Describe and explain the procedures for investigating and controlling an outbreak of gastrointestinal illness
T1-4. Use equipment, techniques, and procedures to conduct inspections/ investigations	<ul style="list-style-type: none"> ✓ Use equipment, techniques, and procedures to conduct testing and evaluation methods consistent with Standard Methods or NSF International field evaluation procedures
T1-5. Identify and explain analysis reports in relationship to the <i>practice</i>	<ul style="list-style-type: none"> ✓ Identify and explain food sample, water sample, and stool sample results
T1-6. Identify symptoms and etiology of common diseases related to the <i>practice</i> , using relevant reference materials	<ul style="list-style-type: none"> ✓ Recognize symptoms and etiology of common enteric infections
T1-10. Identify, explain, and apply, where necessary, the most recent provincial/regional <i>practice</i> requirements, standards, guidelines, policy and program changes including amendments using relevant reference materials	<ul style="list-style-type: none"> ✓ Identify, explain, and apply Canadian Drinking Water Guidelines and Canadian Recreation Water Guidelines by: <ul style="list-style-type: none"> - Locating webpages for guidelines and technical documents, and differentiating between a MAC, an AO, and an OG. (Maximum Acceptable Concentration, Aesthetic Objective, Operational Guideline) - Explaining how the guidelines are different from regulations - Making a recommendation about the safety and suitability of a source of water based on a set of analysis results
T1-11. Explain roles and functions of the CPHI(C) holder related to the <i>practice</i>	<ul style="list-style-type: none"> ✓ Describe the roles and functions of the of the CPHI(C) holder in disease surveillance

Discipline Specific Competency	Real Life Example:
<p>T1-16. Apply systematic inspection processes to any premises, and conduct audits when applicable</p>	<ul style="list-style-type: none"> ✓ Apply systematic inspection processes during the inspection of public and private housing, including health and safety risks of substandard housing and inspection of private onsite/ municipal sewage treatment systems
<p>T3-3. Identify and explain effective <i>practice</i> guidelines, policies, and procedures</p>	<ul style="list-style-type: none"> ✓ Identify and explain Canadian Drinking Water Guidelines and Canadian Recreational Water Guidelines
<p>T4-11. Evaluate <i>practice</i> issues that need collaboration with communities/partners and other stakeholders to amend legislation/policies and protect the health and well-being of individuals and communities</p>	<ul style="list-style-type: none"> ✓ Evaluate Food Safety legislation or controls for uninspected foods at Farmers' Markets





▪ Discipline Specific Competencies

Discipline Specific Competencies

Most CPHI(C) holders will be competent only in some practice areas. Assess your knowledge, skills, and abilities in Tables 1 to 8 below for the practice areas that are relevant to you. Conduct the assessment more than once if you work in more than one practice area. CIPHI expects that CPHI(C) holders should be proficient in the competencies that apply to them and are relevant to his/her practice area.

T1. Public Health Sciences

This category includes key knowledge, critical thinking skills, and aptitudes related to the environmental public health sciences. Competency in this category requires the ability to apply knowledge in practice.

Competency Statement –Public Health Sciences	
T1-1	Identify, explain, and assess <i>practice</i> principles
T1-2	Using resources available, identify potential incident causes
T1-3	Describe and explain the procedures for investigating an incident such as an outbreak
T1-4	Use equipment, techniques, and procedures to conduct inspections/investigations
T1-5	Identify and explain analysis reports in relationship to the <i>practice</i>
T1-6	Identify symptoms and etiology of common diseases related to the practice, using relevant reference materials
T1-7	Identify and explain hazards related to the <i>practice</i> , i.e. chemical, biological, radiological, and physical hazards
T1-8	Explain the control measures used to prevent or reduce exposure to hazards related to the <i>practice</i> .
T1-9	Explain the potential impacts to public health associated with the <i>practice</i> , e.g. the impacts associated with land use, development planning activities, environmental contaminants, and any type and quantity of spills

Competency Statement –Public Health Sciences

T1-10	Identify, explain, and apply, where necessary, the most recent provincial/regional <i>practice</i> requirements, standards, guidelines, policy and program changes including amendments using relevant reference materials
T1-11	Explain roles and functions of the CPHI(C) holder related to the <i>practice</i>
T1-12	Explain <i>practice</i> advisories/orders/recalls
T1-13	Based on information provided, implement or rescind relevant practice advisories/orders/recalls
T1-14	Recommend behavioural changes based on <i>practice</i> knowledge and historical data such as communicable disease trends
T1-15	Explain changes to sampling techniques and advances related to analysis results in <i>practice</i>
T1-16	Apply systematic inspection processes to any premises, and conduct audits when applicable
T1-17	Use and maintain knowledge of current <i>practice</i> technologies, inspection equipment and sampling equipment
T1-18	Assess and monitor the quality of one's own work
T1-19	Research policy and procedure development and analyze evidence to help with the evaluation of <i>practice</i> policies and programs
T1-20	Analyze <i>practice</i> activities to assist in effective and efficient delivery
T1-21	Analyze and apply <i>practice</i> risk assessment and protection strategies
T1-22	Develop operation plans or provide feedback/input on operational plans to Managers, looking at evidence and research
T1-23	Evaluate <i>practice</i> program needs or provide feedback/input to Managers
T1-24	Evaluate political action and perspective to support <i>practice</i> area policies and programs
T1-25	Evaluate the historical interaction of public health and local/regional conditions
T1-26	Develop policies and procedures to manage actions taken by department, especially on high risk events and activities

T2. Assessment and Analysis

This category describes the competencies needed to assess, analyze, and evaluate information (including data, facts, concepts, and theories). These competencies are required to make evidence-informed decisions, prepare budgets and reports, conduct investigations, and make recommendations for policy and program development.

Competency Statement –Assessment and Analysis	
T2-1	When applicable, identify and assess areas/facilities to confirm non-compliance activities related to the <i>practice</i>
T2-2	Identify indicators used in sampling quality
T2-3	Identify and understand how to set up a sampling program for a given site and situation, when relevant policy is in place
T2-4	Identify and apply relevant reference material for <i>practice</i> activities and issues
T2-5	Use appropriate methodologies to collect, store, and retrieve accurate <i>practice</i> information
T2-6	Identify and interpret illness or adverse results based on available evidence for, and analysis of, the <i>practice</i>
T2-7	Explain and apply progressive enforcement actions required when hazardous practices, related illnesses, or non-compliance activities have been identified
T2-8	Assess risk status based on investigation, in order to assign priorities for <i>practice</i> assessment, inspection, and follow-up actions
T2-9	Identify community leaders and champions as sources of information for community action
T2-10	Assess and interpret requirements and best practices that are relevant to local conditions and policies
T2-11	Apply existing data collection tools to assess <i>practice</i> outcomes
T2-12	Identify and assess past public health impacts of failed systems and recommend corrective action
T2-13	Analyze technical papers, understand tabular and graphical presentations of data, and interpret them for a non-technical audience
T2-14	Analyze internally generated quality assurance data to assist in planning for and setting future directions

Competency Statement –Assessment and Analysis

T2-15	Analyze internally generated data and communicate it to staff to enhance effective program delivery and assist in planning and setting future environmental public health directions
T2-16	Interpret and apply <i>practice</i> methodologies, including biostatistics and epidemiology, and recommend specific actions to assist in planning for and setting future directions
T2-17	Evaluate program implications for political and local audiences in non-technical terms, using appropriate media
T2-18	Design new data collection tools to assess <i>practice</i> outcomes
T2-19	Evaluate the effectiveness of performance of procedures, interventions, and programs related to the <i>practice</i>
T2-20	Evaluate resource needs and conduct assessments based on analysis of <i>practice</i> program information when applicable (e.g. in response to an emergency or disaster)
T2-21	Assist stakeholders in development and implementation of applicable <i>practice</i> plans (such as Food Safety Plans and/or Public Health plans for various emergency scenarios incorporating incident management system principles)
T2-22	Review and monitor compliance of practice plans
T2-23	Identify and evaluate tools, equipment, and procedures used in the <i>practice</i>

T3. Policy Program Planning, Implementation, and Evaluation

This category describes the competencies needed to effectively choose options, and to explain, assess, analyze, implement, and evaluate policies, and/or programs in environmental public health. This includes the management of incidents such as outbreaks and emergencies.

Competency Statement – Policy Program Planning, Implementation, and Evaluation	
T3-1	Implement, evaluate, and maintain fiscally responsible programs and projects
T3-2	Identify, explain, and apply priorities to maximize outcomes based on workload assigned
T3-3	Identify and explain effective <i>practice</i> guidelines, policies, and procedures
T3-4	Identify areas to work with others to implement <i>practice</i> policies and ensure continuing quality assurance
T3-5	Explain selected policy and program options that address a specific <i>practice</i> health issue
T3-6	Explain and propose amendments to policy, procedures, operational plans, or existing <i>practice</i> legislation and/or implement changes
T3-7	Recommend proposed activities for the <i>practice</i> operational plan
T3-8	Identify and explain prevention and risk management strategies to address <i>practice</i> incidents, outbreaks, and emergencies
T3-9	Explain relevant data and prepare reports to document actions, keep records, and inform appropriate parties on <i>practice</i> issues
T3-10	Interpret the results of interventions during an audit or inspection to determine if improvements have occurred over time
T3-11	Analyze <i>practice</i> risk and evaluate lessons learned during a public health emergency/outbreak
T3-12	Analyze policy statements and procedures related to <i>practice</i> inspection/assessment activities

Competency Statement – Policy Program Planning, Implementation, and Evaluation

T3-13	Analyze <i>practice</i> program data, including investigation procedures and risk reduction, to assess progress and program effectiveness
T3-14	Evaluate the implementation of continuing quality assurance, and develop a plan to implement recommendations to improve quality assurance and assessment results
T3-15	Evaluate the feasibility and expected outcomes of each <i>practice</i> program policy option
T3-16	Evaluate <i>practice</i> program activity outcomes to determine whether resources budgeted are being maximized/used effectively
T3-17	Develop strategies for determining budget priorities, which are incorporated into a <i>practice</i> program budget (e.g. for food safety budgets)

T4. Partnerships, Collaboration, and Advocacy

This category captures the competencies required to influence and work with others to improve the health and well-being of the public through the pursuit of a common goal. Partnership and collaboration optimizes performance through shared resources and responsibilities. Advocacy – speaking, writing, or acting in favour of a particular cause, policy, or group of people – often aims to reduce inequities in health status or access to health services related to *practice* issues.

Competency Statement – Partnerships, Collaboration, and Advocacy	
T4-1	Research, prepare, deliver, and evaluate educational programs on current <i>practice</i> techniques and advances for the general public and applicable stakeholders, and identify and prepare related materials
T4-2	Develop media release materials to promote or provide information on an issue related to the <i>practice</i>
T4-3	Recommend stakeholder participation in practice education programs and other learning opportunities
T4-4	Identify key persons in organizations located in your area and use a coordinated approach to open and maintain communication lines between stakeholders to ensure effective program implementation
T4-5	Describe role and mandate related to any <i>practice</i> issue when queried by public, municipal partners, related agencies, or other professionals
T4-6	Explain and use collaborative techniques with neighbouring agencies, organizations, communities, and professionals, to promote common <i>practice</i> education initiatives/services
T4-7	Use applicable practices to enhance/promote behaviour change
T4-8	Use team building, negotiation, and conflict resolution skills to build community partnerships and facilitate effective team delivery of <i>practice</i> programs
T4-9	Evaluate and advocate for the equitable allocation of resources related to the <i>practice</i> program delivery
T4-10	Develop a dialogue between local governments and community partners regarding identified <i>practice</i> strategies, to attain and sustain behaviour change
T4-11	Evaluate <i>practice</i> issues that need collaboration with communities/partners and other stakeholders to amend legislation/policies and protect the health and well-being of individuals and communities

T5. Diversity and Inclusiveness

This category identifies the socio-cultural competencies required to interact effectively with diverse individuals, groups, and communities. It is the embodiment of attitudes and practices that result in inclusive behaviours, practices, programs, and policies.

Competency Statement – Diversity and Inclusiveness	
T5-1	Apply cultural sensitivity while maintaining the protection of public health as the number one priority
T5-2	Identify how cultural diversity influences <i>practice</i> activities and how they may need to be adapted to respond to diversity issues
T5-3	Identify and assess how regional and cultural perceptions of authority may influence how enforcement and attempts for behaviour change are received
T5-4	Apply culturally relevant <i>practice</i> behaviour change requirements with sensitivity and tact
T5-5	Identify and assess when to collaborate with related professions, organizations, and communities to effectively address culturally relevant <i>practice</i> issues, e.g. with other agencies/regulators with shared jurisdiction for safe drinking water and/or safe recreational water
T5-6	Identify population, cultural, socioeconomic, and educational diversity when contributing to the development of <i>practice</i> educational and promotional materials
T5-7	Develop policies and program delivery mechanisms that respond to diversity in population, regional, educational, age, gender, health status, and ability-related characteristics
T5-8	Develop strategies and approaches that recognize workplace diversity when dealing with occupational issues
T5-9	Develop strategies to ensure that both professional and support staff understand the importance of using diverse and inclusive approaches that are consistent with <i>practice</i> principles
T5-10	Develop an organizational framework and policy structure that supports a culture of collaboration and partnership across all discipline specific <i>practices</i>
T5-11	Implement opportunities for training and understanding cultural diversity

T6. Communication

Communication involves an interchange of ideas, opinions, and information. This category addresses numerous dimensions of communication including internal and external exchanges (written, verbal, non-verbal), listening skills, computer literacy, providing appropriate information to different audiences, working with the media, and social marketing techniques.

Competency Statement – Communication	
T6-1	Identify and use teaching as part of regulatory functions of environmental public health program delivery activities
T6-2	Explain basic concepts of the various environmental public health <i>practices</i> and the value and importance of possible consequences and resolutions to clients and the public, using both written and oral communication
T6-3	Apply effective communication skills in preparing letters/orders and/or inspection reports and records, which provide clear language and direction according to basic public health principles
T6-4	Use effective listening skills when participating in a situation related to a health issue/action
T6-5	Use polite, prompt, and professional communication
T6-6	Develop <i>practice</i> communication protocols, e.g. emergency preparedness communication protocols
T6-7	Use flexibility when preparing public health educational programs and information
T6-8	Explain resolution of conflicts within the agency, in the community, and with regulated parties
T6-9	Assess the needs of learners and teach environmental public health concepts to persons of all ages, genders, cultures, and educational backgrounds, in various settings and with available resources
T6-10	Apply appropriate risk communication principles/strategies and exchange information with colleagues, other professionals, and clients
T6-11	Explain the goals, purposes, problems, and needs for effective and efficient delivery of the various <i>practice</i> components
T6-12	Interpret amended concepts related to an identified <i>practice</i> issue to policy-makers using current technology
T6-13	Research, interpret, and prepare information related to an identified <i>practice</i> issue that requires immediate action to reduce risk for distribution to the community
T6-14	Design, develop, and implement community networks to receive and provide information about issues that may affect the health of citizens

T7. Leadership

This category focuses on leadership competencies that build capacity, improve performance, and enhance the quality of the working environment. They also enable organizations and communities to create, communicate, and apply shared visions, missions, and values.

Competency Statement – Leadership	
T7-1	Identify solutions to environmental public health problems, with guidance from other CPHI(C) holders as applicable
T7-2	Explain performance standards in all Public Health programs
T7-3	Explain the CIPHI Code of Ethics to manage self in all areas of environmental public health, and act ethically with clients, information, and resources
T7-4	Explain the mission and priorities of the environmental public health organization where one works
T7-5	Assist employer organization to become/stay evidence based
T7-6	Explain the key values of the organization (employer) and follow a shared vision in the planning and implementation of environmental public health programs and policies in the community
T7-7	Explain and share knowledge, tools, expertise, and experience, e.g. in mentoring situations
T7-8	In committees, explain, use, and assess best practices and incorporate relevant guidelines into policies and practice
T7-9	Assess issues and recommend policies and practices that advance public health goals and organizational learning
T7-10	Recommend and apply key values of environmental public health programs and policies in the community
T7-11	Research and apply learning opportunities for environmental public health staff to build strong teams with different skill sets, and to promote sharing of knowledge, tools, expertise, and experience
T7-12	Analyze program activity data for inclusion in the organization's annual performance report
T7-13	Design, develop, and implement continuing education sessions for peers and related stakeholders on successes and challenges in delivering applicable environmental public health programs

Competency Statement – Leadership

T7-14

Design, implement, and evaluate quality assurance processes of all programs, policies, and best practices

T7-15

Evaluate the historical development, structure, and interaction of environmental public health and health care systems at the local, provincial/territorial, national, and international levels

T7-16

Implement and evaluate information about the economic and political implications of decisions

T7-17

Evaluate and provide direction and empathy when presented with staff concerns related to situations experienced in the field

T8. Legal and Regulatory

This category includes key knowledge and critical thinking skills related to the regulatory and legal context of the *practice*.

Competency Statement – Legal and Regulatory	
T8-1	Identify, understand, and follow the legal and regulatory context of the legislation applicable to the <i>practice</i>
T8-2	Identify and understand the relevant legislative infrastructure and roles of authority at the municipal, provincial, federal, and multi-jurisdictional levels
T8-3	Use legal and regulatory discretion when dealing with issues and problems in the <i>practice</i>
T8-4	When other strategies have been exhausted, identify and explain enforcement procedures (including applicable litigation processes) according to policy
T8-5	Identify and explain rationale for enforcement action on non-compliant practices
T8-6	Apply the underlying principles of <i>practice</i> legislation and hazard analysis/risk assessment
T8-7	Identify and assess recent legislative changes related to the <i>practice</i> , as applicable
T8-8	Apply enforcement procedures applicable to the situation
T8-9	Recommend specific actions or amendments to legislation based on the analysis of information
T8-10	Apply selected policies and applicable regulatory tools and options when non-compliance is observed
T8-11	Assess and provide recommendations in response to proposed policies, legislation, and standards that affect <i>practice</i> program delivery
T8-12	Analyze <i>practice</i> interventions that include enforcement leading to litigation
T8-13	Research, advocate, and apply proposed <i>practice</i> policies, legislation, and standards that improve current levels to protect the health and well-being of individuals and communities
T8-14	Implement and evaluate the limitations and uses of public health legislation, policies, and standards





▪ Appendices

Appendix A – Glossary

Please see Appendix B for a list of references.

Advocacy: Interventions such as speaking, writing or acting in favour of a particular issue or cause, policy or group of people. In the public health field, advocacy is assumed to be in the public interest, whereas lobbying by a special interest group may or may not be in the public interest. Advocacy often aims to enhance the health of disadvantaged groups such as First Nations communities, people living in poverty, or persons with HIV/AIDS. **(PHAC)**

Analysis: The examination and evaluation of relevant information in order to select the best course of action from among various alternatives. In public health, this requires the integration of information from a variety of sources. **(PHAC)**

Analyze: Break down into components or essential features; e.g. break down, compare, and/or correlate data available or provided to assist in understanding information. **(CIPHI)**

Apply: Be applicable to; as to an analysis. Use examples or provide action to illustrate statement.

Application: The use of previously learned information in new and concrete situations to solve problems that have single or best answers. Use knowledge of a procedure to apply it to a situation. **(CIPHI)**

Assessment: A formal method of evaluating a system or a process, often with both qualitative and quantitative components. **(PHAC)**

Attitude: A relatively stable belief or feeling about a concept, person or object. Attitudes can often be inferred by observing behaviors. Related to definition of values. (See definition – Values.) **(PHAC)**

Collaboration: A recognized relationship among different sectors or groups, which have been formed to take action on an issue in a way that is more effective or sustainable than might be achieved by the public health sector acting alone. **(PHAC)**

Communication skills: These are the skills required by CPHI(C) holders to transmit and receive ideas and information to and from involved individuals and groups. Communication skills include the ability to listen, and to speak and write in plain language; i.e. verbal skills, often reinforced with visual images. **(PHAC)**

Community participation: Procedures whereby members of a community participate directly in decision-making about developments that affect the community. It covers a spectrum of activities ranging from passive involvement in community life to intensive action-oriented participation in community development (including political initiatives and strategies). The Ottawa Charter for Health Promotion emphasizes the importance of concrete and effective community action in setting priorities for health, making decisions, planning strategies and implementing them to achieve better health. **(PHAC)**

Core competencies for public health: Core competencies are the essential knowledge, skills and attitudes necessary for the practice of public health. They transcend the boundaries of specific disciplines and are independent of program and topic. They provide the building blocks for effective public health practice, and the use of an overall public health approach. They are published in *Core Competencies for Public Health Release: 1.0. (PHAC)*

CPHI(C): The Certificate in Public Health Inspection (Canada), CPHI(C), is granted to those candidates who fulfill the requirements set forth in the Regulations Respecting the Certificate in Public Health Inspection (Canada) and Governing the Board of Certification of Public Health Inspectors. The CPHI(C) is a certificate of qualification and is intended to meet the needs of the provinces, municipalities, federal government, and other employers of qualified Public Health Inspectors. Candidates must meet educational and practicum requirements. They must hold a degree in a program of instruction approved by the Board of Certification. The Candidates must also satisfactorily complete a twelve (12) week minimum practicum in the basic inspection programs and complete a set of certification documents.

CPHI(C) holder: An individual who has been awarded the credential of CPHI(C) by the Board of Certification, Canadian Institute of Public Health Inspectors, and may have one or more post-secondary or graduate diplomas or degrees. May also be called Public Health Inspector (PHI), Environmental Health Officer (EHO), Environmental Public Health Professional (EPHP), Quality Assurance Manager, Water Inspector, Manager, Director or a Certified Sanitary Inspector (CSI).

Culturally-relevant (and appropriate): Recognizing, understanding and applying attitudes and practices that are sensitive to and appropriate for people with diverse cultural, socioeconomic, and educational backgrounds, and persons of all ages, genders, health status, sexual orientations and abilities. *(PHAC)*

Data: A set of facts; one source of information. (See definition – Information) *(PHAC)*

Demonstrate: Provide evidence for; stand as proof of; show by one's behavior, attitude, or external attributes. To show or make evident, by reasoning or proof; to prove by deduction; to establish so as to exclude the possibility of doubt or denial. To exhibit and explain. To display and explain the workings of a machine, product or specifics of a practice area. *(CIPHI)*

Demonstrate knowledge: The skills demonstrated for the practice area in question include: knowledge of major ideas, being able to describe, identify and explain the details of the subject matter, and examine the applicable processes. *(CIPHI)*

Describe: Give a description of; to give an account or representation of in words. *(CIPHI)*

Design: Plan or intend for a purpose; make or work out a plan for; devise. Conceive and produce a design for. Used when “applying knowledge”. See also “**Synthesis**” for more information. *(CIPHI)*

Determinants of health: Definable entities that cause, are associated with, or induce health outcomes. Public health is fundamentally concerned with action and advocacy to address the full range of potentially modifiable determinants of health – not only those which are related to the actions of individuals, such as health behaviours and lifestyles, but also factors such as income and social status, education, employment and working conditions, access to appropriate health services, and the physical environment. These, in combination, create different living conditions which impact on health. For more details, please visit www.phac-aspc.gc.ca/ph-sp/phdd/determinants. *(PHAC)*

Develop: Make something new, such as a product, or a mental or artistic creation. Also proposing or writing a procedure, policy, or activity. *(CIPHI)*

Diversity: The demographic characteristic of populations attributable to perceivable ethnic, linguistic, cultural, visible or social variation among groups of individuals in the general population. *(PHAC)*

Environmental Public Health Professional: A person working in the field/science/profession of Environmental Public Health. Different working titles are in use across Canada, e.g. Public Health Inspector and Environmental Health Officer. The National Executive Committee coined the term “Environmental Public Health Professional” during its 5-year strategic planning session to be consistent with US initiatives, and make the subtle distinction between human health protection work conducted by health agencies and the ecological protection and pollution prevention work conducted by environmental agencies. *(CIPHI)*

Ethics: The branch of philosophy dealing with distinctions between right and wrong, and with the moral consequences of human actions. Much of modern ethical thinking is based on the concepts of human rights, individual freedom and autonomy, and on doing good and not harming. The concept of equity, or equal consideration for every individual, is paramount. In public health, the community need for protection from risks to health may take precedence over individual human rights, for instance, when persons with a contagious disease are isolated and their contacts may be subject to quarantine. Finding a balance between the public health requirement for access to information and the individual’s right to privacy and to confidentiality of personal information may also be a source of tension. *(PHAC)*

Ethics (CIPHI)—code of ethics. In addition to the general definition of ethics above, also includes adhering to the Canadian Institute of Public Health Inspectors’ Code of Ethics as defined in its Constitution, to which every member signs a declaration to adhere to. *(CIPHI)*

Evaluation: Efforts aimed at determining, as systematically and objectively as possible, the effectiveness and impact of health-related (and other) activities in relation to objectives, taking into account the resources that have been used. *(PHAC)*

Evidence: Information such as analyzed data, published research findings, results of evaluations, prior experience, and/or expert opinions any or all of which may be used to reach conclusions on which decisions are based. *(PHAC)*

Explain: To make something plain or understandable; to give the reason for or cause of; to show the logical development or relationships of. Using knowledge of subject to provide information that helps to understand something. *(CIPHI)*

Hazard: Is a source of potential harm from past, current, or future exposures. *(ATSDR)*

Health hazard: a) A condition of a premise, (b) a substance, thing, plant or animal other than man, or (c) a solid, liquid, gas or combination of any of them, that has, or that is likely to have, an adverse effect on the health of any person. *(HPPA Ontario)*

(Health) planning: A set of practices and procedures that are intended to enhance the efficiency and effectiveness of health services and to improve health outcomes. This important activity of all health departments commonly includes short-term, medium-term, and long-range planning. Important considerations are resource allocation, priority setting, distribution of staff and physical facilities, planning for emergencies and ways to cope with extremes of demand and unforeseen contingencies, and preparation of budgets for future fiscal periods with a feasible time horizon, often 5 years ahead, and sometimes as far ahead as 10 or even 15 years. *(PHAC)*

Health policy: A course or principle of action adopted or proposed by a government, political party, organization, or individual; the written or unwritten aims, objectives, targets, strategy, tactics, and plans that guide the actions of a government or an organization. Policies have three interconnected and ideally continually evolving stages: development, implementation and evaluation. Policy development is the creative process of identifying and establishing a policy to meet a particular need or situation. Policy implementation consists of the actions taken to set up or modify a policy, and evaluation is the assessment of how, and how well, the policy works in practice. Health policy is often enacted through legislation or other forms of rule-making, which define regulations and incentives that enable the provision of and access to health and social services. *(PHAC)*

Health program: A description or plan of action for an event or sequence of actions or events over a period of time. More formally, an outline of the way a system or service will function, with specifics such as roles and responsibilities, expected expenditures, outcomes, etc. A health program is generally long term and often multifaceted, whereas a health project is short-term and usually narrowly focused activity. *(PHAC)*

Health promotion: The process of enabling people to increase control over, and to improve their health. It not only embraces actions directed at strengthening the skills and capabilities of individuals, but also action directed towards changing social, environmental, political and economic conditions so as to alleviate their impact on public and individual health. The Ottawa Charter for Health Promotion (1986) describes five key strategies for health promotion: build healthy public policy; create supportive environments; strengthen community action; develop personal skills; and re-orient health services. *(A public health system core function.) (PHAC)*

Health protection: A term to describe important activities of public health, in food hygiene, water purification, environmental sanitation, drug safety and other activities, that eliminate as far as possible the risk of adverse consequences to health attributable to environmental hazards. *(A public health system core function.) (PHAC)*

Identify: To recognize or be able to name, or to prove who or what (someone or something) is. To recognize a condition or situation that requires a specific action, or; results in a prescribed solution or action to be applied. *(CIPHI)*

Information: Facts, ideas, concepts and data that have been recorded, analyzed, and organized in a way that facilitates interpretation and subsequent action. *(PHAC)*

Interpret: To explain or tell the meaning of; present in understandable terms. **Note:** generally used when trying to understand a regulation, act, or by-law. In the process of interpreting (or translating) the legalese of same, an attempt is made to provide an explanation of it in plain and understandable language. *(CIPHI)*

Investigation: A systematic, thorough and formal process of inquiry or examination used to gather facts and information in order to understand, define and resolve a public health issue. *(PHAC)*

Implement: Apply in a manner consistent with its purpose or design. Ensure observance of laws and rules. *(CIPHI)*

Knowledge: Remembering (recalling) of appropriate, previously learned information related to the Practice Area. *(CIPHI)*

Leadership: Leadership is described in many ways. In the field of public health it relates to the ability of an individual to influence, motivate, and enable others to contribute toward the effectiveness and success of their community and/or the organization in which they work. It involves inspiring people to craft and achieve a vision and goals. Leaders provide mentoring, coaching and recognition. They encourage empowerment, allowing other leaders to emerge. **(PHAC)**

Lifelong learning: A broad concept where education that is flexible, diverse and available at different times and places is pursued throughout life. It takes place at all levels—formal, non-formal and informal—utilizing various modalities such as distance learning and conventional learning. **(PHAC)**

Managers: Public health staff who are responsible for major programs or functions. Typically, they have staff who report to them. Sometimes senior managers come from sectors other than public health and therefore rely heavily on specialists and other public health professionals for content expertise and advice. In other situations, managers with public health experience and qualifications are expected to bring more content knowledge. **(PHAC)**

Mediate: A process through which the different interests (personal, social, economic) of individuals and communities, and different sectors (public and private) are reconciled in ways that promote and protect health. Facilitating change in peoples' lifestyles and living conditions inevitably produces conflicts between the different sectors and interests in a population. Reconciling such conflicts in ways that promote health may require considerable input from public health practitioners, including the application of skills in advocacy for health. **(PHAC)**

Mission: The purpose for which an organization, agency or service exists, often summarized in a mission statement. **(PHAC)**

Outbreak: The occurrence, in a community or region, of cases of an illness with a frequency clearly in excess of normal expectancy. The number of cases indicating presence of an outbreak will vary according to the infectious agent, size and type of population exposed, previous experience or lack of exposure to the disease, and time and place of occurrence. Therefore, the status of an outbreak is relative to the usual frequency of the disease in the same area, among the same population, at the same season of the year. **(APHA)**

Partnerships: Collaboration between individuals, groups, organizations, governments or sectors for the purpose of joint action to achieve a common goal. The concept of partnership implies that there is an informal understanding or a more formal agreement (possibly legally binding) among the parties regarding roles and responsibilities, as well as the nature of the goal and how it will be pursued. **(PHAC)**

Performance standards: The criteria, often determined in advance, e.g. by an expert committee, by which the activities of health professionals or the organization in which they work, are assessed. **(PHAC)**

Population health assessment: Population health assessment entails understanding the health of populations and the factors that underlie health and health risks. This is frequently manifested through community health profiles and health status reports that inform priority setting and program planning, delivery, and evaluation. Assessment includes consideration of physical, biological, behavioural, social, cultural, economic and other factors that affect health. The health of the population or a specified subset of the population can be measured by health status indicators such as life expectancy and hospital admission rates.
(A public health system core function.) (PHAC)

Practice – Refer to Practice Area. When reading the competency statements in this document, the word *Practice* should be replaced with the relevant practice area(s) that a CPHI(C) holder works in and/or want to assess.

Practice Area – Related to Environmental Public Health: Specific public health activities, programs, services and roles/responsibilities in which environmental public health professionals function. The activities described in each practice area are not all inclusive and do not represent all of the potential activities that an environmental public health professional may be involved in. **(CIPHI)**

Practitioner: Public health staff who have post-secondary education and experience in the field of public health. Practitioners have sufficient relevant experience to work independently, with minimal supervision. Practitioners carry out the bulk of day-to-day tasks in the public health sector. They work directly with clients, contractors, other professionals, owner/operators, and government agencies, including individuals, families, groups and communities. Responsibilities may include information collection and analysis, fieldwork, program planning, outreach activities, program and service delivery, and other organizational tasks. Examples of practitioners are public health nurses, environmental public health professionals, public health dietitians, dental hygienists and health promoters. **(PHAC), (CIPHI)**

Prepare: To work out the details of, plan in advance.

Principle: A basic idea or rule that explains or controls how something happens or works.

Proficient: Having or showing knowledge, skill, and aptitude in public health.

Public health: An organized activity of society to promote, protect, improve, and when necessary, restore the health of individuals, specified groups, or the entire population. It is a combination of sciences, skills, and values that function through collective societal activities and involve programs, services, and institutions aimed at protecting and improving the health of all people. The term “public health” can describe a concept, a social institution, a set of scientific and professional disciplines and technologies, and a form of practice. It is a way of thinking, a set of disciplines, an institution of society, and a manner of practice. It has an increasing number and variety of specialized domains and demands of its practitioners an increasing array of skills and expertise. **(PHAC)**

Public health practitioner: May also be called public health professional, public health worker. A generic term for any person who works in a public health service or setting. They may be classified according to profession (public health inspector, environmental health officer, nurse, physician, dietitian, etc.); according to role and function (direct contact with members of the public or not); whether their role is hands-on active interventions or administrative; or in various other ways. **(PHAC), (CIPHI)**

Public health sciences: A collective name for the scholarly activities that form the scientific base for public health practice, services, and systems. Until the early 19th century, scholarly activities were limited to natural/biological sciences sometimes enlightened by empirical logic. The scientific base has broadened to include vital statistics, epidemiology, environmental sciences, biostatistics, microbiology, social and behavioral sciences, demography, genetics, nutrition, molecular biology, and more. **(PHAC)**

Recognize: To be fully aware or cognizant of; to be aware of the significance of; to recognize a health hazard. **(CIPHI)**

Recommend: To push for something; express a good opinion of; to represent as being worthy of regard or confidence; give endorsement of; to put forward ideas to somebody who has to decide what to do. **(CIPHI)**

Research: Activities designed to develop or contribute to knowledge, e.g. theories, principles, relationships, or the information on which these are based. Research may be conducted simply by observation and inference, or by the use of experiment, in which the researcher alters or manipulates conditions in order to observe and study the consequences of doing so. In public health, there is an ill-defined distinction between research and routine surveillance, case finding, etc. Qualitative research aims to do in-depth exploration of a group or issue, and the methods used often include focus groups, interviews, life histories, etc. *(PHAC)*

Risk: The probability that something will cause injury or harm, or the likelihood of harm. *(Agency for Toxic Substances and Disease Registry)*

Social marketing: The design and implementation of health communication strategies intended to influence behaviour or beliefs relating to the acceptability of an idea such as desired health behaviour, or a practice such as safe food hygiene, by a target group in the population. *(PHAC)*

Specialist: Specialists are public health staff who are likely to have advanced preparation in a special content area or a specific set of skills. They provide expert advice and support to front line providers and managers although they may also work directly with clients. Examples of specialists include epidemiologists, community medicine specialists, environmental health scientists, evaluators, nurse practitioners and advanced practice nurses. *(PHAC)*

Surveillance: Systematic, ongoing collection, collation, and analysis of health-related information that is communicated in a timely manner to all who need to know which health problems require action in their community. Surveillance is a central feature of epidemiological practice, where it is used to control disease. Information that is used for surveillance comes from many sources, including reported cases of communicable diseases, hospital admissions, laboratory reports, cancer registries, population surveys, reports of absence from school or work, and reported causes of death. *(A public health system core function.) (PHAC)*

Sustainable development: The use of resources, investments, technology and institutional development in ways that do not compromise the health and well-being of future generations. There is no single best way of organizing the complex development-environment-health relationship that reveals all the important interactions and possible entry points for public health interventions. *(PHAC)*

Use: To put into service; make work or employ (something) for a particular purpose or for its inherent or natural purpose; to put something into action or service for some purpose; to make use of something such as a tool or a resource in a particular way. *(CIPHI)*

Values: The beliefs, traditions and social customs held dear and honoured by individuals and collective society. Moral values are deeply believed, change little over time and are often grounded in religious faith. They include beliefs about the sanctity of life, the role of families in society, and protection from harm of infants, children and other vulnerable people. Social values are more flexible and may change as individuals undergo experience. These may include beliefs about the status and roles of women in society, or attitudes towards use of alcohol, tobacco and other substances. Values can affect behaviour and health either beneficially or harmfully. *(PHAC)*

Vision: If a strategic plan is the “blueprint” for an organization’s work, then the vision is the “artist’s rendering” of the achievement of that plan. It is a description in words that conjures up the ideal destination of the group’s work together. *(PHAC)*

Working environment: A setting in which people work. This comprises not merely the physical environment and workplace hazards, but also the social, cultural and psychological setting that may help to induce harmony among workers, or the opposite – tension, friction, distrust and animosity which can interfere with well-being and aggravate risks of injury. *(PHAC)*

Appendix B – References



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Appendix C – Environmental Public Health Practice Areas

This section describes the key activities for each practice area. The descriptions do not represent all of the activities that a CPHI(C) holder may be involved in. The practice areas, related activities, and legislation may vary greatly across the country. Cross-area collaboration is very common. The statements are, however, intended to describe the main functions and activities that a CPHI(C) holder is expected to address in the practice area.

1. Safe Food

The Safe Food practice area includes activities such as:

- food safety in public facilities such as community centres, hospitals, long term care homes, day cares, and schools
- HACCP based principles
- Critical Control Point verification
- inspection/assessment
- food handler training
- food borne illness investigations
- consumer complaints
- allergies
- food recalls
- public food safety knowledge
- enforcement of applicable legislation

2. Safe Water

The Safe Water practice area includes activities related to both safe drinking water and safe recreational water such as:

- public premise water supplies and treatment processes, including water in public facilities such as community centres, hospitals, long term care homes, day cares, and schools
- private water supplies and treatment processes
- water systems inspections and assessments
- water transportation
- bottled water
- results interpretation
- consultation

- investigating water borne illness, and acute and chronic disease conditions from waterborne sources
- Boil Water/Drinking Water Advisories or Orders issued and released
- recreational water related to swimming pools, wading pools, spas, slides, public beaches, and theme parks
- pool operator training
- enforcement of applicable legislation

3. Health Hazard Management

The Health Hazard Management practice area includes activities related to hazard investigation, assessment and surveillance, specifically:

- ensuring safe build environments and safe housing including playgrounds, schools, day cares, work camps, rental housing, noise pollution, body piercing/tattoo facilities, and long term care facilities
- safe indoor air quality in facilities such as schools, day cares, continuing care facilities, bingo halls, and arenas
- outdoor air quality issues
- housing complaints/investigations
- nuisance controls
- pest and vector control
- spills risk assessment and investigation
- pesticides, chemical, biological, radiological, nuclear and physical hazards/use/abuse
- waste management including landfill issues, biological-biomedical wastes, recycling issues, and contaminated sites
- enforcement of applicable legislation

4. Disease and Injury

The Disease and Injury practice area includes activities related to:

- single case investigations, outbreaks including food borne, water borne, SARS, noroviruses, and vector borne diseases
- infection control investigations in public facilities such as community centres, schools, hospitals, long term care homes, and group homes
- investigations in personal services settings including tattoo, massage, piercing, and beauty salons
- asthma, injuries, cancer, heart health, skin and eye problems, poor birth outcomes, noise induces hearing loss, and poisonings
- enforcement of applicable legislation

5. Healthy Living and Healthy Community Environments

The Healthy Living and Healthy Community Environments practice area includes activities related to:

- tobacco enforcement, including sales to minors and display of tobacco products
- smoking in public areas, school properties, public buildings, and workplaces
- health promotion to impact individuals to make more healthy lifestyle choices, e.g. healthy eating
- injury prevention strategies for physical, social, natural and built environments, e.g. playground, housing, and building code risk assessments
- substance abuse reduction
- land use and healthy community planning
- wastewater – land management including onsite sewage disposal, storm water issues, land development, source water protection, and municipal sewage treatment
- environmental assessment reviews
- enforcement of applicable legislation

Activities in this practice area are delivered from an environmental public health perspective.

6. Emergency Preparedness

The Emergency Preparedness practice area includes activities related to:

- disaster preparation/planning
- site management
- environmental public health emergency response procedures
- incident management systems and role/response of CPHI(C) holders to CBRN (chemical, biological, radiological, and nuclear) incidents
- enforcement of applicable legislation

This practice area also includes health hazards related to emerging health issues as they arise, where an emergency response is applicable/appropriate (i.e. may be related to extreme weather, climate change, and indoor and outdoor air quality).

Appendix D – Public Health Agency of Canada Core Competencies for Public Health Release: 1.0

One ... Public Health Sciences

This category includes key knowledge and critical thinking skills related to the public health sciences: behavioural and social sciences, biostatistics, epidemiology, environmental public health, demography, workplace health, and the prevention of chronic diseases, infectious diseases, psychosocial problems and injuries. Competency in this category requires the ability to apply knowledge in practice.

A public health practitioner is able to ...

- 1.1. Demonstrate knowledge about the following concepts: the health status of populations, inequities in health, the determinants of health and illness, strategies for health promotion, disease and injury prevention and health protection, as well as the factors that influence the delivery and use of health services.
- 1.2. Demonstrate knowledge about the history, structure and interaction of public health and health care services at local, provincial/territorial, national, and international levels.
- 1.3. Apply the public health sciences to practice.
- 1.4. Use evidence and research to inform health policies and programs.
- 1.5. Demonstrate the ability to pursue lifelong learning opportunities in the field of public health.

Two ... Assessment and Analysis

This category describes the core competencies needed to collect, assess, analyze and apply information (including data, facts, concepts and theories). These competencies are required to make evidence-based decisions, prepare budgets and reports, conduct investigations and make recommendations for policy and program development.

A public health practitioner is able to ...

- 2.1. Recognize that a health concern or issue exists.
- 2.2. Identify relevant and appropriate sources of information, including community assets and resources.
- 2.3. Collect, store, retrieve and use accurate and appropriate information on public health issues.
- 2.4. Analyze information to determine appropriate implications, uses, gaps and limitations.
- 2.5. Determine the meaning of information, considering the current ethical, political, scientific, socio-cultural and economic contexts.

2.6 Recommend specific actions based on the analysis of information.

Three ... Policy and Program Planning, Implementation and Evaluation

This category describes the core competencies needed to effectively choose options, and to plan, implement and evaluate policies and/or programs in public health. This includes the management of incidents such as outbreaks and emergencies.

A public health practitioner is able to ...

- 3.1 Describe selected policy and program options to address a specific public health issue.
- 3.2 Describe the implications of each option, especially as they apply to the determinants of health and recommend or decide on a course of action.
- 3.3 Develop a plan to implement a course of action taking into account relevant evidence, legislation, emergency planning procedures, regulations and policies.
- 3.4 Implement a policy or program and/or take appropriate action to address a specific public health issue.
- 3.5 Demonstrate the ability to implement effective practice guidelines.
- 3.6 Evaluate an action, policy or program.
- 3.7 Demonstrate an ability to set and follow priorities, and to maximize outcomes based on available resources.
- 3.8 Demonstrate the ability to fulfill functional roles in response to a public health emergency.

Four ... Partnerships, Collaboration and Advocacy

This category captures the competencies required to influence and work with others to improve the health and well-being of the public through the pursuit of a common goal. Partnership and collaboration optimizes performance through shared resources and responsibilities. Advocacy-speaking, writing or acting in favour of a particular cause, policy or group of people - often aims to reduce inequities in health status or access to health services.

A public health practitioner is able to ...

- 4.1 Identify and collaborate with partners in addressing public health issues.
- 4.2 Use skills such as team building, negotiation, conflict management and group facilitation to build partnerships.
- 4.3 Mediate between differing interests in the pursuit of health and well-being, and facilitate the allocation of resources.
- 4.4 Advocate for healthy public policies and services that promote and protect the health and well-being of individuals and communities.

Five ... Diversity and Inclusiveness

This category identifies the socio-cultural competencies required to interact effectively with diverse individuals, groups and communities. It is the embodiment of attitudes and practices that result in inclusive behaviours, practices, programs and policies.

A public health practitioner is able to...

- 5.1 Recognize how the determinants of health (biological, social, cultural, economic and physical) influence the health and well-being of specific population groups.
- 5.2 Address population diversity when planning, implementing, adapting and evaluating public health programs and policies.
- 5.3 Apply culturally-relevant and appropriate approaches with people from diverse cultural, socioeconomic and educational backgrounds, and persons of all ages, genders, health status, sexual orientations and abilities.

Six ... Communication

Communication involves an interchange of ideas, opinions and information. This category addresses numerous dimensions of communication including internal and external exchanges; written, verbal, non-verbal and listening skills; computer literacy; providing appropriate information to different audiences; working with the media and social marketing techniques.

A public health practitioner is able to...

- 6.1 Communicate effectively with individuals, families, groups, communities and colleagues.
- 6.2 Interpret information for professional, non-professional and community audiences.
- 6.3 Mobilize individuals and communities by using appropriate media, community resources and social marketing techniques.
- 6.4 Use current technology to communicate effectively.

Seven ... Leadership

This category focuses on leadership competencies that build capacity, improve performance and enhance the quality of the working environment. They also enable organizations and communities to create, communicate and apply shared visions, missions and values.

A public health practitioner is able to...

- 7.1 Describe the mission and priorities of the public health organization where one works, and apply them in practice.
- 7.2 Contribute to developing key values and a shared vision in planning and implementing public health programs and policies in the community.
- 7.3 Utilize public health ethics to manage self, others, information and resources.
- 7.4 Contribute to team and organizational learning in order to advance public health goals.
- 7.5 Contribute to maintaining organizational performance standards.
- 7.6 Demonstrate an ability to build community capacity by sharing knowledge, tools, expertise and experience.

Appendix E – CPHI(C)

CIPHI currently awards the Certificate in Public Health Inspection (Canada), CPHI(C)⁵. The certificate is granted to those candidates who fulfill the requirements set forth in the Regulations Respecting the Certificate in Public Health Inspection (Canada) and Governing the Board of Certification of Public Health Inspectors.

The CPHI(C) is a certificate of qualification and is intended to meet the needs of the provinces, municipalities, federal government, and other employers of qualified professionals in the field.

To obtain the certificate, candidates must meet educational and practical requirements. They must hold a degree in a program of instruction approved by the Board of Certification. Candidates must also satisfactorily complete a twelve (12) week minimum practicum in the basic inspection programs and complete a set of certification documents.

The CPHI(C) outlines the theoretical and practical requirements for recent graduates and entry-level professionals. The discipline specific competencies in this document establish criteria for self-assessing competency and engaging in continued development once the CPHI(C) has been awarded.

⁵ CIPHI (2009): <http://www.ciphi.ca/boc.htm>.

