



SACRED WAYS OF LIFE



TRADITIONAL KNOWLEDGE



PREPARED FOR THE FIRST NATIONS CENTRE
NATIONAL ABORIGINAL HEALTH ORGANIZATION
2005



SACRED WAYS OF LIFE

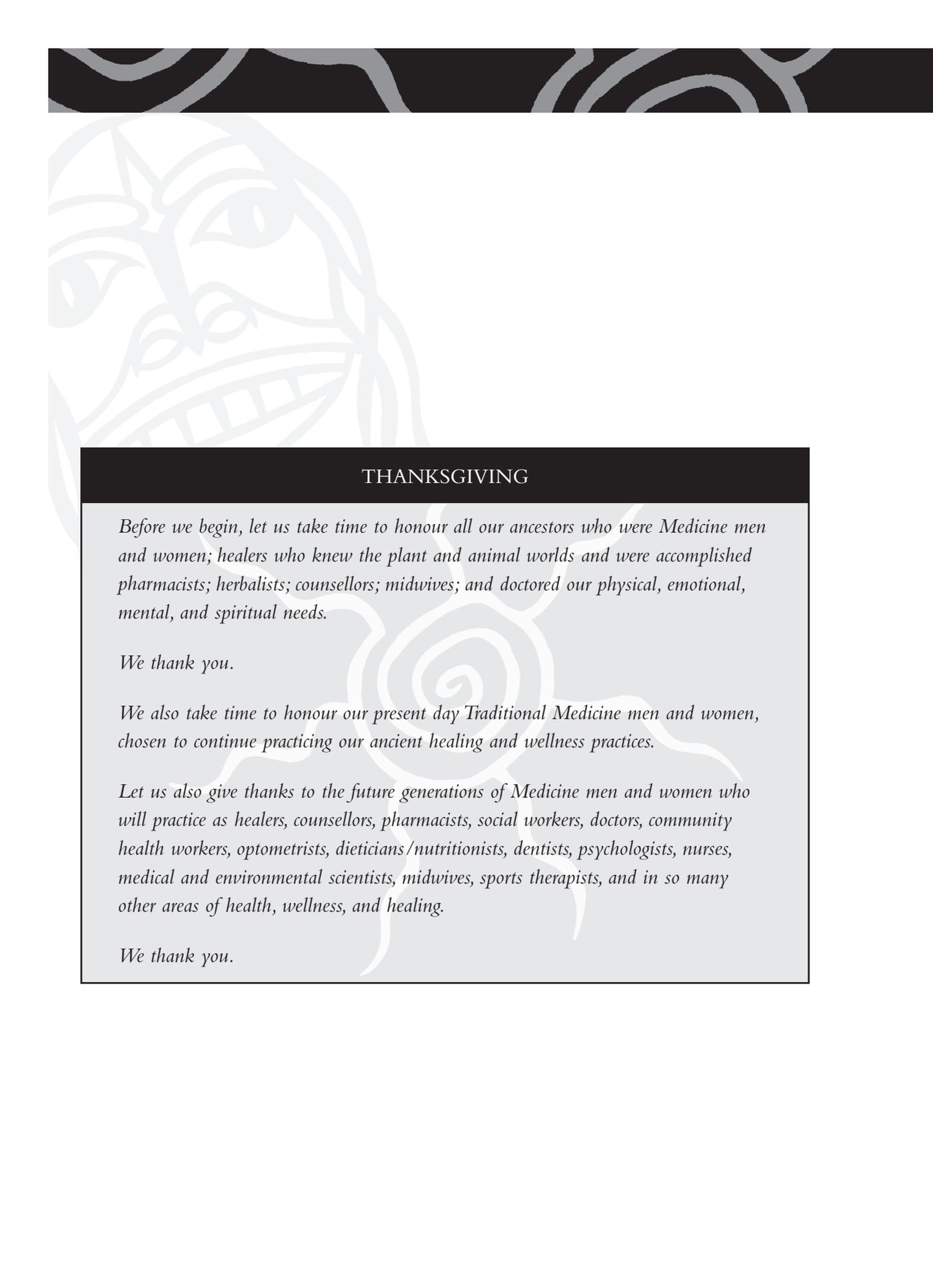


TRADITIONAL KNOWLEDGE



PREPARED BY:
CHELSEA CROWSHOE,
CROWSHOE CONSULTING INC.

PREPARED FOR THE FIRST NATIONS CENTRE
NATIONAL ABORIGINAL HEALTH ORGANIZATION
2005



THANKSGIVING

Before we begin, let us take time to honour all our ancestors who were Medicine men and women; healers who knew the plant and animal worlds and were accomplished pharmacists; herbalists; counsellors; midwives; and doctored our physical, emotional, mental, and spiritual needs.

We thank you.

We also take time to honour our present day Traditional Medicine men and women, chosen to continue practicing our ancient healing and wellness practices.

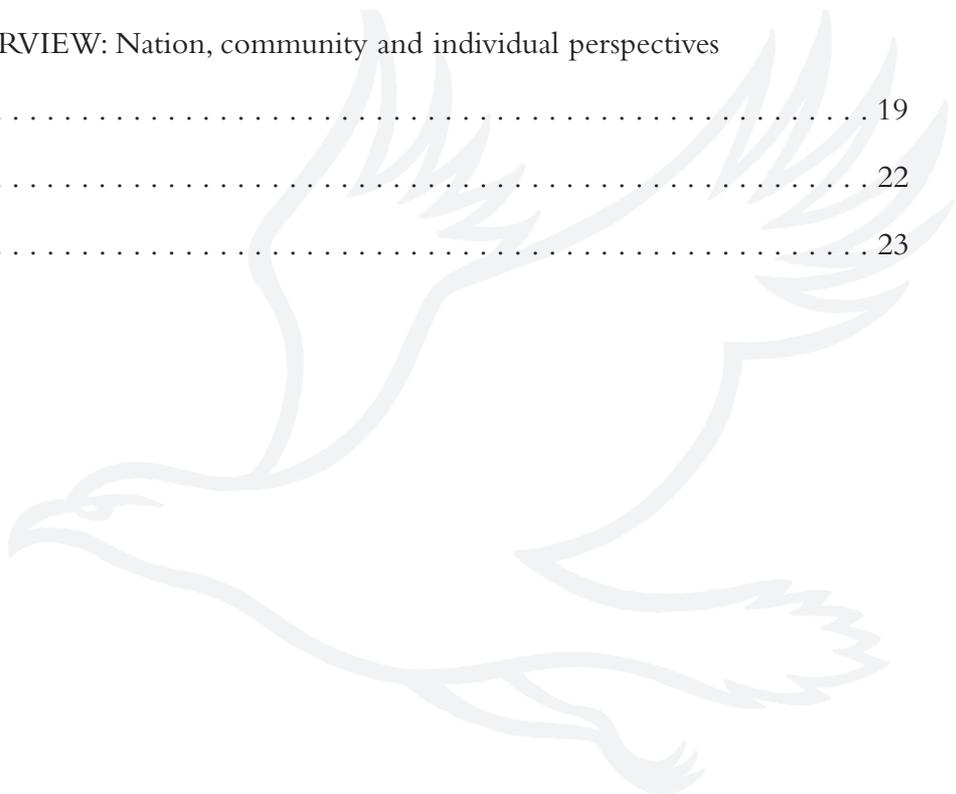
Let us also give thanks to the future generations of Medicine men and women who will practice as healers, counsellors, pharmacists, social workers, doctors, community health workers, optometrists, dieticians/nutritionists, dentists, psychologists, nurses, medical and environmental scientists, midwives, sports therapists, and in so many other areas of health, wellness, and healing.

We thank you.



Table of contents

Introduction	1
What is traditional knowledge?	2
Traditional knowledge and the law	3
Western and First Nations ways of life	6
Western ways of life	6
First Nations ways of life	6
Tools for maintaining traditional knowledge	10
Tool 1 — Develop a First Nations research committee	10
Tool 2 — Developing policies and setting objectives	11
Tool 3 — Curriculum/apprenticeship programs	13
Tool 4 — Traditional healer professional regulation (code of ethics/behaviour) ..	14
Tool 5 — Language retention	16
TOOL OVERVIEW: Nation, community and individual perspectives	
Glossary	19
Resources	22
Endnotes	23





Introduction

This tool kit gives an overview of what traditional knowledge means to First Nations and the important role it can play in our lives. This tool kit is one in a series offered by the First Nations Centre (FNC) at the National Aboriginal Health Organization (NAHO). The other available tool kits are about:

- privacy;
- surveillance;
- research; and
- ethics.

This tool kit:

- focuses on issues around ways of protecting and maintaining traditional knowledge;
- explains how the law views traditional knowledge;

- compares First Nations and western ways of knowing;
- explores tools and other resources for maintaining traditional knowledge; and
- explains terms that may be unfamiliar (in the glossary).

For more information, or to order copies of this tool kit, please contact us at:

First Nations Centre (FNC)
National Aboriginal Health Organization (NAHO)

Toll Free: 1-877-602-4445

E-mail: fnc@naho.ca;
www.naho.ca/fnc

VISION

Our strength is our knowledge and the foundation of healthy people, healthy communities and healthy nations.

MISSION

To advance First Nations health knowledge. The FNC respects First Nations aspirations for self-determination, distinctiveness, and diversity. Working with First Nations, the FNC creates, promotes, and shares health information and research. The FNC develops tools and processes that help build capacity and transfer knowledge.

What is traditional knowledge?

There are many ways of describing the sacred ways of life of First Nations. The terms “traditional knowledge” and “ways of knowing” are used interchangeably. The word traditional is not seen as something old, but as something based in tradition. Traditional knowledge is something created, preserved, and dispersed.¹

First Nations use the term traditional knowledge to describe information passed from generation-to-generation. This information may be rooted in:

- storytelling;
- ceremonies;
- traditions;
- ideologies;
- medicines;
- dances;
- arts and crafts; or
- a combination of all these.

Everyone in a community or culture holds traditional knowledge because it is collective.² Traditional knowledge is determined by a First Nation’s land, environment, region, culture and language. The World Health Organization (WHO) defines traditional medicine, which forms part of traditional knowledge, as follows:



World Health Organization
<http://www.who.int>

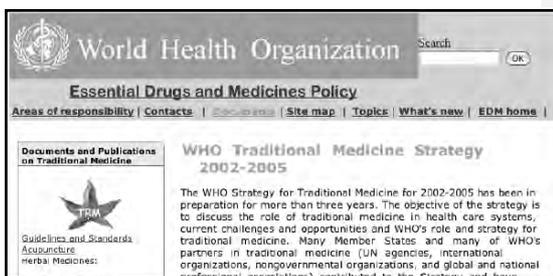
The sum total of knowledge, skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness.³

Traditional knowledge is shared through ways of exchanging cultural and traditional information, such as storytelling. People such as Elders and healers usually share this knowledge with others in the community.

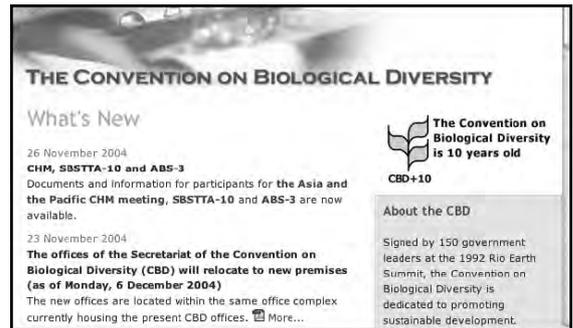
Traditional knowledge and the law

In the times of our ancestors, our peoples had protocols, customary laws and social conventions that regulated social behaviour. These protocols informed people how to obtain objects, such as medicines, through stories and ceremonies. With European contact, and the foreign rules they brought with them, many First Nations protocols were overshadowed or forgotten. Traditional knowledge was not seen as equal to western knowledge. Yet the importance of the rules and protocols for our traditional knowledge is a growing issue for maintaining and rebuilding our cultures and ways of life.

Because of the significance of traditional knowledge, First Nations are raising the issue of protecting the traditional knowledge of indigenous peoples with governments and international organizations. The World Health Organization (WHO), for example, is an international body that is part of the United Nations. Its objective is to have people attain the highest possible level of health. WHO's *Traditional Medicine Strategy 2002-2005*



WHO Traditional Medicine

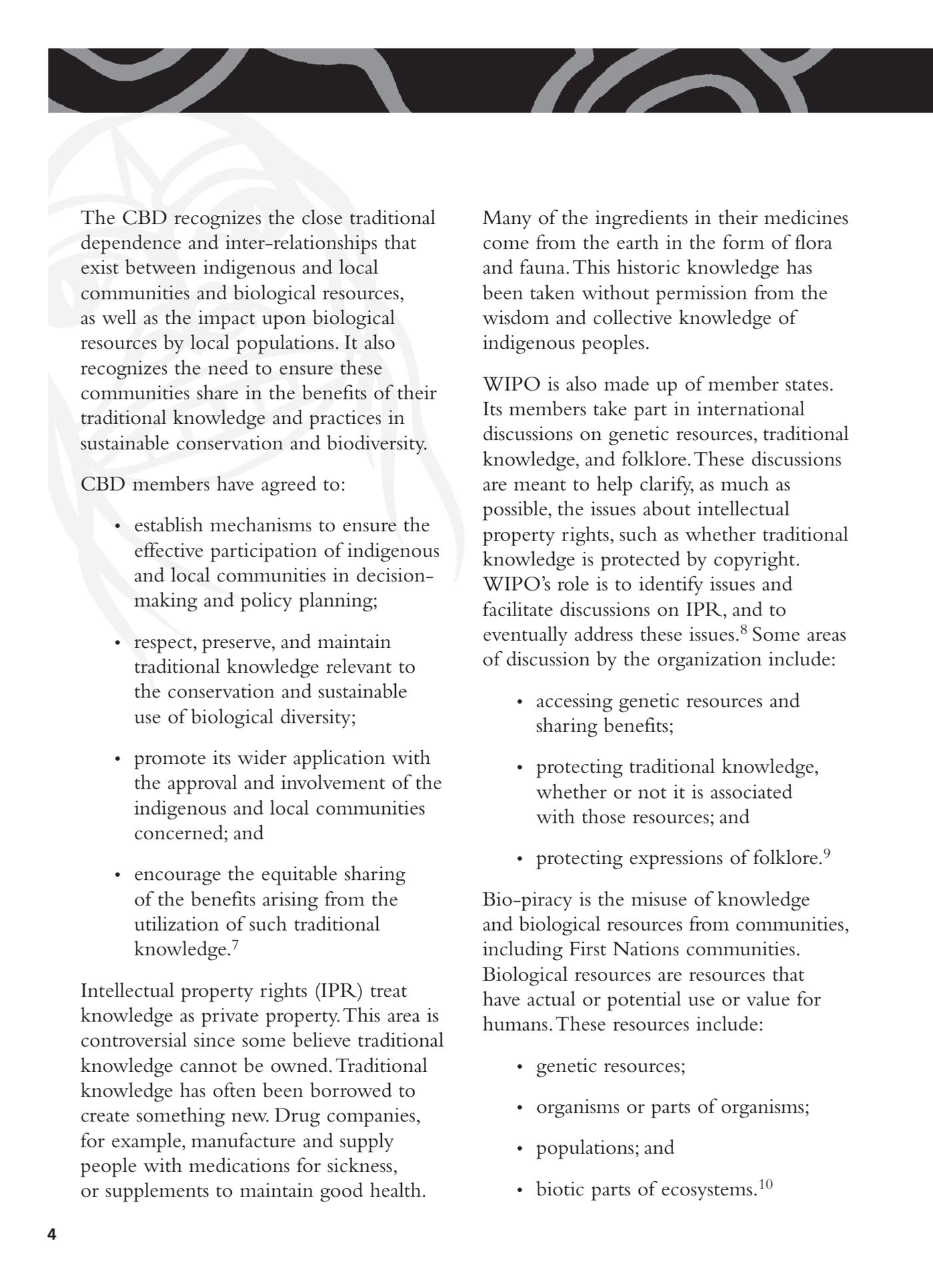


Convention on Biological Diversity

recognizes the important role of traditional knowledge and medicines in the health and well-being of indigenous peoples around the world.⁴

Two other organizations that recognize traditional knowledge are the Convention on Biological Diversity (CBD) and the World Intellectual Property Organization (WIPO).

The CBD is made up of member states that have signed agreements to support its objective to maintain the conservation of biological diversity, the use of its parts, and the fair and equitable sharing of the benefits gained from using genetic resources.⁵ CBD defines biological diversity as the variability among living organisms from all sources including terrestrial, marine, and other aquatic ecosystems and includes their ecological complexes. It also includes diversity within species, between species, and of ecosystems.⁶ Canada has been a CBD member since 1992.



The CBD recognizes the close traditional dependence and inter-relationships that exist between indigenous and local communities and biological resources, as well as the impact upon biological resources by local populations. It also recognizes the need to ensure these communities share in the benefits of their traditional knowledge and practices in sustainable conservation and biodiversity.

CBD members have agreed to:

- establish mechanisms to ensure the effective participation of indigenous and local communities in decision-making and policy planning;
- respect, preserve, and maintain traditional knowledge relevant to the conservation and sustainable use of biological diversity;
- promote its wider application with the approval and involvement of the indigenous and local communities concerned; and
- encourage the equitable sharing of the benefits arising from the utilization of such traditional knowledge.⁷

Intellectual property rights (IPR) treat knowledge as private property. This area is controversial since some believe traditional knowledge cannot be owned. Traditional knowledge has often been borrowed to create something new. Drug companies, for example, manufacture and supply people with medications for sickness, or supplements to maintain good health.

Many of the ingredients in their medicines come from the earth in the form of flora and fauna. This historic knowledge has been taken without permission from the wisdom and collective knowledge of indigenous peoples.

WIPO is also made up of member states. Its members take part in international discussions on genetic resources, traditional knowledge, and folklore. These discussions are meant to help clarify, as much as possible, the issues about intellectual property rights, such as whether traditional knowledge is protected by copyright. WIPO's role is to identify issues and facilitate discussions on IPR, and to eventually address these issues.⁸ Some areas of discussion by the organization include:

- accessing genetic resources and sharing benefits;
- protecting traditional knowledge, whether or not it is associated with those resources; and
- protecting expressions of folklore.⁹

Bio-piracy is the misuse of knowledge and biological resources from communities, including First Nations communities. Biological resources are resources that have actual or potential use or value for humans. These resources include:

- genetic resources;
- organisms or parts of organisms;
- populations; and
- biotic parts of ecosystems.¹⁰



As part of traditional knowledge, traditional medicine falls under the definition of genetic resources.

IPR are one means of protecting the rights of a person or group to benefit from their discoveries, creations, and products. Western thought on IPR focuses on personal economic gain and the promotion of innovation and research. This focus on personal gain exploits and erodes First Nations cultures and identities. Many First Nations' world views, or understandings of their particular reality, place more importance on community or collective gain (i.e., supporting collective over personal rights to traditional knowledge).

Traditional knowledge is now recognized more for its importance to First Nations communities and nations. First Nations are increasingly involved in making decisions related to land through co-management arrangements with governments and organizations. These co-management practices are involving First Nations peoples and their traditional knowledge in decision-making processes.¹¹ This happens nationally and internationally. Examples include:

National

- National Biodiversity Strategy;
- National Forestry Strategy;
- Canada National Parks Act; and
- Inuit Impact and Benefit Agreement for Territorial Parks.

International

- International Joint Commission, Boundary Waters Treaty, created to manage lakes and rivers that cross the international boundary of Canada and the United States. The commission sets water levels, approves applications for the construction of dams or canals and investigates water and air pollution;
- Parksville Protocol, Protection of Migratory Birds in Canada and the United States;
- Agreement on the Conservation of Polar Bears;
- Treaty between the Government of Canada and the United States Concerning Pacific Salmon;
- Agreement between the Government of Canada and the United States on the Conservation of the Porcupine Caribou Herd;
- North American Bird Conservation Initiative.

All of these agreements and strategies recognize the importance of First Nations' knowledge of the land. The agreements include some form of First Nations membership for giving important feedback and input on the subject.



Western and First Nations ways of life

Western ways of life

Western ways of knowing are rooted in academics, science, and literature. They lack the lived experience that First Nations peoples emphasize. Quantitative evidence and numbers are important to western thought, which often sees things in absolutes, or what can be seen and scientifically proven. This is clear when looking at the western medical model. Illness is seen as coming from the body and its parts. People; their surroundings (environment); and relationships with others, nature and the spirit world are not often considered.

First Nations ways of life

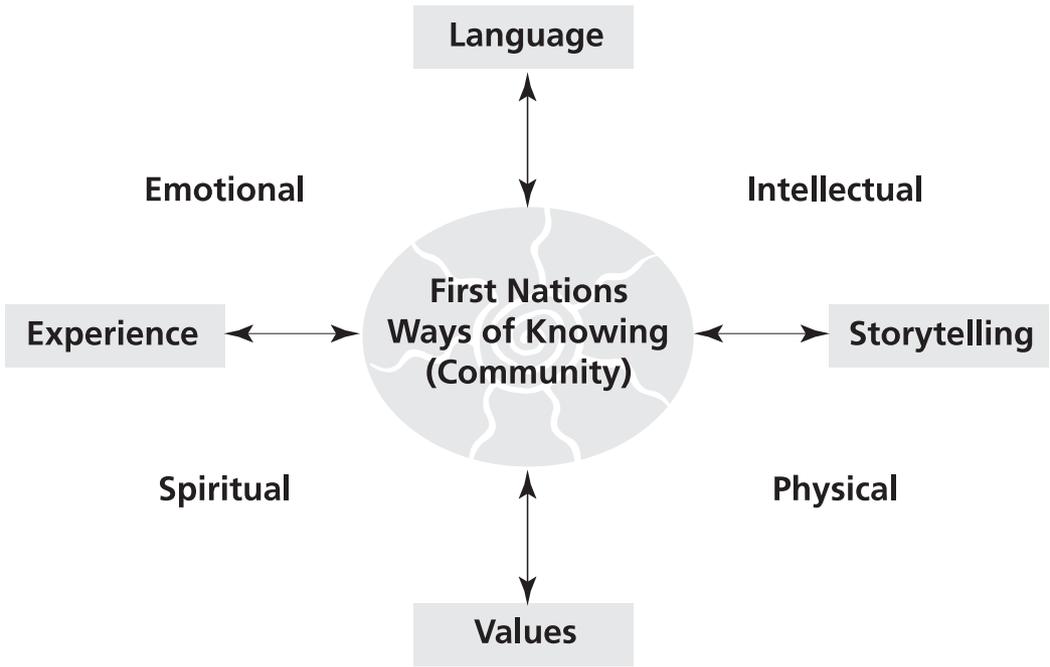
Some First Nations peoples follow the medicine wheel. It includes physical, emotional, intellectual, and spiritual aspects. Each of these areas is connected to Mother Earth. It also focuses on balance. When one area is not working as well as it should, the other three areas are also affected. First Nations knowledge stems from the Elders' understanding of needs and using the Earth's gifts for these needs.¹²

Uniquely, First Nations cultures are based on beliefs about the Earth, animals and plants from time immemorial. This knowledge maintains who we are and what is passed on to future generations.

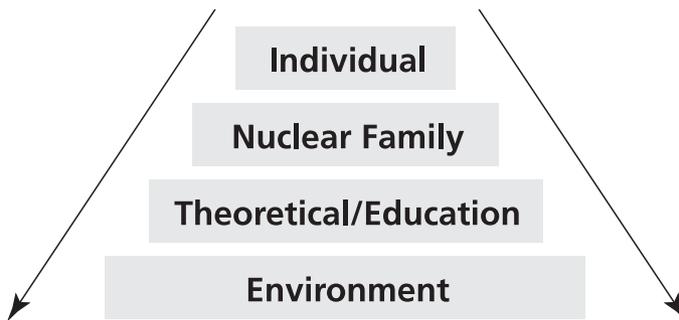
Lived experience is central to First Nations knowledge. It is part of how we make sense of, and share information. Storytelling is also a vital part of keeping our cultures alive. Teaching was done through stories passed on by Elders when there were no writing tools such as paper, pen, and pencil.

Language is also a very important part of maintaining traditional knowledge. With more technology, language has had to adapt to changes by making words for new objects. In many First Nations languages there are words that do not easily translate to another language. Meanings are learned and passed on through ceremonies, cultures, and crafts.

First Nations ways of knowing



Western ways of knowing



Comparisons between traditional and scientific knowledge styles ¹³

The following table has been taken from the Alaska Native Science website at:
www.nativescience.org/html/traditional_and_scientific.html.

TRADITIONAL KNOWLEDGE	SCIENTIFIC KNOWLEDGE
Assumed to be the truth	Assumed to be a best approximation
Sacred and interconnected	Secular (non-religious) segregated
Teaching through storytelling	Formal teaching
Learning by doing and experiencing	Learning by formal education (molding)
Oral and visual	Written
Integrated, based on whole system	Analytical, based on parts of the whole
Intuitive	Model or theory based
Holistic (based on complete systems)	Reductionist (reduces complex systems to simpler systems)
Subjective (based on personal experience/beliefs)	Objective (not based on personal opinion)
Experiential (based on experience)	Positivist (based on facts)

Comparisons between traditional and scientific knowledge in use ¹⁴

The following table has been taken from the Alaska Native Science website at:
www.nativescience.org/html/traditional_and_scientific.html.

TRADITIONAL KNOWLEDGE	SCIENTIFIC KNOWLEDGE
Transfer of knowledge takes a long time	Transfer of knowledge is fast
Long-term wisdom	Short-term prediction
Powerful prediction in local areas	Powerful predictability in natural principles
Weak in distant areas of knowledge	Weak in local areas of knowledge
Models based on cycles	Linear modeling as first approximation
Explanations based on examples, stories, myths	Explanations based on hypothesis, theories, laws
<ul style="list-style-type: none">• Classification:• a mix of ecological and use• non-hierarchical differentiation• includes everything natural and supernatural	<ul style="list-style-type: none">• Classification:• based on phylogenic* relationships• hierarchical differentiation• excludes the supernatural

* Phylogenic refers to the evolutionary development and diversification of groups of organisms.

Tools for maintaining traditional knowledge

The following are tools a person, community, or nation can use to help maintain traditional knowledge. Each example can be changed to fit your community's needs, and in a way that supports the vision of your community.

Tool 1 Develop a First Nations research committee

Credible research follows rules that are usually reviewed and approved by certain groups of people. Research in most scholarly journals is reviewed by peer review boards that suggest revisions and corrections, or decide if the research will be published.

First Nations communities could develop a research committee to decide if a research project involving their people is possible. This committee might also control the end product of research and decide where and who would use the information. This gives the community ownership of and involvement in the research project. The research committee can also help develop policies for research and the management of community information.

A community research committee could be made up of several people, decided upon by the community. It might include an Elder, Chief, Counsellor, and someone considered knowledgeable or an expert in the subject of the research. This committee

could be actively involved in the research. It should have clearly defined mandates. Its members should also represent the diversity within the community.¹⁵

Participatory action research (PAR) is a model that actively promotes community involvement. Put simply, PAR is a group of people confronted by a problem who decide to do something, look for solutions, and then see how successful they were.¹⁶ If the researchers were not successful, or they were not satisfied with the results, they could begin again. While the origins of this research model are vague, its usefulness in turning ordinary community members into researchers is widely recognized.

PAR looks at issues that the community identifies as important. It is research that is done according to a community's interests, values, and protocols.

This model promotes a qualitative approach to gathering and making sense of information. This process is referred to as "heuristic," a way of being informed and a way of knowing. Heuristic research involves self-search, self-dialogue, and self-discovery. It makes researchers understand their frames of reference when doing research involving something foreign to them.¹⁷

First Nation research committee diagram



Tool 2 Developing policies

A policy outlines how a course of action, or activity, will be undertaken and managed based on the principles, values, traditions, and beliefs of a community, a society, a nation.¹⁸ Policies are written to guide communities and organizations on various issues, such as how research will be conducted in First Nations communities. Traditional knowledge should be included in these important guides for behaviour. Written policies can offer a sense of security and safety for First Nations communities because they set common responsibilities and goals for areas of traditional knowledge.

For example, the Philippine Congress created the Institute of Traditional and Alternative Health Care under the *Traditional and Alternative Medicine Act* to increase developments of their traditional medicine and a fund to support its research. Its model is based on developing laws that give guidance for setting policies or goals. Community groups were instrumental in guiding the policy and were included by the Philippine government when drafting the law. Section 2 of the Act outlines the following policy declaration:

SEC. 2. Declaration of Policy. — It is hereby declared the policy of the State to improve the quality and delivery of health care services to the Filipino people through the development of traditional and alternative health care and its integration into the national health care delivery system.

It shall also be the policy of the State to seek a legally workable basis by which indigenous societies would own their knowledge of traditional medicine. When such knowledge is used by outsiders, the indigenous societies can require the permitted users to acknowledge its source and can demand a share of any financial return that may come from its authorized commercial use.¹⁹

Setting objectives

Objectives are clear statements of specific activities needed in order to reach goals and support policies and laws recognized within a specific group. For example, the Philippine Institute of Traditional and Alternative Health Care developed the following objectives to help support its goals:

- To encourage scientific research on and develop traditional and alternative health care systems that have direct impact on public health care.
- To promote and advocate the use of traditional, alternative, preventive and curative health care modalities that have been proven safe, effective, cost-effective and consistent with government standards on medical practice;
- To develop and coordinate skills training courses for various forms of traditional and alternative health care modalities;
- To formulate standards, guidelines and codes of ethical practice appropriate for the practice of traditional and alternative health care as well as in the manufacture, quality control and marketing of different traditional and alternative health care materials, natural and organic products, for approval and adoption by the appropriate government agencies;
- To formulate policies for the protection of indigenous and natural health resources and technology from unwarranted exploitation, for approval and adoption by the appropriate government agencies;
- To formulate policies to strengthen the role of traditional and alternative health care delivery system; and
- To promote traditional and alternative health care in international and national conventions, seminars and meetings in coordination with the Department of Tourism, Duty Free Philippines, Incorporated, Philippine Convention and Visitors Corporation and other tourism-related agencies as well as non-government and local government units.²⁰

Tool 3

Curriculum/ apprenticeship programs

Education is crucial to gain and keep traditional knowledge. The Navajo Nation has a model that focuses on education. This Nation developed an apprenticeship program that trains Navajo to become certified traditional healing practitioners. Funding partners became involved in developing this program, showing their commitment to maintaining Navajo traditional knowledge and the importance it has for the Navajo people.²¹

Six Nations of the Grand River Territory in southern Ontario has a program to train midwives. It shows the importance of traditional midwifery from a First Nation's perspective and has led to the development of the Six Nations Maternal and Child Centre. The Centre offers a training program for First Nations midwives. The goal of this community-driven project is to give expectant mothers and their families a balance of traditional and contemporary programming that supports their beliefs and customs.²²

Indigenous peoples throughout the world understand the need to maintain traditional knowledge. Indigenous peoples of the Colombian Amazon through the Union of Yagé Healers have a certification process for traditional healer apprentices. This allows people to tell the difference between traditional healers and people who pretend to be traditional healers.²³

Many First Nations people receive education in universities and colleges. Not every school offers a Native Studies program, but the few that do are trying to deliver culturally-appropriate education. Learning about First Nations cultures is one step in maintaining traditional knowledge. Many universities, colleges, First Nations, and non-First Nations people are trying to include this knowledge in their programs.

Although Native Studies curricula vary from school to school, it usually includes the knowledge of Elders. The First Nations University of Canada in Regina, Saskatchewan, delivers course information co-facilitated by Elders. First Nations colleges are similar to mainstream colleges with one major distinction—they have dual missions:

- to rebuild, reinforce, and explore traditional tribal cultures using uniquely designed curricula and institutional settings; and
- to address western models of learning by providing traditional disciplinary courses that are transferable to four-year institutions.²⁴

Educating First Nations children in elementary school lays the foundation for maintaining traditional knowledge. Many First Nations community schools use cultural teachings to teach lessons using traditional ways in everyday life.

Tool 4

Traditional healer professional regulation (code of ethics/behaviour)

Traditional healers throughout history have always understood protocols of ceremonies. Through their learning and teachings, they were taught what was acceptable when entrusted with the knowledge given to them. Today, misusing traditional knowledge can cause damage to either a person or community whether intentional or not.

Many professionals must belong to a self-regulatory body that ensures their commitment and ethical responsibility to their job, and are bound by a code of ethics/behaviour. Elders and healers are important to a community. It is up to the community to ensure they seek background information. The following

questions can be used as a guide when developing a code of ethics/behaviour:

- How do our traditional healers earn a living to support their families?
- How do we promote the use of our medical knowledge by our own people when the medical practices of the dominant society are promoted so forcefully?
- How do we ensure our knowledge is not only preserved but also improved?
- How do we protect ourselves from the misuse and abuse of our medicines?

STATEMENT OF BELIEF

We consider yagé, along with our other medicinal plants and our wisdom and knowledge, to be a gift from God and a great benefit for the health of humanity. We have a duty to demonstrate to the world, with determination and solemnity, the importance of our values.²⁷

STATEMENT OF COMMITMENT

At the conclusion of the Gathering, we committed ourselves to working for the unity and defense of our traditional medicine and to offering our services for the health of indigenous peoples and humanity.²⁸

*Union of Yagé Healers of the Colombian Amazon,
Ethics for Indigenous Medicine of the Colombian Amazon*

- How do we protect our traditional healers from unwarranted claims against them?

The Haudenosaunee, or the Six Nations Iroquois Confederacy, developed a code of behaviour for traditional medicine healers. They used the above questions in developing their code. The Haudenosaunee developed their own code of behaviour in response to Canadian initiatives, such as the regulation of natural health products that could be used against their interests.²⁵

Traditional healers of the Colombian Amazon in South America created a document entitled *The Beliefs of the Elders, Code of Ethics for Traditional Medicine Healers*. This was prompted by the realization they were losing their culture. They decided the most direct way to preserve their healing practices and cultural identity was to define who could work legitimately as a traditional healer.²⁶ A group of healers wrote the code for traditional healers of other Nations. They developed statements to describe how they see their traditional knowledge and how it is used.

A group of Māori in New Zealand (Aotearoa), called Nga Ringa O Te Iwi (the National Body of Traditional Māori Healers) and the New Zealand Ministry of Health developed guidelines that recognize and support herbal treatments and traditional healing in New Zealand's public health system. They believe trusted Māori healers should be recognized to practice traditional healing methods when requested. The discussions between the

Māori and the New Zealand government examined such issues as:

- contributions to improve health;
- improved service delivery;
- funding for traditional healing; and
- protecting intellectual and cultural property rights.

In 1999, the following Māori standards of practice were accepted by the New Zealand Ministry of Health:

- Tohunga Puna Ora [Traditional Māori Healing Practitioners] will ensure that assessment is performed in a way that is relevant to the needs of the māuiui [people who are sick or experience ill health, a patient];
- Tohunga Puna Ora will ensure that the diagnosis, assessment and treatment of māuiui are in accordance with tikanga Māori [patterns of appropriate behaviour including customs and rites], are culturally safe and recognize the needs of māuiui;
- Tohunga Puna Ora will co-operate with other Tohunga Puna Ora and health professionals, as appropriate to the wishes and needs of the māuiui;
- Tohunga Puna Ora will ensure that all māuiui are aware of any required follow-up treatment or consultation;
- Tohunga Puna Ora will ensure that (where appropriate) māuiui are

referred to other appropriate services, particularly if they have any emergency or acute care needs;

- The participation of whanau [family, including extended family] in care is facilitated;
- Mäuiui will be given the information needed to give informed consent to ongoing care activities;
- Services provided to mäuiui should be within the scope of the Whare Oranga [facilities from which traditional healers work, e.g., a clinic]. Where the needs of the mäuiui change or move outside the scope of the Whare Oranga services, appropriate arrangements should be made to refer, and seek support from other service providers;
- When mäuiui are referred to other service providers, the referral process must ensure that:
 - Mäuiui have informed choice;
 - The service(s) to which the mäuiui is referred is appropriate to each mäuiui;
 - Provision is made for the review of any referral should this be requested;
 - Provision is made for effective co-ordination of services where a mäuiui or whanau requires the services of a number of organizations;

- Policies, procedures and resources are consistent with effective referral processes.²⁹

Tool 5 Language retention

Language retention is central to maintaining traditional knowledge and First Nations cultures. There are many ideas in First Nations languages that cannot be translated into other languages, such as English. Once languages are lost, traditional knowledge and ceremonies may also be lost.

Including First Nations languages in community schools would increase the capacity of communities and members to maintain and develop strategies for preserving traditional knowledge. Many First Nations schools across Canada recognize the importance of teaching their languages to children and youth and have adopted curricula to satisfy this need.

There are more than 150 First Nations communities in Ontario that speak dialects of Anishnaabeg and Onkwewehonwew. They are commonly called Algonquian and Iroquoian, respectively. The Woodland Cultural Centre has programs and projects to recognize and maintain First Nations languages.

Woodland Cultural Centre Aboriginal languages programs and projects:

- Helped found and fund the first Cayuga and Mohawk Language immersion school at Six Nations of the Grand River, near Brantford, Ontario;
- Published a Cayuga language thematic dictionary and Mohawk lexicon;
- Founded and supported a community radio station;
- Published language primers for the primary level;
- Lobbied for pay equity and better training for language teachers;
- Lobbied and advocated for First Nations communities to have the right to teach First Nations languages in the classroom;
- Supported the development of the *Native as a Second Language Guideline* of the Province of Ontario's Ministry of Education; and
- Collected and archived oratories in First Nations languages.³⁰

The Alaska Native Language Center at the University of Alaska Fairbanks and the Cherokee Elementary School in the United States help keep language alive by running language programs. The Alaska Native Language Center helps retain

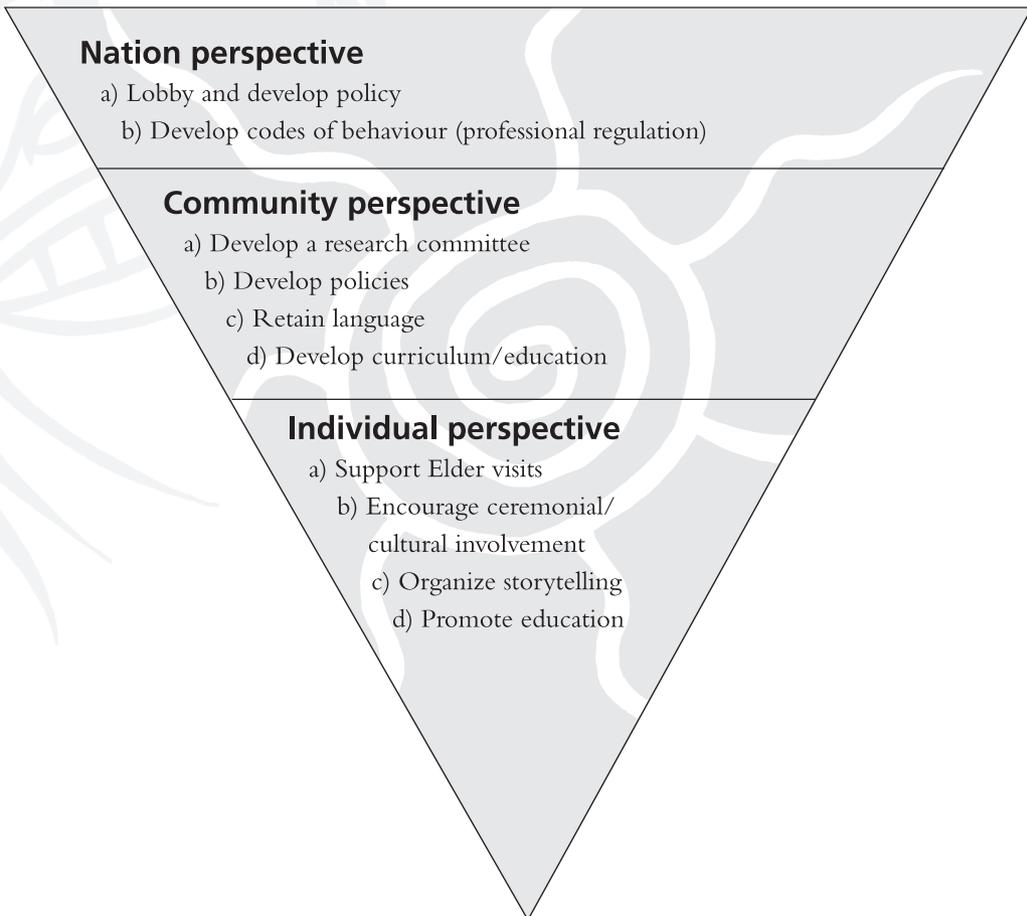
20 of the state's First Nations languages.³¹ The Cherokee Elementary School has a pre-school language immersion program that allows students to follow the program until they graduate from high school.³²

Technology has allowed for more programs to retain language. Interactive learning takes place using computers and language learning CDs. The Government of Canada has two programs that encourage First Nations to use new technology. Canada's Digital Collection (CDC)³³ and SchoolNet³⁴ both have good material on their respective websites on First Nations peoples, their cultures and histories, as well as explanations of issues.

To learn more about these two programs, visit their websites at:

<http://collections.ic.gc.ca>
<http://www.schoolnet.ca>

Tool overview: Nation, community and individual perspectives



Glossary

Apprenticeship – learning a trade, occupation, or craft through practical experience from someone with years of knowledge in the area.

Bio-piracy – the misappropriation of knowledge and/or biological material from traditional communities.

Biological diversity – all living species that depend on each other as part of a healthy and sustainable environment.

Biological resources – resources that have actual or potential use or value for humanity which include: genetic resources, organisms or parts of organisms, populations, and biotic parts of ecosystems.

Certified traditional healing practitioner – a person who has gone through all the appropriate lessons and actions approved by a mentor and is recognized by the community as credible.

Code of Behaviour – a system of principles that provides a guide to what is considered proper or improper, and appropriate or inappropriate behaviour.

Code of Ethics – a written system of standards, principles, rules, or guidelines that is used by researchers to guide the ethical conduct of research.

Convention on Biological Diversity (CBD) – the CBD was signed by 150 government leaders at the 1992 Rio Earth Summit. The Convention is dedicated to promoting sustainable development. It recognizes that biological diversity is about more than plants, animals and micro-organisms and their ecosystems. It is about people and their need for food security, medicines, fresh air and water, shelter, and a clean and healthy environment in which to live. It has established three main goals: the conservation of biological diversity; the sustainable use of its components; and the fair and equitable sharing of the benefits from the use of genetic resources.

Curriculum – a set of courses, educational program or educational activities to teach a certain subject or area of specialization.

Ethical – relates to a set of moral principles or values, or a theory or system of moral values that guide(s) the behaviour of an individual or group.

First Nations – a term used to refer to the First Peoples of Canada, including status, treaty, and non-status Indians.



First Nations Centre (FNC) – a centre of excellence at the National Aboriginal Health Organization that is a First Nations-designed and -controlled organization dedicated to advancing First Nations health knowledge, and the health and well-being of First Nations through research and knowledge-based activities.

Heuristic – relates to exploratory problem-solving that uses self-educating techniques; an educational method in which learning takes place through discoveries based on investigations.

Heuristic research – relates to research that involves self-search, self-dialogue, and self-discovery.

Ideologies – a body of ideas reflecting the social needs and aspirations of an individual, group, or culture; a set of doctrines or beliefs that form the basis of a political, economic, or other system.

Intellectual property rights (IPR) – rights recognized as belonging to creators of original creative works and designs that are protected under legislation for a period of time.

Medicine wheel – a concept of health and well-being symbolized by a circular pattern recognized for encompassing the four areas of life: physical, emotional, mental, and spiritual, espoused by plains and western First Nations.

Member states – countries that have agreed to join a body or organization that is composed of several other member states, such as the United Nations; countries that have agreed to adopt a mandate and take part in a process or movement to demonstrate their commitment in advancing and addressing certain issues of concern to other member states, such as the Convention on Biological Diversity.

National Aboriginal Health

Organization (NAHO) – an Aboriginal-designed and -controlled body created to influence and advance the health and well-being of Aboriginal Peoples through research and knowledge-based strategies.

Participatory action research (PAR) – qualitative research that promotes community involvement to identify issues and to find solutions. PAR aims to contribute both to the practical concerns of people in an immediate problematic situation and to further the goals of social science simultaneously. The active collaboration of the researcher and the research participant/respondent is required to accomplish this dual goal. PAR stresses the importance of co-learning as a primary aspect of the research process.

Phylogenic – refers to the evolutionary development and diversification of groups of organisms.



Policy – a plan or course of action intended to influence and determine decisions, actions, and other matters.

Protocols – a preliminary memorandum often formulated and signed by negotiators as a basis for a final convention or treaty; the records or minutes of a conference or congress that show officially the agreements arrived at by the negotiators; rules for organizational procedures.

Research journals – periodicals that publish articles on various topics submitted to, and tested by, a formal review process.

Traditional knowledge – the sum of knowledge, skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in maintaining health as well as in preventing, diagnosing, and improving treatment of physical and mental illness.

Qualitative research – research that focuses on subjective data that are not easily coded into numbers. The emphasis is on words and feelings rather than numbers. Qualitative research tends to work with fewer research participants or respondents but analyzes each case on a deeper level. Key qualitative research techniques include focus groups and other observational methods.

Ways of knowing – theories of knowledge known to a First Nations community that includes ceremonies, spiritual practices, dances, songs, crafts, and language important to that group.

World Intellectual Property

Organization (WIPO) – an international organization dedicated to promoting the use and protection of works of the human spirit. With headquarters in Geneva, Switzerland, WIPO is one of the 16 specialized agencies of the United Nations system of organizations. It administers 23 international treaties dealing with different aspects of intellectual property protection. The Organization counts 182 nations as member states.



Resources

If you would like to learn more about traditional knowledge and issues, check out the following resources.

Battiste, Marie and Henderson, James (Sa'ke'j) Youngblood, *Protecting Indigenous Knowledge and Heritage* (Saskatoon: Purich, 2000).

Council for Yukon First Nations, *Traditional Knowledge Research Guidelines: A Guide for Researchers in the Yukon* (Whitehorse: Council of Yukon First Nations, 2000).

Environment Canada, "Aboriginal Traditional Knowledge and Environmental Management," *Science and the Environment*, Bulletin No. 32 (Ottawa: Environment Canada, 2002).

Ferguson, Michael A.D., "Utilizing Indigenous Knowledge in Environmental Research and Assessment," *Terra Borealis*, No. 2 (Labrador: Institute for Environmental Monitoring and Research, 2002).

Grenier, Louise, *Working with Indigenous Knowledge: A Guide for Researchers* (Ottawa: International Development Research Centre, 1998).

Hopi Tribe, *Cultural Theft and Misrepresentation* (Kykotsmovi, Arizona: Hopi Tribe, 2001-2005). Available at: www.hopi.nsn.us/Pages/Culture/misrep.html.

Leech, David J., Lickers, Henry F., and Haas, G., "Community Health for First Nations: Connections to Biodiversity," *Biodiversity: Journal for Life on Earth*, Vol. 3, No. 3 (Ottawa: Tropical Conservancy, 2002).

Moore, MariJo, "Pre-School Program: Revitalizing Cherokee Language," *Cultural Survival*, Issue 23.3 (Cambridge: *Cultural Survival*, Inc., 1999).

Tauli-Corpuz, Victoria, *Biodiversity, Traditional Knowledge and Rights of Indigenous Peoples* (Pangan, Malaysia: Third World Network, 2004). Available at: <http://twinside.org.sg/title/bioipr.htm>.

Endnotes

- ¹ S.A. Hansen and J.W. Van Fleet, *Traditional Knowledge and Intellectual Property: A Handbook on Issues and Options for Traditional Knowledge Holders in Protecting their Intellectual Property and Maintaining Biological Diversity* (Washington, DC: American Association for the Advancement of Science, 2003).
- ² *Protecting Indigenous People's Traditional Knowledge and Intellectual Property: A Community Guide* (Ottawa: Pauktuutit Inuit Women's Association, 2003).
- ³ World Health Organization, *World Health Organization Traditional Medicine Strategy 2002-2005* (Geneva: World Health Organization, 2002). Available at: www.who.int/medicines/library/trm/trm_strat_eng.pdf.
- ⁴ Ibid.
- ⁵ Convention on Biological Diversity, "Traditional Knowledge and the Convention on Biological Diversity." Available at: www.biodiv.org/programmes/socio-eco/traditional/default.asp.
- ⁶ Ibid.
- ⁷ Convention on Biological Diversity, *Composite Report on the Status and Trends Regarding the Knowledge, Innovations and Practices of Indigenous and Local Communities* (New York: United Nations Environment Program, 2003).
- ⁸ See website for the World Intellectual Property Organization at: www.wipo.int.
- ⁹ Ibid.
- ¹⁰ Convention on Biological Diversity, *Composite Report on the Status and Trends Regarding the Knowledge, Innovations and Practices of Indigenous and Local Communities* (New York: United Nations Environment Program, 2003).
- ¹¹ See website for the Alaska Native Science Commission at: www.nativescience.org/html/traditional_and_scientific.html.
- ¹² C. Fletcher, "Community Based Participatory Research Relationships with Aboriginal Communities in Canada: An Overview of Context and Process," *PIMATZIWIN: Journal of Aboriginal and Indigenous Community Health*, Vol.1, Issue 1 (2003) pp. 27-61.
- ¹³ Alaska Native Science Commission, *Table 1: Comparisons between Traditional and Scientific Knowledge Styles* (Anchorage: Alaska Native Science Commission, 2005). Available at: www.nativescience.org/html/traditional_and_scientific.html.
- ¹⁴ Alaska Native Science Commission, *Table 2: Comparisons between Traditional and Scientific Knowledge in Use* (Anchorage: Alaska Native Science Commission, 2005). Available at: www.nativescience.org/html/traditional_and_scientific.html.
- ¹⁵ Theresa Zolner, "Going Back to Square One and Finding It's a Circle: (Not) Doing University Research in Indian Country." *PIMATZIWIN: Journal of Aboriginal and Indigenous Community Health*, Vol.1, Issue 1 (2003) pp. 91-113.
- ¹⁶ Global Development Research Centre, *Capacity Building for Microfinance: The design of microfinance policies and programmes* (Osaka, Japan: Global Development Research Centre, 2003).
- ¹⁷ Office of Diné Culture, Language and Community Services, *Overview: Navajo Traditional Apprenticeship Program* (Phoenix, Arizona: Office of Diné Culture, Language and Community Services, 1997).
- ¹⁸ E. Panousos, "First Nations Health Information Governance: The Importance of Policy-Making," *How to Use Data for Effective Community Health Planning, A Three Day Workshop – Day Two: Skills and Considerations in Planning* (Ottawa: First Nations Centre, National Aboriginal Health Organization, 2004).
- ¹⁹ Republic of the Philippines, *Traditional and Alternative Medicine Act (TAMA) of 1997* (Manila, Philippines: Republic of the Philippines, 1997). Available at: www.grain.org/brl_files/philippines-tama-1997-en.pdf.

- ²⁰ Philippine Institute of Traditional and Alternative Health Care. Available at: www.doh.gov.ph/pitahc/Index.html.
- ²¹ Office of Diné Culture, Language and Community Services, *Overview: Navajo Traditional Apprenticeship Program* (Phoenix, Arizona: Office of Diné Culture, Language and Community Services, 1997).
- ²² S. Fraser, *TSi Non:we Ionnakeratstha (the place they will be born) Ona:grahsta' (a birthing place)* (Six Nations of the Grand River Territory, Ontario: Six Nations Maternal and Child Centre). Available at: www.naho.ca/french/pdf/ABirthingPlace-SixNations.pdf.
- ²³ Union of Yagé Healers of the Colombian Amazon, *Ethics for Indigenous Medicine of the Colombian Amazon* (Columbia: Union of Yagé Healers of the Colombian Amazon, 2000).
- ²⁴ American Indian Higher Education Consortium, *Tribal Colleges: An Introduction* (Washington, D.C.: American Indian Higher Education Consortium, Institute for Higher Education Policy, February 1999) p. A-3. Available at: <http://www.aihep.org/AIHEC%20Documents/PDFS/intro.pdf>.
- ²⁵ John Kahlunes Fadden, *The Haudenosaunee Code of Behaviour for Traditional Medicine Healers* (Ohsweken, Ontario: Irocraft Books, 1995).
- ²⁶ Union of Yagé Healers of the Colombian Amazon, *The Beliefs of the Elders: Code of Ethics for Indigenous Medicine of the Colombian Amazon* (Columbia: Union of Yagé Healers of the Colombian Amazon, 1999). Available online at: <http://www.amazonteam.org/elders2.html>.
- ²⁷ Ibid.
- ²⁸ Ibid.
- ²⁹ Government of New Zealand, *Standards for Traditional Māori Healing* (Wellington: Ministry of Health Manatū Hauora, Government of New Zealand, June 1999). Available at: <http://www.moh.govt.nz>.
- ³⁰ Woodland Cultural Centre, *Aboriginal Languages Programs and Projects* (Brantford, Ontario: Woodland Cultural Centre, 2002). Available at: www.woodland-centre.on.ca/languages.html#anchor249809.
- ³¹ Alaska Native Language Center. Available at: www.uaf.edu/anlc/languages.html.
- ³² Marijo Moore, "Pre-School Program: Revitalizing Cherokee Language," *Cultural Survival*, Issue 23.3 (Cambridge: Cultural Survival, Inc., 1999).
- ³³ Government of Canada, *Canada's Digital Collections* (Ottawa: Government of Canada, 2005). Available at: <http://collections.ic.gc.ca/E/WhatsNew/Index.html>.
- ³⁴ Government of Canada, *First Peoples on SchoolNet* (Ottawa: Government of Canada, 2005). Available at: http://www.schoolnet.ca/aboriginal/e/background_e.asp.

