

GLOSSARY FOR BASIC CANCER TERMINOLOGY IN THE NAVAJO LANGUAGE

*A TRANSLATED GUIDE FOR CULTURALLY SENSITIVE EXPLANATIONS
FOR MEDICAL CLINICIANS, EDUCATORS, INTERPRETERS,
RESEARCHERS AND STUDENTS*

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DINÉ COLLEGE IN ASSOCIATION WITH MAYO CLINIC
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Marie Brown-Wagner, MD,
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Center, Shiprock, NM,
speaking at “Breast Health and
the Navajo Woman”
conference, Shiprock Chapter
House, Shiprock, New
Mexico, August 27, 2009.
Photo by Edward R. Garrison.

Fourth of July Celebration /
Rodeo at Kayenta, Arizona,
July 4, 2009. Photo by Linda
Cothron.

Fourth of July Celebration / Rodeo
at Kayenta, Arizona, July 4, 2009.
Photo by Linda Cothron.

Parade Float by Navajo Nation
Breast and Cervical Cancer
Prevention Program (NNBCCPP),
Navajo Nation Fair Parade,
Window Rock, Arizona,
September 10, 2005.

Avon 10 K Walk for Breast
Cancer, Winslow, Arizona,
September 2008.

Georganna Baca participating in
Avon 10 K Walk for Breast Cancer,
Winslow, Arizona, September
2008.

Daniel Costello, CAPT, PA-C,
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at “Breast Health and the Navajo
Woman” conference, Shiprock
Chapter House, Shiprock, New
Mexico, August 27, 2009. Photo
by Edward R. Garrison.

INTRODUCTION AND ACKNOWLEDGEMENTS

This “Navajo Cancer Glossary” represents the work of one of the major activities sustained under a P20 collaborative planning grant awarded to Diné College and Mayo Clinic by the Minority Institution / Cancer Center Partnership (MI/CCP) program of the National Cancer Institute. Established by an Act of Congress in 1968, Diné College is “The Institution of Higher Education of the Navajo Nation” and operates eight campuses across the 27,000 square miles of the Navajo Indian Reservation. Mayo Clinic partners included colleagues from both the Rochester, Minnesota and Scottsdale, Arizona campuses of Mayo Clinic.

Beginning in the Fall of 2006, Navajo Cancer Glossary “working group” meetings were held on nearly a monthly basis at the Shiprock, New Mexico campus of Diné College. The original thinking was that this resource would be focused for use among the Navajo public, but participating Navajo professionals advocated that a resource of this nature was also critically needed by clinicians and educators due to the facts that: (a.) there had never been a standardization and codification of cancer terminology in the Navajo language, and further that (b.) existing commonly used translations in the Navajo language, which had become entrenched after decades of use, were both inaccurate and misleading. The most notable example is that the most commonly used translation in Navajo for “cancer” is *łóód doo nádziihii* or “the sore that does not heal.” This is not only technically inaccurate but it also tends to defeat the goals of screening and early detection and treatment, and tends to foster a fatalistic attitude that nothing can be done for the Navajo patient diagnosed with cancer.

The working group that has produced this “Navajo Cancer Glossary” was comprised mostly of Navajo health professionals employed either by the Navajo Area Indian Health Service (U. S. Public Health Service) or by the Navajo Division of Health of the Navajo Nation government (most notably the Navajo Nation Breast and Cervical Center Prevention Program, the Navajo Health Education Program and the Kayenta Public Health Nursing Program). As word of this work spread through the provider and health educator community, additional participants continued to join the working group for as long as the working group remained active. By 2009, meetings were being held on a more frequent basis, sometimes as many as three times per month, in a concerted effort to complete the Glossary. By the Fall of that year the last series of revisions were being entered into the working draft, and the document was being prepared for production and dissemination.

Among the Navajo professionals who participated in the working group that produced this “Navajo Cancer Glossary,” a group of ladies at the Northern Navajo Medical Center (the Indian Health Service hospital at Shiprock, New Mexico) took on a special sense of ownership and convened their own meetings (especially during the summers of 2007 and 2008) so as to report back to the larger group on their thoughts, as clinicians and health educators, regarding the clinical and community appropriateness of the various translations being considered for different terms. We owe an extra debt of gratitude to these “Five Famous Ladies” for their special contributions to this effort.

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We began our work by consulting the “Cancer 101” curriculum which was previously developed by the Northwest Portland Area Indian Health Board in collaboration with Spirit of EAGLES and the National Cancer Institute’s Cancer Information Service – Northwest Region. At the end of each of the seven modules in this curriculum, a Glossary is presented that is focused on the content of that module. We aggregated all of these Glossary entries to form the beginning body of terms for our endeavor, and then added additional terms that we felt would be useful for a general purpose Glossary to serve the providers and public of the Navajo Nation community. We extend our appreciation and recognition for this previous work completed by the Northwest Portland Area Indian Health Board and their collaborators.

Special thanks to Linda Cothron and Teresa Garrett Hill for providing especially extensive contributions to the English texts of this Glossary.

PREFACE

This guide containing Navajo language translations of medical terminology for cancer is intended for clinical practitioners, medical interpreters, researchers and students. It is to be used with understanding and respect for the Navajo language. The Navajo language, as are all languages, is powerful. In the Navajo tradition, the spoken word is powerful and becomes a reality and therefore they say be mindful and careful of what you say. It is our responsibility to use these terminologies carefully.

Our elders teach us that we should never joke or tease each other about diseases and abnormal conditions that affect the body, mind, and spirit. Disease, diagnosis, treatment and medicines are to be handled with great care. These traditions and beliefs are the background to translation and interpretation in all cases.

Interpretations should be in the context of positive thinking, hope and compassion. Whenever possible, include the use of kinship terms. Using the Navajo language appropriately gives a person great joy, satisfaction, and sense of pride.

And Navajo people appreciate proper expression of concepts. Dominant societal concepts and terminology cannot be explained well by mere use of literal translations by looking at constructs from the dominant society's perspective. An interpreter should also be familiar with the Navajo way of thinking and understanding. The Navajo people who live out there near the mountains and mesas are the greatest teachers of semantics and expressions. When you need help, rely on these people and they will show you categories of meaning, the "corn pollen" language, and ways to help a person with your words. Keep learning the language and how to use it in different situations.

– Frank Morgan, Consultant, July 2006

Health care providers who use this Glossary should please remember that English is a second language for many Navajos. Much of the information and terminology that appears in this Glossary is specialized and esoteric even for native English speakers. Navajos who speak English sometimes do not understand the intended meaning of oncology disease and oncology screening information that is shared in English by health care providers, and they may be reluctant to say that they do not understand. We request that when giving explanations or education on these sensitive topics, that all health care providers request their client *to repeat back the understood information* in the client's own words.

This *Glossary for Basic Cancer Terminology in the Navajo Language* is the product of one of the activities supported through a P20 planning grant from the Minority Institution / Cancer Center Partnership (MI/CCP) program of the National Cancer Institute – Grant Number P20 CA119013 at Diné College and Grant Number P20 CA118774 at Mayo Clinic. We gratefully acknowledge this support and encouragement that we received which enabled us to provide this resource for the Diné (Navajo) people and for the health care providers who attend to their needs and interests.

The Basic Characteristics of Cancer Cells May be Described as Follows:

Ats'íís bitł'óól áát'eelgi át'é.

Ats'íís bitł'óól yichxóoh dóo ba'át'e' haleeh, kót'íihgo lahda:

Body cells, damaged, and, dangerous, becomes, when this happens, sometimes:

- doo hazhó'ó ahii' hááhinooséelda
does not, very much, multiply/grow
- lahda atít'íihgo doo bééhózingóo dah díníisééh
sometimes, injured, unknown direction, it grows
- lahda t'áá bił oochíil leh
sometimes, just, hereditary/you are born with it
- haniyééhgo na'nítl'ah yileeh
growing into a big lump, difficulty, becomes
- doo aheelt'éégóo nidahinisééh
does not mature to become a normal cell
- binaagóo ats'íís bitł'óól hadaalt'éhígíí yaah a'í yileeh
surrounding it, it takes the nutrients
before the healthy cells have their share
- doo hazhó'ó nida'ahidlo'da
they do not work together, they lose connections
- ats'íís bitł'óól hadaalt'éhígíí doo yídadíneelnáada yileeh
they have no connections with the healthy cells
- ats'íís bitah nááná lahda dah náadíníisééh
it spreads to another area

To aid Navajo-speaking users of this Glossary, Navajo translations are shown in **brown** and word-for-word back-translations into English are shown in **red**.

Adherence to Treatment Program – When a patient follows the instructions for treatment given by the health care provider, it is said that he or she “adheres” to the treatment which will help the patient become well again. In medical settings, use of the word “adherence” is replacing the less respectful use of the word “compliance.”

Nahodi'nitinígíí bik'eh hojíl'íggo. Nidi'nínígíí át'éego bik'ehgo í'íl'íi doo.

Receiving the instruction, following it, adhere to it. What you are told, follow the instruction.

- **Lack of Adherence to Treatment Program** – When a patient does not adhere to the treatment program, it means that the patient is not following through with taking the medicine (treatment) provided by the doctor to help the patient become well again. Many things could influence the behavior of the patient, such as barriers or challenges to care.

Nahodi'neestá'ígíí doo la' bik'eh hojíl'íggoó.

Haah í'doolnínígíí doo la' bi'jil'íggoó éi doodago bich'í' ni' jil'íggo.

Receiving the instruction, not following some of it, adhere to it.

Receiving treatment, not following it through, or, hesitate on treatment.

Anesthesia – An anesthesia is a medicine that causes the patient not to feel pain or to not have pain. Some anesthetics make the patient temporarily unconscious or drowsy so that the patient may not remember what has happened.

Temporarily makes the body numb or unable to feel pain.

Local anesthesia – numbing only the area involved in the treatment

Regional anesthesia – The patient remains awake but usually will receive medication to help relax. Regional anesthetics interfere with the feeling in a part of the body larger than the spot where the treatment is going to take place, without causing the patient to become unconscious.

Azee' bił haa e'etsihgo hats'íis doo aniihda yileeh,

doo neezgaigóó hona'anish, dóó la' éi doo ajiniihgóó hona'anish leh.

Medicine that causes, one's body, does not feel it,

not, aware of pain during surgery, one does not feel anything, then surgery is done.

Antibodies and Antigens – An antigen is a substance (usually a type of a protein) that causes a reaction of the immune system. Antigens are normally present on the surface of all cells, and help the body keep track of its own cells as well as cells (such as bacteria) that may have invaded the body. When the body detects an antigen that does not belong, such as on the surface of a bacterial cell, the body makes another protein called an antibody that attaches to that antigen so that the body can detect and attempt to destroy the cell where that antigen was found.

Ats'íis doo bá yá'át'ééhígíí éi doodago atíbidoolííligíí bitah yileehgo

éi hats'íis yee bits'áhoniyé'ígíí haidil'íih. Ákót'íihgo éi ats'íisígíí bee bich'ááh

naabaahígíí áyíil'íihgo éi dah yiyiitl'óóh lahda dił ligaiígíí yinéjahgo deildééh.

Antigen : Body, not good stuff, or what will harm it, comes into the body, that, one's body, with it, immune system, marks it. When that happens, the body, antibodies, marks it, with it, sticks on, sometimes, white cell will destroy it.

Barriers to Care – (Barrier) – Something that gets in the way or obstructs or impedes. Something that separates or holds apart. Intolerance is a barrier to understanding.

Binahjì' bik'izhdi'dootíílgíí bich'ááh hólóonii.

To understand it, obstruction, exists/is there.

Barium Enema – A liquid with barium (tiny metal particles) is put through the anus into the rectum and colon so that an x-ray can be taken. **Barium swallow** – the patient drinks a mixture that contains barium so that x-rays can be taken that will show the esophagus, stomach and small intestine. An **enema** is a substance that enables the doctor to be able to see an outline. A contrast medium (that will show up on an x-ray) is pushed through a tube into the rectum and x-rays are taken to look for places where an unusual growth may be present in that part of the intestine.

Hach'íí' nitsxaazígíí biyi'di bee yit'íigo bighádíldla' biniyé hach'íí' bih yikááh.

Large intestines, inside it, with it, visible to see it, an x-ray it is done, reason for, one's intestines, inner side, it is placed.

Basal Cells of the Skin – cells from the deepest of the five layers of the skin

Hakágí bitl'áahdi sikaadígíí.

One's skin, at the bottom of it, that is spread out.

Behavior / Aggressiveness of Cancer – The manner in which the disease behaves.

Aggressiveness – Hostile or destructive behavior or actions. One disease may be more or less aggressive than another.

Ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí hazhóó'ógo nooséél éí doodago tsxíílgó ba'át'e' hólógo nooséél.

Cells in the body that grow uncontrollably, among one's body it works, very slowly, it grows, or, faster, that grows.

Benign Tumor – See the entry under “Tumor” on page 48 of this Glossary.

Biopsy – A biopsy is the removal and examination of a sample of flesh from a person to determine if a disease is present. This may be done by using surgery (cutting) or by using a needle to remove (withdraw) a small amount of the flesh from the area involved.

Ats'íís kónishéhígo haalgishgo éí doodago tsah bee haalts'ihgo dóo haalt'óodgo binahjì' ats'íís bohodiit'i'gi naalkaah.

Body, very small, cut out, or, needle with it, pinched out or sucked out, from it, body, affected are, examined in the lab.

- **Excisional biopsy** – surgical removal by cutting, as of a tumor or a portion of a structure or organ

Hats'íís biyi'di t'áadoo át'éégóó dínéesánígíí altso nahgóó haalgish.

One's body, inside it, not in the right way/abnormal growth/tumor, all of it, out, cut away.

- **Incisional biopsy** – a cut into a body tissue (flesh) or organ (inside body part), especially one made during surgery. The purpose is to make an opening.

Hats'íís biyi'di doo bééhózingóó dínéesánígíí

haashíí níltsogo t'éi nahgóó haalgish dóó t'áá ąą'át'éego ál'íih.
 One's body, inside it, not known of its growth/abnormal growth,
 to some amount/size, only, out, cut away/partial removal of tumor.

- **Needle biopsy** – removal of a sample of flesh for testing by withdrawing it through a needle or piece of equipment that pierces the skin or the surface of a body part and continues into the underneath flesh to be examined. This is done without causing the outside of the body to have a large cut. This may also be called “aspiration biopsy.”

Hats'íis bihodiit'i'ígíí tsah bee haalt'óodgo naalkaah.

One's body, affected area, needle, by means of it, sucked out, examined in the lab.

- **Surgical biopsy** – In addition to needle biopsy, there are two types of surgical biopsy: excisional and incisional (which were described above).

Hats'íis bihodiit'i'ígíí álts'íisigo haalgish.

One's body, affected area, small, cut out.

Blood – The blood is made up of plasma (which is the fluid or liquid portion of blood) along with several different kinds of blood cells that are carried in the blood. The plasma contains nutrients from the food that has been eaten, along with many other dissolved substances such as oxygen, carbon dioxide, hormones and antibodies. The plasma makes up about 55% of the volume of the blood. All of the different kinds of blood cells are made in the bone marrow.

Dił tó t'éi át'é dóó ats'íis bitl'óól bii' hólóogo hatah nidaazlí.

Dił bitoo' éi ch'iyáán jiyánigíí bitoo' dóó nídadeez'élígíí bił ałtahgo hatah nidaazlí.

Alnii'dóó biláahgo dił bitoo' hadił bitah hóló.

Ats'íis bitl'óól dił biyi'ígíí éi hawol biyi'di nihwiileeh.

Blood is mostly water, and, body cells, are in the blood, as it flows in the body.

Plasma, that, nutrients from the food, one eats, and, other dissolved substances, flows in the body. Over half, plasma, among the blood, exist.

Body cells in the plasma, that, in one's marrow, inside, they are made.

- **Red Blood Cells** – Red blood cells are also called erythrocytes. When they pass through the lungs, they pick up oxygen from the fresh air that has been breathed in. They then carry this oxygen to all parts of the body. At the same time, they help pick up carbon dioxide from throughout the body and carry it to the lungs where it is breathed out. In a normal healthy person, red blood cells make up about 45% of the volume of the blood.

Dił lichíí'ígíí biyi'di ats'íis bitl'óól hóló. Hadił lichíí' éi nílch'ih yá'át'éehii bił ajoodzí'ígíí néiyiilááh. Éi hajéiyilzólíi bii'dóó hats'íis bitahgóó neheleeh. T'áá ako nílch'ih chooz'ııdígíí hats'íis bitahdi nídeiyiilááh dóó hajéiyilzólíi bii'jı' nehe'eel dóó nahgóó bił hajiidziih.

Red blood, inside it, body cells, exist. Red blood cells, that, good air (oxygen), the one you breathed in, picks it up. That lungs, inside it, flows throughout body. Just about the same time, used up air (carbon dioxide), collected and carried, to the lungs, and it is breathed out.

- **White Blood Cells** – White blood cells are also called leukocytes. There are five major kinds of white blood cells (one kind is called lymphocytes). They all help in protecting the body from bacteria, viruses and other organisms that sometimes get into the body and cause infections. Cancers of the white blood cells include leukemias and lymphomas. Altogether, the white blood cells and platelets (which help in making blood clots) make up less than 1% of the blood in a normal healthy person.

Dil ligaaígíí biyi'di ats'íís bitl'óól hóló. Hadil ligaaí bii' ats'íís bitl'óól ashdla' al'aa ádaat'é. Éí t'áá át'é hats'íís yaa ádahalyá áko doo ayóo ts'íihniidóóh dóo ch'osh doo yit'íinii dóo naalniih hweinit'íida.

Ats'íís bitl'óól dah díníisééh áadóo ba'át'e' hóló yileehígíí éí hadil ligaii lahda yeinit'íih.

White blood cells, inside it, body cells, exist. White blood cells, five, different types. All of them, protect the body, thus, one does not get diseases, germs or viruses too often. Cells in the body that grow uncontrollably, that, white blood cells, sometimes affects it.

Bone Marrow – The bone marrow is the soft, fatty substance or tissue that fills the cavity (hollow area) in the inside of a bone. It contains fibers and cells that are needed by the body to make red blood cells and white blood cells, and to allow red blood cells and white blood cells to grow and mature.

Awol – éí ak'ah yilzhóólí ats'in biyi'di danít'i'.

Awol éí adil lichíí'í dóo adil ligaaí íl'íí dóo yee nanise'.

Bone marrow – that, soft fatty tissue, bone, inside it, extends out.

Marrow, red blood, and, white blood cells, makes it, and helps it to mature.

Breast Cancer – Cancer of the breast tissue (flesh) that may start as a small tumor. Worldwide, it is the most common form of cancer in women. Because the breast is made up of identical type of flesh in males and females, breast cancer can also occur in men, but in men it happens very rarely – less than 1% of breast cancer cases).

Ats'íís bitl'óól dah díníisééh áadóo ba'át'e' hóló yileehígíí éí habe' bii' díníisééh.

Díí doo asdzání t'éí beidínóot'íílda. Hastóí neeznádiin yilt'éego t'áálá'ída beidínóot'íílda.

Cells in the body that grow uncontrollably, one's breast, it grows in it.

This, not just women, can get it, too. Men, 100 of them, one may get it, too.

- **Breast Self Examination (BSE)** – A Breast Self Examination is when a woman checks her own breasts to detect any lumps that might indicate an abnormality in the breast tissue.

Asdzání t'áá bí biládiníbiní yee bibe' yik'ih nidilniihgo, nitl'izgo bii' nidoolts'íhígíí yee neilkaah.

Women, just, themselves, their breasts, feeling with their fingers, for lumps that might indicate, from having it, they do self examination.

- **Clinical Breast Examination (CBE)** – A Clinical Breast Examination is an annual breast examination performed by a health care provider.

Asdzání t'áá nináháhááh bik'eh azee'íil'íni yaa nádáahgo, bibe' bá ninálkah.

Women, every year, health care provider, visit, do clinical breast examination.

Cancer – Cancer is the uncontrolled / undisciplined growth of some cells in the body. Cancer is actually a group of diseases (more than 100) that can be recognized because they all have the behavior of uncontrolled growth of cells resulting in the invasion of healthy flesh in the same area or throughout the body. Cancer cells show the unwanted behavior of growing directly into other types of nearby tissue (flesh) and also of spreading to other areas of the body (a process called metastasis) which makes it difficult for the other areas to function as they should.

Ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileeh, doo bééhózingóó díníisééh. Hats'íis biyi'di lahgo hazhó'ó hats'íis nooséél dóó hasht'e náá'nííł yęę t'óó bitahjigóó díníisééh. Bee hats'íis nizhónigo háádoo'nííł yęę doo hazhó'ó naalnishda silíí'.

Cells in the body that grow uncontrollably, undisciplined growth.

One's body, inside it, at one point, well, one's body growing again, and, becoming well again, just, merely growing/abnormal. By means of it, one's body, good/well, normal growth, but, not, well, works, it became.

- **Cancerous** – Relating to or affected with cancer, such as in the description of a “cancerous growth.” A growth that has cells that have cancer.

Ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileeh.

Cells in the body that grow uncontrollably.

- **Cancerous Tumor** – A growth that contains cells that have cancer. The tumor is the growth itself, which may be a lump or extra flesh somewhere in or on the body.

Hats'íistahdi haa'ída dínéesáago, hatsi' bii' ni'alts'i'go ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileeh.

Among one's body/inside one's body, somewhere, when it starts to grow, flesh, lump growth, cells in the body that grow uncontrollably.

Cancers are divided into five main groups:

Ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí ashdla' ál'ąą át'éego dah naazhjaa':
Cells in the body that grow uncontrollably, five, different, types, in groups:

- **Carcinoma** – A carcinoma is a cancer that begins in the skin and other “coverings” (epithelium). It is an unwanted spreading growth that comes from the flesh of the skin that tends to spread to other areas of the body. A carcinoma may begin growing in the skin or in the coverings and linings of most organs (inside body parts). Carcinomas are divided into two main subtypes which are named according to the type of cell where they start to grow: **adenocarcinoma**, which develops from the cells of a gland, and **squamous**, which refers to a cancer that begins in the flat cells that cover the surface of the skin, the mouth, the cervix, and several other body parts.

Ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí hakágí dóó hatsá silíii bik'ídaasti'ígíí biyi' díníisééh.

Cells in the body that grow uncontrollably, one's skin and internal organs, its covering, inside it grows.

- **Sarcoma** – A sarcoma is a cancer that begins in bone, fat, muscle, nerve, joint, blood vessel, or deep skin. It is a spreading cancer that grows from tissues (flesh)

that connect different parts of the body together, such as bones, tendons (which attach muscles to bones), cartilage (found in the joints and in other places), muscle and fat.

Ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí hats'in biyi'di, hak'ah bitahdi, hadoh bitahdi, hats'óóz bee ajiniihígíí biyi'di, ahādzhdit'āgi, hats'oos biyi'di, éí doodago hakági alk'ih sikaadígíí biyi'di díníisééh.

Cells in the body that grow uncontrollably, one's bone, inside it, one's fat, among it, one's muscle, among it, one's nerves one feels with, inside it, at one's joints, in one's blood vessels, or, deep inside one's skin, it grows.

There are five basic types of Sarcoma. These are described in the *Appendix*.

- **Leukemia** – Cancer of white blood cells (which are formed in the bone marrow). There are different types of leukemias, but they all result in either a sudden or a long lasting cancer of the bone marrow in which uncontrolled production of white blood cells occurs and in which the person usually has anemia (a low number of red blood cells) and also has problems related to blood clotting and unusual enlarging of the lymph nodes, liver, and spleen.
Ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí hadił daalgaaígíí hawol biyi'di díníisééh.
Cells in the body that grow uncontrollably, one's blood, the white ones from the bone marrow, grows inside it.
- **Lymphoma** – Cancer that begins in lymph nodes. A lymphoma may also be called a **malignant lymphoma** which develops in the cells of the lymph tissue, which are collections of immune system cells (cells that fight disease and infection) that are found in the lymph nodes. Lymph nodes are located throughout the body but are located especially under the arms and in the groin.
(See the several entries under “Lymphatic System” in this Glossary.)
Ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí hakaáz biyi'di díníisééh.
Cells in the body that grow uncontrollably, one's tonsils/lymph nodes, it grows inside it.
- **Myeloma** – A myeloma is a cancer that originates in the white blood cells that are called “plasma cells.” These cells are made in the bone marrow.
Awol biyi'di ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí dił līgaigo bee wójihígíí bii' díníisééh.
In the bone marrow, cells in the body that grow uncontrollably, white blood, that is called, it grows inside it.
 - **Multiple Myeloma** – Multiple myeloma is a myeloma cancer that is present in more than one location in the marrow of a bone or in more than one bone.
Awol biyi'di ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí dił līgaigo bee wójihígíí bii'di díkwíigo shíí ał'aa nahaz'ādi dadíníisééh.
In the bone marrow, cells in the body that grow uncontrollably, white blood, that is called, several places, those areas, it grows inside it.

Cancer Rates – Cancer statistics are most often given either as a “rate” or as a “ratio.” These are mathematical calculations that are used to describe the frequencies of disease (such as cancer) that are occurring in a population, such as how many people out of a thousand people in a population might be expected to be at risk for a certain disease, or that actually have that disease.

Ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí bíla'ashdla'ii
haashíí néeláá' yee yaah dahool'aah.

Cells in the body that grow uncontrollably, five fingered people,
so many of them, harms them with that disease.

Cancer Screening – Tests that are carefully provided to certain groups of people for the detection of early disease that has not yet caused symptoms of illness, such as women having breast exams and mammograms to check for early breast cancer.

Ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí
t'áá bítséedi bee ádaa áháyáago naho'dilkaah.

Cells in the body that grow uncontrollably, from it, prevention,
one goes through lab/screening.

- **Colon – Colonoscopy, Sigmoidoscopy, Fecal Occult Blood Test**

The colon is the portion of the large intestine that extends from the cecum (near the end of the small intestine) all the way to the rectum.

- **Colonoscopy** – Colonoscopy is the examination of the entire large intestine (colon) using a small camera on a flexible tube that is brought in through the rectum. It allows the doctor to see the flesh inside the large intestine. If an area suspected to have disease is found, it also allows the doctor to remove a small part to examine it (biopsy). Colonoscopy is similar to but not the same as sigmoidoscopy. The difference between colonoscopy screening and sigmoidoscopy screening is related to which parts of the colon can be examined.

Ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí há'déest'íí'go
ach'íídííl t'áá át'é biyi'di naalkaah. Bee dínóol'íí'ígíí dóó bee nidoolkahígíí
ach'íídííl t'áá át'é dóó bee ajichí'ígíí biyi'di nél'í. Díí binahjí' áldó' ach'íídííl
la' haalts'ihgo naalkah.

Cells in the body that grow uncontrollably, looking for it, large intestine,
all of it, inside it, screening it. With it, one looks, and, instrument, large
intestine, all of it, rectum, inside, it is looked at. This, with it, is also
used, large intestine, part of it, pinched out/taken out, lab/they study it.

- **Sigmoidoscopy** – Sigmoidoscopy is the examination of the large intestine from the rectum through the last or lower part of the colon (large intestine). This section is not difficult to reach with the equipment. The doctor uses a thin lighted tube and a little camera to see inside the colon and rectum and may decide to remove (cut out) one or more small pieces to do lab tests for cancer. Sigmoidoscopy is used for screening for colon and sigmoid cancer. Sigmoidoscopy is similar to but not the same as colonoscopy. Sigmoidoscopy only examines up to the sigmoid, which is the lowest part of the colon, while colonoscopy examines the entire large intestine.

Ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí há'déest'íí'go
bee dínóol'ííhígíí dóó bee nidoolkahígíí bee ajichí'í góne' iilt'ih.

Ach'íídííl hóyahdóó nineel'ánígi dóó ajilchii'gi bee nél'í.

Yii' díldla' dóó yida'ale'go éi bee ach'íídííl dóó ajilchii' bii'dóó nél'í.

Díí binahjí' áldó' néel'í'áagi haalts'ihgo naalkah.

Cells in the body that grow uncontrollably, looking for it,
with it one sees, and instrument, rectum, extend into it.

Large intestine, the lower end and, at the rectum, it is examined.

The light enters and it takes pictures, inside the colon and rectum, it is examined.

This, with it, also, that part examined, pinched out/taken out, lab/they study it.

- **Fecal Occult Blood Test (FOBT)** – Fecal occult blood is a term for hidden (unseen) blood that may be present in the feces. In medical services, a fecal occult blood test is a check for hidden (occult) blood in the stool (feces). If hidden blood is found, it means that the person is bleeding farther up in the intestine where it is more difficult to see.

(There is another longer description of FOBT on page 27 of this Glossary.)

Hachaan díł biyi' doo yit'ínígíí bee naalkaah.

One's feces, blood, inside it, not visible, with it, examined in the lab.

- **Mammogram** – A mammogram is an x-ray of the breast.
(There is a more detailed description of mammogram on page 34 of this Glossary.)

Habe' bighá'díldla'go bee naalkaah.

One's breast, x-ray light going through it, with it, lab/screening.

- **Pap Test** – A Pap Test involves using a swab to remove cells from the opening of a woman's cervix. The cells are then sent to the lab to be examined under the microscope to see if there are any abnormal (cancerous) cells that might be present.

Hwiishch'id bidáa'gi ats'íís bitl'óól ál'íih.

Ál'íihígíí nidoolkahgóó bíl'é'él'íih áadi bee da'déest'í'í

ayóo bee yit'ínígíí bee naalkaah, ats'íís bitl'óól doo hadaalt'éhígíí

la' hadeidil'íihgo éi hazhó'ó há nideilkaah doo.

Body cells, on one's uterus, at the tip of it/cervix, taken out.

It is sent, to a lab, under a powerful microscope, lab work is done,
abnormal cells, looking for it, carefully examined.

- **Prostate Exam (Digital Rectal Exam)** – The male patient is placed in a position where the doctor can have access to the anus (rectum) and the patient is relaxed (lying on his side, somewhat curled up on the examination table). The doctor inserts a gloved and lubricated finger into the rectum through the anus and feels the insides to search for unusual growth (enlargement) of the prostate gland.

Halizh bikááz hajilchii' biyi'dóogo yíla tsost'idí

bee bí'dílnihgo naalkaah. Ákwe'é dah nitsaago ats'íís bitl'óól dah díníisééh

áádóó ba'át'e' hóló yileehígíí hoł nawólní.

One's prostate, from inside rectum, when pressed with index finger,
screening done. Here, big, it becomes, cells in the body that grow
uncontrollably, one might have it.

- **Prostate** – The prostate is a part of the male reproductive (sexual) system. Its main function is to store until needed a clear fluid that carries sperm (semen) out of the body. A healthy human prostate is slightly larger than a walnut. It surrounds the urethra (the tube through which semen and urine come out of the body), just below the bladder (where urine is stored) and can be felt during a digital rectal exam. It is common for the prostate gland to get larger as a man gets older, but sometimes this enlargement results from cancer cells that have started to grow in the prostate gland.

Alizh bikááz éí dinéjí yee bá ni'iichíihgo yee hadít'é.

Alizh bikááz biyi'di diné bik'eelyéí, bíigash bits'íís biyi'déé' ch'éhé'eel.

Alizh bikááz dah si'ánígíí binákááh góne' lizh bá nít'i'ígíí ch'ínít'i', lizh bee dah siltsoozígíí biyaagi yílá tsosts'idí bee hajilchii' biyi'dóogo bí'díniigo bee naalkaah leh. Hastói t'áá lą bináahaigo bilizh bikááz nitsaa yileeh, lahda t'áá éí ats'íís bitl'óól dah díníisééh áádóo ba'át'e' hóló yileehígíí bilizh bikááz bii'dóo díníisééh.

Prostate gland, that, male/man, with it, reproductive, sexual make up.

Prostate gland, inside it, male sperm, semen, his body, from inside, flows out.

Prostate gland, that, in place, through it, urethra, extends out of it, below urinary bladder, and, index finger, with it, rectum, inside, felt, with it, examine.

Men, older ones, their prostate gland, large, becomes, sometimes, that, cells in the body that grow uncontrollably, from the prostate gland, it grows.

- **PSA Test** – The PSA (Prostate Specific Antigen) Test is a blood test that is used to detect the amount of a certain type of substance (antigen) that is dissolved in a man's blood. This substance is made in a man's prostate gland and is not present in women. If the PSA result is higher than normal, it may mean that the patient has a problem with his prostate gland, which could be prostate cancer or it could simply be that his prostate gland has become enlarged (called benign prostatic hyperplasia, or BPH). A high PSA level is commonly caused by enlargement of the prostate gland or by an infection or prostatitis (inflammation of the prostate), so a higher PSA test result may not always mean that a man has prostate cancer. However, it is important to monitor the PSA level in men, since prostate cancer may cause a high PSA level. The PSA Test is also used to monitor the status of disease or the possibility of recurrence of disease in men that have been previously treated for prostate cancer.

Hastói bilizh bikááz bits'íís bitl'óól bee bééhózinígíí bidil biyi'di hólónígíí naalkaah.

Men, his prostate gland, cells, identifying, in his blood, inside it, that substances, test/measured.

- **Antigen** – An antigen is a substance (usually a type of a protein) that causes a reaction of the immune system. Antigens are normally present on the surface of all cells, and help the body keep track of its own cells as well as cells (such as bacteria) that may have invaded the body. When the body detects an antigen that does not belong, such as on the surface of a bacterial cell, the body makes another protein called an antibody that attaches to that antigen so that the body can detect and attempt to destroy the cell where that antigen was found.

(See the entry on "Antibodies and Antigens" on page 5 of this Glossary.)

Cancer Survival – surviving any of the group of diseases known as cancer, usually stated as “5-year survival.” It is similar to a percentage, indicating what proportion of people who are treated for that type of cancer are likely to live for at least the next 5 years.

Ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí t'áá bii' háá'iildééh.
Cells in the body that grow uncontrollably, from it, to survive.

- **Improved Cancer Survival** – Having a better chance of surviving cancer. Any person will have better chances of surviving cancer if they have adequate access to health care, including access to culturally appropriate cancer care, early detection of any cancer that may develop (such as by having recommended Mammograms, Pap Tests, Prostate Exams, etc.) and prompt treatment for any cancer that may be found in the body.

Ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí la' háida bits'íistah díníisééh áádóó bee bik'ihjí' na'anishgo yii' háádoodáaigo át'é.
Cells in the body that grow uncontrollably, someone, among their body, growth, and then, with it, working/treatment against it, one can survive from it.

Good ways that are known to improve cancer survival include:

- Receiving education / training
Bee hoł hóóne'go binahodi'niltin dóó hazhó'ó bik'izhdiitáago.
After being told about the illness, receive training and, able to understand the illness.
- Adhering to treatment
Azee' hazhó'ó chojool'íigo.
Medicine, well, using it.
- Transportation to cancer treatment centers
Azee'ál'í t'áá éi biniiyé bił nahaz'áagoó bee hodoot'ihígíí hólógo.
Hospital, for that, reason for, treatment centers, with it, transportation, available.
- Taking care of any other health conditions
Aḡah dahaz'á la' hainít'ínígíí áldó' baa áhojilyá.
Illness/health conditions, no, other, affecting one.
- Continuing to follow the path to recovery
Hózhógo náájoódaal doo biniiyé azee' ḡah ḡ'íí dóó níjídziih, hadaalt'é níjísdlíí' doo.
In a beautiful way, one will live, reason for, medical treatment, recovery, getting well again.
- Living in harmony and having beliefs
Hózhógo iiná dóó hwe'oodla' hóló.
In a beautiful way, living, and using cultural belief.
- Get adequate rest.
Háá'áyíih bee ádaa áhojilyá.
Resting, with it, take care of self.
- Encouraging others
Saad bee ha'ahóníinii bee yájliti'.
Words of encouragement, with it, one talks.

Cancer Treatment – Medical treatment of the cancer itself *or* management of the symptoms that result either (a.) from the cancer or (b.) from effects of the treatment. Symptoms that result from the cancer may include nausea, vomiting, diarrhea or pain. Symptoms that result from the treatment may also include nausea, vomiting, diarrhea or pain, as well as other effects such as loss of hair.

Ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí bik'ihjí' adinishgo bits'áádóó hatah haashíí hósínígíí éi jizkwih, níjkwih, hachaan tógo hagháníí éi doodago jidiniih leh. Hatsii' dó' bét'ood doo.

Cells in the body that grow uncontrollably, working against it or management of the symptoms, from it, nausea, vomiting, diarrhea, or pain. Loss of hair.

○ **Symptom Management (Managing the Effects of Treatment)**

Azee' haah ál'íhígíí aldó' ba'át'e' dahóló. Łahda doo ákóhósinda leh.
Treatments, one gets, also, have negative side effects.
Sometimes, one does not feel well from it.

○ **Goal of Treatment** – The goal of cancer treatment is to restore the body to a healthy condition with no remaining disease being present. For a cancer patient, sometimes the goal of treatment will be to control the disease so that the patient does not have continuing illness or the symptoms of illness, even though the cancer might still be present in the body.

Yá'át'ééh nízhdoodleel biniyé haah é'él'íih.

Łahda azee' haah ál'íigo níjdziih ndi hats'íís biyi'di t'áá hólónígíí biniinaa t'áá ahááh náhodi'nél'íih doo.

Well/good, to become, reason for, getting treatment.

Sometimes, getting medical treatment, getting well, but, in his/her body, it is still in the body, because of it, regular check ups.

- **Biological Therapy (or Immunotherapy)** – The use of natural biological materials to strengthen the body's own cancer-fighting abilities. Substances from the body's immune system may be used to “teach” the body to fight the cancer (similar to the way that vaccines work). These are given to the patient in the form of medicine. (See the separate entries for “Interferon” and “Interleukin-2,” both of which are examples of biological therapy or “biological response modifiers.”)

Hats'íís t'áá bí yee ádaa ahályánígíí dóó bee bits'áhoniyée'gi bidziilgo ál'íihgo bee ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí yik'ihjí' naalnish.

One's body, just, itself, with it, taking care of, and one's defense, its strength, keeping it, with it, cells in the body that grow uncontrollably, against it, works.

- **Brachytherapy** – Brachytherapy is a form of radiation treatment in which a radioactive source (seeds or implants) is placed inside or next to the area that needs treatment. (See also the entry for “Radiation Therapy.”)

Ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíi

shánidíín bee adidlidígíí ílástsii' nahalingo ádaalts'íísí bíighahgi niit'ááh/nii'nílda.

Cells in the body that grow uncontrollably,

radioactive / x-ray, small seed, that small, next to, is placed/are placed.

- **Chemotherapy** – Chemotherapy is the use of medications to treat (or work against) the disease. It refers primarily to medicines used to treat cancer – medicines that are poisonous to the cancer cells. The purpose of these medicines is to kill the cancer while causing as little harm as possible to the patient. Chemotherapy medicines can be in the form of pills, liquids that are taken by mouth or given into the veins, or they can be creams that are applied to the skin. There are different side effects from the medications depending on the ways that they work. When cells grow, they go through different growth periods (or cycles), just like people. Some of the chemotherapy medicines act during one specific part of the growth period or cycle more than in others. Many patients receive more than one medicine so that the medicines can attack the cancer in several different periods of the cancer cell growth cycle. Chemotherapy medicines are classified according to the ways that they work.

Azee' hwiih nákáahgo ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí bee naatseed. Ła' azee' yildeel, la' daadlá, la' bił haa'e'etsih, dóó la' bee ádíłtlahí ádaat'é. Ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí t'áa al'ąąh át'éego bik'ihji' na'anish.

Medicine, into one's inside, pouring, cells in the body that grow uncontrollably, with it, it is killed/destroyed. Some medicines are pills, some you drink it, some given as shots, and some apply like creams. The cells, different effects, the medications, works against it.

- **Adjuvant Chemotherapy** – Medicines that are used to work against cancer. An “adjuvant” therapy is an “additional” therapy that aids another therapy. Adjuvant therapy means giving a second treatment after the primary treatment, such as radiation or chemotherapy that is given after the surgery.

Azee' ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí bee bik'iji' na'anish. Díí azee' ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí bik'ihji' adinishgo áldó' choo'í.

Medicine, that is used to work against, cells in the body that grow uncontrollably. This medicine, cells in the body that grow uncontrollably, that is used to work against, also, used.

- **Neo-Adjuvant Therapy** – Neo-adjuvant therapy is treatment that is given before the main or “primary” treatment but with the primary treatment still being necessary. For example, chemotherapy that is given before surgical removal of a breast cancer would be considered “neo-adjuvant chemotherapy.” Sometimes both adjuvant and neo-adjuvant therapy are used, in which case they would be given both before and after the primary (main) cancer treatment. For example: if a patient has surgery, followed by chemotherapy, followed by radiation, then the chemotherapy would be considered to be the primary treatment, the surgery would be considered neo-adjuvant (before) and the radiation would be considered adjuvant (after). Examples of neo-adjuvant therapy include chemotherapy, radiation therapy and hormone therapy. The goal of all of these treatments is still to kill the cancer.

T'ah doo iiyisíí hona'nishgóó t'áa bitséedi azee' haąh ádoolníł.

Łahda naaki al'ąą at'ėego azee' dıı ats'ııs bitł'óól dah dıńıisėéh áádóó ba'át'e' hóló yileehígıı alch'ihdėé' azee' baąą ádoolńııl éı doodago bighánaá'dıldla'go bee didlid.

Not yet, real surgery, before it, medicine, on one, it is applied/treated. Sometimes two types of medicine are used, this, cells in the body that grow uncontrollably, from both sides, medicine is applied/treated or radiation is done.

Chemotherapy Classifications: Types of Chemotherapy Medicines (Drugs)

The chemicals that are used to treat different types of cancer work in different ways and they also have different effects on the body of the person being treated. The healthcare provider should explain these different types of medicines and their effects before beginning to treat the patient with one of these medicines.

Ats'ııs bitł'óól dah dıńıisėéh áádóó ba'át'e' hóló yileehígıı t'áá al'ąą at'ėego bik'ihjı' na'anish. Azee' t'áá al'ąą ádaat'ėego bee bik'ijı' adinish.

Ła' azee' daaldeł, ła' daadłá, ła' bil aa'ada'atsih, dóó ła' bee ádadiltłah.

Cells in the body that grow uncontrollably, just different kinds, use to treat it. Different types of medication, used to treat it.

Some medicines are pills, some you drink it, some given as shots, and some apply like creams.

A classification of types of Chemotherapy Medicines is presented in the [Appendix](#).

The Goals of Chemotherapy are to cure the cancer, control the disease, or control the effects of the symptoms of the disease, while causing as little damage as possible to the normal healthy cells in the person's body.

- **Cryosurgery / Cryotherapy** – This is the use of extremely cold temperatures to freeze and thereby destroy cancer on a certain area of the body, so that the cancer can be safely removed. Cryosurgery is often used to remove some types of skin cancer.

Ats'ııs bitł'óól dah dıńıisėéh áádóó ba'át'e' hóló yileehgo náltııhgo naatseed. Hakáa'gıda hakáı náltııhgo ats'ııs bitł'óól dah dıńıisėéh áádóó ba'át'e' hóló yileehígıı bee naatseed.

Cells on the body that grow uncontrollably, freezing it, it is killed.
One's skin, freezing it, cells on the body that grow uncontrollably, with it, it is killed.
- **Hormone Therapy** – Hormone therapy involves the treatment of diseases with hormones taken from endocrine glands (thyroid, pituitary, pineal and adrenal) or by using substances that increase the normal hormone effects. Some cancers are sensitive to hormones in the body. The hormones can be used to change the environment inside the body where the cancer is growing, causing the cancer to be weakened or even to become unable to continue to grow. The doctor may give a medicine that stops the production of certain hormones or prevents the hormones from working in the normal way.

Alohk'e' dóó akááz dah yikahjí bitoo' éi hayaayáákááz, hatsiighaa' biyi'di hakááz, dóó hatsá'ask'azhí bikáa'gi hakááz bitoo' éi alohk'e' dóó akááz dah yikahjí bitoo' nilíigo éi bee ts'íhniidóóh dóó naalniih bik'ihjí' na'anish. Alohk'e' dóó akááz dah yikahjí bitoo' ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí la' yik'ihjí' naalnish. Alohk'e' dóó akááz bitoo' dah yikahjí bitoo' lahda ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí doo hináágóó áyíil'íih, lahda doo nanise'góó áyíil'íih.

Pancreas and lymph nodes/hormones gland, its juice/fluid, that, thyroid, pituitary, pineal and adrenal gland, it is, with it, diseases, against, it works. Cells in the body that grow uncontrollably, hormones, works against it. Pancreas and lymph nodes/hormones, this, cells in the body that grow uncontrollably, weakened it, sometimes, does not grow on.

- **Tamoxifen** – Tamoxifen is a medicine that is used to treat certain types of breast cancer in both women and men. It is also used to prevent breast cancer in women who have had ductal carcinoma in situ (abnormal cells in the ducts of the breast) and are at a high risk of developing breast cancer. Tamoxifen blocks the effects of the hormone estrogen in the breast. Tamoxifen belongs to the family of drugs called anti-estrogens. It is also called tamoxifen citrate and Nolvadex™.
- **Surgery** – Surgery can also be used in one form of hormone therapy. The surgeon may remove organs such as the ovaries or testicles that make hormones. The side effects of hormone therapy depend on the type of therapy. In women, the side effects may include weight gain, hot flashes, nausea and other changes similar to those that usually occur during menopause. In men, hormone therapy may cause impotence, loss of sexual desire and breast growth or tenderness.
- **Radiation Therapy** – Radiation therapy is usually a local treatment (given to a small portion or area of the body). A precise dose of radiation is targeted to a specific tumor or area of the body to destroy the cancer cells while not harming the surrounding flesh. It is like a strong x-ray that is used to get rid of the cancer.

Bee aghá'deeldlaad biziilígíí ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí bee didlidgo naatseed.

A strong x-ray, cells in the body that grow uncontrollably, with it, it is burned and destroyed.
- **Surgery** – Surgery is a procedure during which the body is cut to remove or repair something. This may also be done to find out if cancer is present in the body or if it has spread. Hona'anishgo ats'íis haa'ida baah dahoo'a'ígíí nahgóó haalgish éi doodago naalgizhgo bee hasht'e nál'í. Lahda ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí haanízahgóó náás dínéesánígíí biniiyé na'algizh doo.

Operation, body, something goes wrong with it, cut it out, or surgery, to repair something. Sometimes, cells in the body that grow uncontrollably, how far it has grown, reason for, surgery is done.

- **Laparoscopic surgery** – The tumor can be seen through a small camera attached to a tube and then inserted into the body through a very small cut. If a cancerous growth is seen, a small amount of the flesh where the cancer is found can be cut out and removed, as in a biopsy. This method can be used to examine and to rule out the possibility that the cancer has spread to other organs. It only requires a small cut in the skin and avoids the need for a large surgical wound.

Habid t'áá áalts'íísigo bikáa'gi yiigishgo ákóne' bee ida'alne'í
 bil e'elt'ihgo naat'áago hatsá siléii bee nél'íi dóo t'íihdígo
 haalts'ihgo éi ats'íís bitl'óól dah díníisééh áádóo
 ba'át'e' hóló yileehígíí há'déest'íi'go naalkaah.

One's stomach, just small size, on it, surgically cut, into it, with it,
 small camera, moved around to various internal organs, observe,
 a biopsy / pinched out, the cells in the internal organs that grow
 uncontrollably, looking for it, lab study is done.

- **Treatment**

- **Local Treatment** – Local treatment is a treatment or medicine that is applied only to the area of the body where the disease is present.
 Ats'íís bitl'óól dah díníisééh áádóo ba'át'e' hóló yileehígíí
 hats'íís íiyisíí baḡh díníiséehgi dóo binaagi t'éi bina'anish.
 Cells in the body that grow uncontrollably, only on one's body,
 where it grows on it, at that area, only that part, treatment.
- **Systemic Treatment** – Systemic treatment is a treatment that will reach and affect the entire body even if the disease cannot be seen everywhere.
 Hats'íístahgóo t'áá át'é azee' baḡh ál'í.
 Throughout one's body / among one's body, just all of it,
 medicine, on it, applied to / treated.

Carcinogen – Something such as cigarette smoke, uranium, or other substances (such as certain kinds of chemicals) that may cause cells to change so that they grow and multiply uncontrollably. Carcinogens may cause them to change into cells which become diseased and develop into cancer.

Kindéé' nát'oh nijilt'ohgo, leetso, dóo ha'át'íi shíi bits'áádóo
 ats'íís bitl'óól dah díníisééh áádóo ba'át'e' hóló yileeh.

Smoking store-bought tobacco, uranium, and, something, from it,
 cells in the body that grow uncontrollably, starts growing.

Cell – Cells are the basic “units” of life or “building blocks” of all living things. Some living things are made up of only one cell, such as a bacterial cell. The human body is made up of many millions of cells. We grow new cells all the time. Some cells normally die every day and are removed from our bodies. Each cell is supposed to develop or “grow up” into a particular kind of cell, such as a muscle cell, a nerve cell, or a bone cell. Cancer cells grow uncontrollably and do not “grow up” to become a normal kind of a cell in the body.

Dahináanii t'áá át'é ats'íis bitl'óól yee hadadít'é.
 Ła' dahináanii bits'íis bitl'óól t'ááłá'í yee dahiná éi ch'osh doo yit'iinii ákót'é.
 Bíla'ashdla'ii éi miiltsoh biláahgo yee hadít'é.
 Ats'íis bitl'óól ahii' hááhinooséél t'áá álahji'.
 Ła' ats'íis bitl'óól altso choo'ijhgo daniné dóó nahgóó kódaane'.
 Ats'íis bitl'óól t'áá bahat'aadí al'aah ádaat'éego nidahinisééh,
 la' ats'íis bitl'óól díi adoh, ats'óóz, éi doodago ats'in yee hadadít'é yileeh.
 Ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí
 éi doo t'áá níit'éeji' hazhó'ó nanise'da.

Body, cells, all of it, are alive, with it, it grows.

Some, life, its body cells, only one, exist, with it, there is life, as bacteria, it is like that.

People, they have millions, over, their body cells, have.

Body cells, multiply by growing all the time, every day, skin and blood, and
 some body cells, when all used up, die, every day, and they are removed from the body.

These body cells, all of it, are growing, some are muscle cells, some nerve cells,
 or bone cells, they become. Cancer cells, do not “grow up,” are not normal cells.

Body, with it, it is made of (cells).

- **Abnormal Cell Growth – (Abnormality)** – Cells may become damaged as a result of the effects of certain chemicals or from radiation or other causes. If the cell is not able to repair itself, then it should die (called “apoptosis”) before it reproduces to make more cells that have the same damage. Abnormal cells are not able to repair themselves but continue to reproduce and make more damaged cells that may result in cancer. “Abnormal” means that the cells are out of control, undisciplined.

Ats'íis bitl'óól dah díníisééh dóó t'áadoo le'é ba'át'e' ádaat'éii éi doodago
 shá bits'áádóó bits'áziilígíí átideile'. Áko doo t'áá bí hadaalt'é nádleehgóó
 éi t'óó nidahiniłnééh. Ats'íis bitl'óól doo hadaalt'éhígíí éi yichohgo
 doo hadaalt'é nádleehda, ndi t'óó bóhólníihgóó hááhinoosééh,
 éi la' ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileeh.

Body cells, grows, and something, chemical that kind, or,
 sun rays, radiation, damages them. Thus, not, by itself, repair to healthy one,
 that, dies. Body cells, abnormal ones, that, damaged, not able to repair itself,
 but, grows out of control, that, sometimes, becomes, cells in the body that
 grow uncontrollably.

- **Death of Cells** – Death of cells results when cells are not able to continue the normal life cycle of cells. They cannot continue to grow and make more cells. Many of the cells in the body normally reach “old age” and die so that they can be replaced by new cells. Cancer cells lose the ability to reach “old age” and so they just continue growing uncontrollably but they do not “grow up” to become a normal kind of a cell in the body.

Ats'íis bitl'óól ániidígíí t'áá álahji' náhoodleel.

Altso binaanish la' dayiilaagíí éi daniné.

Ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí
 éi doo nidahiniłnéehda, t'áá bóhólníihgóó hadínisééh.

Body, cell, new ones, all the time, they are made/grow.

The ones that have completed their work, they die.

Cells in the body that grow uncontrollably, do not die, they grow uncontrollably.

- Cancer cells do not die, but just keep growing uncontrollably.
 Ats'íís bitł'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí
 éi doo nidahiniłnéehda, ndi t'áá bóhólnííhgóó hadíníisééh.
 Cells in the body that grow uncontrollably,
 do not die, just anywhere, they grow uncontrollably.
- **Dividing Cells** – Dividing cells are living cells that grow (multiply) to make more new cells in the body. This is a normal process that occurs inside the body's tissues and organs. During this process, cells may undergo changes (damages) that cause the new cells to act or “grow” differently (or uncontrollably). These changes in the cells may lead to cancer.
 Ats'íís bitł'óól ahii' hááhinoosééhígíí éi ats'íís bitł'óól ániidígíí hats'íís biyi' danéeséehgo áyósín. Kót'éego hats'íís bitł'óól danilíigo hwii' siléii biyi'di nizhónigo danéesééh. Nizhónigo hats'íís nooséelgo haa'ishíí hoolzhishgo ániid hanááníshígíí lahgo át'íih, éi lahda ats'íís bitł'óól dah díníisééh áádóó ba'át'e' hóló yileeh.
 Dividing cells, that, new ones, one's body, inside it, grows, keeps it that way.
 This way, one's body, cells, they are, one's organs, inside them, well/normal, grows.
 Beautifully, one's body, somewhere in time, it changes, new cells, differently, may change to, cells in the body that grow uncontrollably.
- **Poorly Differentiated Cells** – All cells in the body are supposed to “grow up” to become a specific type of mature cell, such as a skin cell or a blood cell or a liver cell or a nerve cell. One of the characteristics of cancer cells is that they do not “grow up” or differentiate properly to become a specific kind of normal mature cell, but instead they remain as undeveloped or immature poorly differentiated cells. Poorly differentiated cells are often cancer tumor cells that may only slightly resemble the normal tissue that they came from. This type of tumor may tend to be more aggressive in how it “behaves” or spreads and it may be more difficult to treat or cure. This is because the cells have become very unlike the normal original cells due to the effects of the disease on them (that is, they have become poorly differentiated). The presence and condition of poorly differentiated cells may tell the doctor more about the aggressiveness of the disease.
 Ats'íís biyi'di ats'íís bitł'óól t'áá bahat'aadí al'ąąh ádaat'éego nidahinisééh, la' ats'íís bitł'óól díí akágí, adil, azid, dóó ats'óóz yee hadadít'é nidahaleeh.
 Ats'íís bitł'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí éi doo nizhónigo hadaalt'éego nidahiniséehda, ndi t'áadoo ééhózingóó nooséel yileeh.
 Body, inside it, its cells, specific type, different ones, grow to maturity, these, skin, blood, liver, and nerve cells, they grow to be.
 Cells in the body that grow uncontrollably, that, not, good normal healthy, grows to maturity, but, not, just without known direction, it grows, it becomes.
- **Well Differentiated Cells** – Well differentiated cells are cells that have “grown up” or matured to become a normal type of cell in the body. Cancer cells do not mature into normal “well differentiated” cells, but become “poorly differentiated.” When cells from a biopsy are examined under a microscope, the doctor who examines those cells is looking to see if the cells are no longer “well differentiated” but are instead

becoming “poorly differentiated,” which would be an indication of the cells becoming cancer cells.

Ats'íís bitl'óól t'áá bahat'aadí al'ąą ádaat'éego nidahineesánígíí nizhónigo hadaalt'éego hats'íís bitahdi nidanise'. Ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí éi doo hadaalt'éégóó nidahiniséehda, ndi doo hazhó'ó bééhózingóó nidanise'. Áko ats'íís bitl'óól haalts'ihgo éi ats'íís bitl'óól doo hazhó'ó bééhózingóó nooséligíí nideilkaah leh.

Body cells, well differentiated, grow to maturity, well/healthy, among the body, grows. Cells in the body that grow uncontrollably, that, are not well differentiated, grows, but poorly differentiated, it grows.

Thus, body cells, biopsy, not, well differentiated, growth, they examine it.

Cell Migration – When cells move from one area of the body to another, it is called cell migration. They can be carried in the blood through blood vessels or in the lymph through the lymph system. This is a method that cancer cells use to spread from one area of the body to another. When cancer cells spread in this manner, the process is called metastasis. (See also the description of “Metastasis” on page 35 of this Glossary.)

Ats'íís bitl'óól hadil biyi'di dóó náána lahdi nii'olgo díníisééh. Ats'íís bitl'óól éi adil biyi'go hats'oos biyi' nidaazlí éi doodago hakááz dah yikahjí bii' dahóló.

Body cells, in one's blood, at another place, it migrates/flows, it grows. Body cells, that, carried in the blood, through the blood vessels, or in the lymph system, they exist.

Cervical Cancer – Cervical cancer is uncontrolled growth of abnormal cells in the cervix. This is also called cancer of the cervix. The cervix is the opening that provides the passageway into the uterus (womb). It is also known as the birth canal, since the baby passes through the cervix on the way out of a woman's body during birth. Cancer that starts to grow here can be detected in an early, curable stage by the Pap Test.

(See also the description of “Pap Test” under “Cancer Screening” on page 12 of this Glossary.)

Ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí asdzání biishch'id bidáa'gi/bilátahgi díníisééh.

Cells in the body that grow uncontrollably, woman, uterus, at the edge/at the tip, it grows.

Clinical Trials – Clinical trials are research tests that are done to evaluate and decide if certain treatments are effective and safe when used to treat a disease. There are three primary phases or types of clinical trials for medications, with an additional fourth phase for follow-up studies after the new treatment has already been approved.

Bee ąąh í'doolníligíí éi doodago azee' idídóolnihígíí hazhó'ó naalkaah.

Táá' al'ąąh ádaat'éego bee ąąh í'doolníligíí éi doodago azee' idídóolnihígíí naalkaah.

Most effective treatment, or, effective medicine, carefully, tests/studies.

Three, different types, most effective treatment, or, effective medicine, tests/studies.

A description of the four phases of Clinical Trials is provided in the [Appendix](#).

Colonoscopy – Colonoscopy is the examination of the large intestine (also called the colon) using a small camera on a flexible tube that is brought in through the rectum. It allows the doctor to see the flesh inside the intestine. If an area suspected to have disease is found, it also allows the doctor to remove a small part to examine it (a biopsy). Colonoscopy is similar to

but is not the same as sigmoidoscopy. The difference between colonoscopy screening and sigmoidoscopy screening is related to which parts of the colon can be examined.

(There is more information on both Colonoscopy and Sigmoidoscopy in the section on “Cancer Screening” in this Glossary.)

Ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí há'déest'íí'go hach'íídííl biyi'di naalkaah. Bee dínóol'ííligíí dóó bee nidoolkahígíí ach'íídííl biih yilt'ihgo bee ach'íídííl dóó bee ajichí'ígíí biyi'di bee nél'í. Ach'íídííl la' haalts'ihgo naalkah.
Cells in the body that grow uncontrollably, one looks for it, large intestine, inside it, lab/screening it. With it, one looks/instrument, large intestine, inside it, extending it, with it, large intestine, and, rectum, it is studied, inside it. Large intestine, part of it, pinched out, examined in the lab.

Colony-Stimulating Factors – Colony stimulating factors are medicines that stimulate the cells in the bone marrow to multiply and mature at a faster rate. When a person receives cancer treatment they may experience a decrease in the number of red cells, white cells, and platelets in the blood. Colony stimulating factors cause the body to make more of these blood cells at a faster rate than normally and helps the person recover more quickly.

Azee' la' éi hawol biyi'di tsxíilgo hats'íís bitl'óól la'ígo ahii' hááhinooséelgo áyíil'íih.
Medicine, that, one's marrow, stimulate faster, cells, growth in multiples, stimulates/makes.

Colorectal Cancer – Colorectal cancer is cancer of the large intestine, often recognized by a change in bowel habits and the passing of blood (melena) in the bowel movement. The blood may not be easily visible but may be noticed as causing a black tarry stool (feces).

Ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí ach'íídííl éi doodago bee ajichí'ígíí bii' díníisééh.

Cells in the body that grow uncontrollably, large intestine, or, with it, one's rectum, on it, it grows inside it.

Cultural Beliefs about Cancer – The Diné (Navajo People) believe in each person taking care of himself or herself so as to live a good long life by living in a harmonious way. A Navajo person will have these thoughts about taking care and living a good long life when seeing a doctor to have a checkup or to have a screening test for the early detection of cancer.

Diné éi hózhóójik'ehgo (Si'ah Naaghái Bik'eh Hózhóón) ádaa áháyánígíí yee sizíigo binahjí' nízadgóó iiná yá'át'éehii yoolt'ih. Díí yee bidziilgo éi bits'íís yaa áhályáago éi azee' ál'íídi yah anadáahgo bits'íís bá naalkaahgo áko díí ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló dooleelígíí t'áá bitséedi yee ádaa áhályá.

Navajo people, in harmonious way (Long Life, Beautiful Life) taking care of self, by it, he/she stands, with it, long life good, living it. With these thoughts, taking care of his/her body, that, visit the doctor, checks, cells in the body that grow uncontrollably, early detection, taking care of self.

Culturally Relevant Programs – Programs that specifically address the culture of the people (such as the Diné or Navajo People) for whom they are presented or offered. Culturally relevant programs on cancer will address the traditions and beliefs of the patient in a respectful manner. Navajo people have a positive value about health, so it is more

culturally appropriate to think about “wellness” and actions that may lead to better health instead of thinking about things that may threaten or harm one’s health.

Bíla’ashdla’ii (Diné/Naabeehó) be’iina’ dóó bíbee’é’él’í’ binahjí’ bee bíká’aná’álwo’go bee oonish. Diné éí hózhó’jík’ehgo iiná dah yilyéél yaa nitsídaakees, éí hadaalt’éego oodáál hózhó’go iiná dah yilyéél yee naazí.
Five fingered people (Diné or Navajo) their lives, and, their cultural beliefs, with it, they may get help, working with them. Navajo, beautiful way of life, they have it in their hands, they think about it, healthy or wellness, living a beautiful life, have firm belief.

Diagnosis of Cancer – A diagnosis of cancer is a detailed medical description of any of the group of diseases known as “cancer.” When a person is diagnosed with a cancer disease, information has been found (usually as a result of a “biopsy” followed by examination of the cells through a microscope) that determines that the person has the illness.

Ats’íís bitl’óól dah díníisééh áádóó ba’át’e’ hóló yileehígíí hats’íís bii’ díníiséehgi haalts’ihgo bii’ da’déest’í’í ayóo bee yit’ínígíí binákáá góne’ há bééhoozìih.
Cells in the body that grow uncontrollably, one’s body, growth in it, pinched out, through microscope, for one, it is known/diagnosed.

Diagnostic Procedures and Tests for Cancer – A doctor may suspect that cancer may be present after examining a patient or after the patient has had an abnormal screening result from a mammogram, Pap test, colonoscopy, prostate exam, etc. In order to arrive at a more certain diagnosis, the patient will be asked to participate in additional tests, such as a biopsy and/or one or more methods of taking a picture (image) of the part of the body where the doctor thinks that cancer may be present.

Ats’íís bitl’óól dah díníisééh áádóó ba’át’e’ hólónígíí hoł naawólniigo t’áá alkée’ honi’áago naho’dilkaah dóó náhodi’nél’íihgo hazhó’ó há bééhoozìih.
Cells in the body that grow uncontrollably, with one, suspect, one after another, test, and examine, until it is diagnosed.

- **Biopsy** – A biopsy is the removal and examination of a sample of flesh from a person to determine if a disease is present. This may be done by using surgery (cutting) or by using a needle to remove (withdraw) a small amount of the flesh from the area involved. (There is a section that describes different ways in which biopsies are done, in the separate main entry for “Biopsy” that begins on page 6.)

Ats’íís kónishéihigo haalgishgo, haalts’ihgo dóó haalt’óodgo binahjí’ ats’íís bohodiit’i’gi naalkaah.
Body, very small, cut out, pinched out, and sucked out from it, body, affected are, examined in the lab.

- **Bone Marrow Biopsy** – In a bone marrow biopsy, a needle is used to remove a sample of tissue from a bone marrow so that it can be examined under a microscope.

Hayid ts’ínígíí éí doodago hak’aashjaa’ ts’ínígíí tsah bee baa e’etsihgo ts’in biyi’di hawol ła’ haalt’oh dóó nél’íigo há naalkaah.
One’s breast/chest area, the bone, or, at one’s hip, the bones, needle, with, stick into it, bone, inside it, bone marrow, some, sucked out, and, examined in the lab.

The doctor removes some bone marrow from the hipbone or another large bone. A pathologist examines the sample using a microscope. The removal of tissue to look for cancer cells is called a biopsy. Local anesthesia is used during a biopsy so that the patient may be more comfortable. A biopsy is the only sure way to find out whether cancer cells are present. There are two ways that the doctor can obtain a bone marrow sample. Some patients will have both procedures:

- Bone Marrow Aspiration – The doctor uses a needle to remove (suck out) samples of bone marrow.
 - Bone Marrow Biopsy – The doctor uses a very thick needle to remove a small piece of bone and bone marrow.
- **Imaging Study** – Imaging studies allow health care providers to take pictures of areas inside the body. (“Imaging” refers to making an image or a picture.)
Ats’íis baa áháyáájí nidaalnishígíí e’alyaa yee nida’álkaah.
Health care workers, picture/images, with it, studies done.

Examples include:

- **CT Scan (Computed Tomography)** – CT scan is a series of pictures that are taken by an x-ray machine which is connected to a computer. The computer shows the pictures in sequence so that detailed pictures of different parts of the body can be studied. A contrast material, such as a dye, may be used so that different organs will show up more clearly in the x-ray pictures.
Ats’íis bihodiit’i’gi t’éí yida’ale’,
kindéé’ bááh neheeshgizh nahalingo hahinidééh.
Body, something is wrong, only, takes pictures of it,
from the store, sliced bread, like that, each picture is processed.
- **MRI (Magnetic Resonance Imaging)** – A strong magnet linked to a computer is used to make detailed pictures of areas inside a person’s body. The health care provider can view these pictures on a computer and can print them on a sheet of photographic film.
Tóshjeetso biih ho’dilzho’ dóó béesh ná’iiláahii
bee hats’íis naalkaah dóó yida’ale’.
Big barrel, while inside it, sliding, and magnetic,
with it, body, study done and pictures are taken.
- **PET Scan (Positron Emission Tomography)** – A small amount of radioactively labeled glucose (sugar) is injected into the bloodstream while a machine takes pictures that show which cells in the body are using the glucose at the highest rate. Cancer cells sometimes show up in the PET scan because they usually use glucose at a higher rate than other cells.
Ch’iyáán náálkaad bee na’álkaah. Glucose, with it, studies done.
- **Radionuclide Scan** – A small amount of radioactive material is injected into the bloodstream and collects (concentrates) in certain bones or organs.

A machine called a scanner detects and measures the amount of radioactivity in different places in the body. The scanner provides pictures of bones or organs on a computer screen or on a sheet of photographic film. Afterward, the body gets rid of the radioactive substance quickly.

Shá bee na'alkaah.

Radiation, with it, studies done.

- **Ultrasound** – An ultrasound device makes sound waves that people cannot hear. The sound waves bounce off tissues inside the body like an echo. A computer interprets these echoes to provide a picture called a sonogram.

Náás hosiyoalts'iil doo diits'a'góó bee na'alkaah.

Díigi át'éego éi ahilkeed.

Sound waves, cannot be heard, with it, studies done.

In this way, it takes pictures/movies.

- **X-rays** – X-rays are the most common way to view organs and bones inside the body.

Bee ághá'díldlaad.

With it, shine the light through it.

Early Detection of Cancer – Early detection of cancer is finding a cancer and stopping it before it can spread to other parts of the body. Early detection of cancer can save many patient's lives and improve the chances of successful treatment and survival. Examples of tests used to detect cancer early are Mammograms for detecting breast cancer, Pap smears (Pap Tests) for detecting cervical cancer, Prostate Exams for detecting prostate cancer and Colonoscopy used for detecting cancer of the colon.

Ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehgo t'ahgo

há bééhooziìh, éi bee ni' ádoolnílgo doo hats'íistahgóó náás dinóosélda.

Cells in the body that grow uncontrollably, early growth, when known,

that, with it, to stop it, not, among one's body, forward, will not advance/grow.

Early Warning Signals (or Signs) – Early warning signals are signs that something is not right with the body (or not right inside the body). As cancer starts to grow in the body, it may produce certain warning signals or symptoms. (See the list of “Symptoms of Cancer” beginning on page 44 of this Glossary.) It is important to see the doctor or other health care provider right away about any symptoms or physical changes in the body, in order to determine the cause of the symptoms or changes.

Ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíi

díníiséehgo hats'íis lahgo át'éhígíi baa ákozhniizìh.

Cells in the body that grow uncontrollably, when it grows,

when it becomes, one's body, changes, one may notice it.

Endoscopy – An endoscopy is the examination of the inside of a body area or a hollow body part by means of an endoscope (small camera) that is attached to a tube that makes it possible to place it inside the area so that that area can be seen. If a suspicious growth is found when using an endoscope, the doctor may remove the growth

so that it can be examined in the laboratory (a **biopsy**). Colonoscopy is one kind of endoscopy, in which the part of the body being examined is the colon (large intestine). Sigmoidoscopy is another kind of endoscopy, in which the part of the body being examined is the sigmoid (which is the lowest part of the large intestine.)

Hats'íís biyi'di bee adéest'íí' adiníldíingo naat'áago bee nél'í.

Hats'íís biyi'di bee nél'íí dóó łahda hats'íís haalts'ihgo naalkaah.

Sometimes, inside the colon, by means of it, scope / to see it, giving light, inside one, carried around, by it, one sees it. One's body, inside it, with it, examined, and sometimes one's body, pinched out, examined in the lab.

Epidermis – The epidermis is the outer toughened layer of the skin, which protects the more delicate layers of the skin that are underneath it.

Hakágí bikáá'dóó.

One's skin, from the top.

Epithelium – Epithelium is the thin layer of tissue that lines the internal organs, glands, and other structures of the body. This includes the inner linings of the air tubes that bring air into and out of the lungs, the inner linings of the arteries and veins that carry blood, the inner linings of the stomach and intestines where the food goes through, the inner linings of the reproductive organs, and the inner linings of the tubes that carry urine out of the body. A cancer that develops in this type of tissue is called a “carcinoma.”

(See the description of “Carcinoma” under the types of “Cancer” in this Glossary.)

Hats'íís biyi'di bik'ídaasti'ii dóó hakááz. Hazool bii' nílch'ih naazhch'ihgo hajéiyilzólíi yee naalnish, hats'oos lichíí'ígíí dóó hats'oos dootł'izhígíí, habid dóó hach'íí' bik'ésti'ii biyi'di, hwiishch'id bik'ésti'ígíí biyi'di dóó halizh bá ch'ínílnígíí bik'ésti'ígíí biyi'di bíł haz'áanii.

One's body, inside it, linings, and, glands. Air tubes that bring air in and out of the lungs, that make it function, arteries, veins, one's stomach and intestines, its inner linings, uterus, linings, inside it, linings of the tube carrying urine out, its linings, inside it, these areas.

Fecal Occult Blood Test (FOBT) – This is a test that screens for cancer of the colon. The word “occult” means “hidden” and the word “fecal” refers to “stool.” A person places a small amount of feces on a paper card that is then sent to a laboratory to be tested for blood. A patient can take this paper card home and then prepare and send the sample to a laboratory through the mail, or the sample can be taken by a doctor or nurse in a clinic. Blood in the feces may be an early signal or sign of cancer in the colon. Sometimes cancers or polyps bleed, and the FOBT can detect tiny amounts of blood that are too small to be seen with the eyes. If blood is detected in the stool through this test, other tests will be needed to find the source and cause of the bleeding. Benign conditions (conditions that are not dangerous) such as hemorrhoids also can cause blood to be present in the stool.

Achaan díł biyi' doo yit'ínígíí naalkaah.

Atsáádi ats'íís bitł'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí naalkaah.

Naaltsoos bikáá'gi hachaan bee jidlishgo éi azee'íł'íní há nideiilkaahgo deinel'íih.

Hachaan díł bitahgo éi hazhó'ó há nideiilkaah.

Fecal, blood, hard to see, examined in the lab.

Abdominal area, cells in the body that grow uncontrollably, test/screening.

Paper, on it, one's feces, on it, one puts, that, medical doctor, for one, they do test, they look at it. One's feces, blood, among it, that, very well, examined in the lab.

Genetic Risk Factors – Genetic information is information that is contained within the genes inside the cells which is passed on from parents to their children. Many cancers develop as a result of changes or mutations in genes. A normal cell may become a cancer cell after a series of gene changes occur. Store-bought tobacco, certain viruses, or other factors in a person's lifestyle or environment (such as alcohol or other chemicals in the air or water) may cause such changes in certain types of cells. Some gene changes that increase the risk of cancer are passed from parent to child. These changes are present at birth in all cells of the body. It is these gene changes that are passed from parent to child that may be genetic risk factors for the development of cancer.

Liná bitl'óól bik'ehgo náás oochíilígíí lahda náás oochíilgo lahgo át'íih.
Ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí lahda yileeh.
Éí kindéé' nát'oh níjilt'ohgo éí doodago hanaa ádahoot'éiida,
leetsoda bits'áádóó hohodiilt'ih.

Genetics of cell, following it, future births, sometimes, may change from it.
Cells in the body that grow uncontrollably, will become, from changes in the genes passed to offspring. Smoking store-bought tobacco, or from environment, as uranium, from it, one may be harmed.

Hormones – Hormones are substances that are made in small amounts in different parts (organs) of the body. They are carried in the blood to all parts of the body, and guide and control what other parts of the body do. Hormones help control the actions of cells and keep certain cells and organs working properly. Some cancers need hormones to grow.

Ats'íís bitoo' t'óó ahayóí al'ąąh ádaat'é. Alohk'e' dóó akááz dah yikahjí bitoo'
ats'íís bitl'óól áát'íilgi neilo' dóó hazhó'ó naalnishgo áyósin.
Ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí éí alohk'e' dóó akááz
dah yikahjí bitoo' la' yee nidanise'.

Body fluid, many types, are different, they are. Pancreas/glands and lymph node/hormone that group, its fluid body cells, controls it and keeps it working right.
Cells in the body that grow uncontrollably, that, hormone/gland, with it, it grows.

- **Hormone Therapy** – Hormone therapy is used to keep cancer cells from getting or using the hormones that they need. Hormone therapy is “systemic therapy,” since the hormone therapy medication goes through the blood to all parts of the body.
Alohk'e' dóó akááz dah yikahjí bitoo' hadil biyi' nidaazlı. T'áá éí azee'
ánalyaago hadil biyi'di hazhó'ó bíneel'ąągo áyósin dóó hazhó'ó ahil nidaalnish.
Pancreas/glands and lymph node/hormone that group, its fluid, blood, flows about.
Just that, hormone therapy, it is, one's blood, with it, well, balance, keeps,
and, well, they work together.

Examples of hormones that are normally present in the body include the following:

- **Estrogen** – Estrogen is a type of hormone made in the woman's body that helps develop and maintain female body characteristics and helps the body grow to maturity. Estrogens can also be made in the laboratory.

Ats'íís bitoo' bee asdzání ídlínígíí t'áá éi bits'íís yee hadít'é dóó yee nanise'.
 Ła' azeé' anállyaago asdzáníjí bits'íís yee hadít'é dóó yee nidanise'.
 Body fluid, with it, female, being, just that, her body, develops and with it,
 she grows. Some, hormone therapy, the woman, her body, with it,
 body characteristics, and, grows by it to maturity.

- **Progesterone** – Progesterone is a type of hormone made in the woman's body that plays a role in the menstrual cycle and pregnancy. Progesterone helps the woman's body adjust to pregnancy and support the growth of the unborn baby inside of her.

Ats'íís bitoo' bee asdzání ídlínígíí t'áá éi bits'íís yee hadít'é dóó yee nanise'
 éi aąhdii dóó ootsąągi yee naalnish. Díí asdzání bits'íís yee neilo'go
 i'niiltsąąhgo awée' t'ahdoo yichííhgóó yee dínisééh.

Women, hormone, with it, being a woman, she is, that, menstrual cycle
 and pregnancy, with, it works. This, woman's body, with, controls/supports,
 becomes pregnant, baby/fetus, with it, grows.

- **Testosterone** – Testosterone is a hormone that is made in the man's body that promotes the development and maintenance of male body characteristics such as a deep voice and more coarse body hair.

Ats'íís bitoo' bee hastiin ídlínígíí t'áá éi bits'íís yee hadít'é dóó yee nanise'.

Body fluid, with it, male, being, just that, his body, develops and with it, he grows.

Human Papillomavirus (HPV) – HPV is the name of a group of more than one hundred different viruses. More than thirty of these viruses can be passed or transmitted from one person to another through sexual contact and can infect the genital area affecting the skin of the penis, vulva, vagina, rectum and anus. Many people who become infected do not have symptoms and will get better on their own.

Some of these viruses are “high risk” and may cause certain kinds of cancers including cancer of the cervix. Pap Tests can detect changes in the cells that are pre-cancerous and may be caused by the HPV. Over time, if these changes in the cells of the cervix go undetected and untreated, they can become cancerous.

In 2006, a new vaccine called Gardasil™ was approved to provide protection from four of the most common forms of HPV. It is recommended to be given as a series of three injections over a 6-month period to girls and young women who are between 9 and 26 years of age.

Ch'osh doo yit'íinii aąh dahwiidool'aahii t'ááláhídi neeznádiin al'aąh ádaat'é.
 Asdzání dóó diné yishtéézh yaa naa'aashgo bitł'ehgi ałch'ihjí ch'osh doo
 yit'íinii yee aąąh dahool'aah. Ła' díí ats'íís bitł'óól dah dínisééh áádóó
 ba'át'e' hóló yileehígíí nidahaleeh.

Virus that is not visible, may harm one, one hundred, different kinds.

A woman and a man, have sexual relations, on their sexual organs, both of them,
 virus that is not visible, may harm one another. One might be, cells in the body
 that grow uncontrollably, it may become.

Immunity – Immunity refers to the body's natural defenses that help the body to stay strong and to fight off things (such as bacteria and viruses) that may cause harm. Immunity refers to the condition of being protected against an infectious disease.

Immunity can develop as a result of previous exposure to the substances in a vaccine, from a previous infection with bacteria or viruses, or by transfer of immune substances from another person (such as the antibodies that a mother provides to her baby in her breast milk).

Hats'íís yee bits'áhoníyéé' éí hats'íístah yíká'análwo'go yee ts'íihniidóóh dóo naalniih ádaat'éii yik'eh didlį́. Hats'íís yee bits'áhoníyéé' éí atah honiigááh ádaat'éii hats'áajį́ kwíıl'į́ leh. Hats'íís bee bits'áhoníyéé'ígíí éí ha'át'íishį́ beéjį́yáhígíí, bíł haa'i'ootsihgoda, áłtséédáą' naalniih hatah honiilgaii nít'ęę'goda, éí doodago awéé' jį́łį́go hamá jilt'o'go bee bits'íís bits'áhoníyéé'ígíí haa yiléeł nahalin.

One's body's natural defenses, that, among one's body, it helps/fight, diseases and viruses, those kinds, fights it. One's body's natural defenses, that, infectious disease, those kinds, away from you, fights it. One's body's natural defenses, that, something, exposed to, from a vaccine, from previous infection viruses that got you sick, or from when being a baby, drinking mother's breast milk, her body's natural defenses, gives/transfers it to you.

Impotence – In medicine, impotence refers to a man's inability to have an erection of the penis adequate for sexual intercourse. Impotence is also called “erectile dysfunction.” Some types of medicine and some types of surgery (such as for prostate cancer) may result in impotence as a side effect of the treatment.

Azee'ál'íidęę'go, éí diné doo na'alcha'da yileeh, bicho' doo k'ęjį́łgóo asdzání yaa nidooghaałgi doo yíghahda yileeh. Diné bicho' doo k'ęjį́łgóo bee bich'į́ anáhóót'i' yileeh. Azee' haashį́ yit'ée shį́ dóo bilizh bikáazda ats'íís dah díníisééh áádóo ba'át'e' hóló silį́'go bá naashgizhgo áko doo na'alcha'da yileeh.

From the medicine, a man is unable to perform sex, his penis, has no erection, unable to have intercourse with a woman. Man, his penis, has no erection, becomes a problem. Some types of medicine and prostate cells in the body that grow uncontrollably, surgery, unable to perform sex.

Incidence of Cancer – The number of new cases of a disease that are diagnosed during a specific period of time. For example, the number of new cases of cancer that are diagnosed during one year.

Ats'íís bitl'óól dah díníisééh áádóo ba'át'e' hóló yileehígíí bíla'ashdla'ii danį́jaa'go ániid bee bą́ąh dahoo'a'ígíí yéel'ta'.

Cells in the body that grow uncontrollably, five fingered people, in groups, newly affected ones, they are counted.

Interferon – Interferon is a kind of medicine that helps the body's natural defenses to stop or slow the growth of cancer. Interferon is a biological response modifier, meaning that it is a substance that can improve the body's immune system response to fight off infections and other diseases such as cancer. Interferon interferes with the development of more cancer cells and can thereby slow the growth of a cancerous tumor. There are several types of interferon, including interferon alpha, beta, and gamma. The body normally produces these substances in the blood, but the body may not make enough interferon to stop the growth of a cancerous tumor. Interferons are also made in the laboratory so that extra amounts can be provided to the patient to help treat cancer (or other diseases).

Ats'íís yee bits'áhoníyéé'ígíí azeé'go éi ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehgo yik'ihjí' naalnishgo ni' áyíil'íh éi doodago hazhóó'ógo nooséél yileeh. Ats'íís yee bits'áhoníyéé'ígíí azeé'go éi naalniih dóó ts'íhniidóóh t'áá éi ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí yik'ihjí' naalnish. Body's natural defenses, as a medicine, that, cells in the body that grow uncontrollably, against it, it will work/fight, stop it or slows down the growth. Body's natural defenses, as a medicine, that, infections and diseases as, cells in the body that grow uncontrollably, works against it/fights it.

Interleukin-2 – Interleukin-2 is a kind of medicine that helps the body's natural defenses to stop or slow the growth of cancer. Interleukin-2 is a biological response modifier, meaning that it is a substance that can improve the body's immune system response to fight off infections and other diseases such as cancer. The body normally produces these substances in the blood, but the body may not make enough interleukin-2 to stop the growth of a cancerous tumor. Interleukin-2 is also made in the laboratory so that extra amounts can be provided to the patient to help treat cancer (or other diseases).

Ats'íís yee bits'áhoníyéé'ígíí azeé'go éi ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehgo yik'ihjí' naalnishgo ni' áyíil'íh éi doodago hazhóó'ógo nooséél yileeh. Ats'íís yee bits'áhoníyéé'ígíí azeé'go éi hats'íís yee bits'áhoníyéé'ígíí, bidziilgo áyósin áko ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehgo yik'ihjí' naalnish. Ats'íís yee bits'áhoníyéé'ígíí azeé'go éi hadił biyi' íl'í. Díí azeé' áldó' t'áadoo le'é naalkaah góne' ádaalne'go azeé'go hwiih deikáahgo éi bee naalniih éi doodago ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehgo yik'ihjí' naalnish. Body's natural defenses, a kind of medicine, that, cells in the body that grow uncontrollably, against it, it will work/fight, stop it or slows down the growth. Body's natural defenses, a kind of medicine, that body's natural defenses, stronger, it makes, thus, cells in the body that grow uncontrollably, against it, it will work/fight. Body's natural defenses, a kind of medicine, that, in one's blood, it makes. This medicine, in a lab, it is made, as a medicine, put into one's body, with that, diseases or cells in the body that grow uncontrollably, against it, it works/fights.

Late Detection of Cancer – Late detection of cancer refers to finding a cancer in someone after the cancer has been present for a long time and has had a chance to grow larger or to spread. If the cancer is found when it is still small (see “Early Detection of Cancer” in this Glossary), then there is a much better chance of removing the cancer from the body and stopping the spread of cancer to other parts of the body.

Ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí nízaadgóó bil nihoolzhiizhgo íinda há bálnkáá' dóó nitsaago éi doodago alts'áá'góó dadínisééh. Ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí t'ahdii áłts'íísigo éi nahgóó hadoolgishgo áko doo nitsaa yileehda dóó doo alts'áá'góó dadínóoséelda. Cells in the body that grow uncontrollably, the ones that became, long ways, with it, time has extended, finally, detected/finding it, and, large or spread, growth. Cells in the body that grow uncontrollably, still small, that, removing it, thus, not big or spread, no further growth of it.

Life Expectancy – Life expectancy is an estimate or a prediction as to how long a person is expected to live. It is a statistical measure defined as the expected or average survival of

people who are similar to each other (in age, sex, ethnicity, current health condition including having a disease of the same type, etc.). When doctors are treating a patient with an advanced case of cancer, they may tell the patient that they think the patient has a certain amount of time left to live, based on their experience of treating other patients with similar cancer conditions.

Díkwíí shíí náahaiji' da'iiná. Bíla'ashdla'ii dah naazhjaa'góó t'áa aheelt'éego iiná deiyilt'ééh (béedááhai, asdzání/diné danilí, bikágí bee al'aa át'éhígíí, bits'íistahdi ádaat'éhígíí bee baaḥ dah nahaz'ánígíí bee wólta'). Díí éí binahji' azee'íí'íní la' ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí aḥh díníisééhígíí haashíí nízahji' hwe'iina' naat'i' dooleelígíí yee hoł hodoolnih. So many years / extension of time, life, an estimate. Five fingered people, in groups, their health conditions, with, similar types of illness, living (age, men/women, skin/ethnicity, health conditions, similar illnesses). Based on this statistic, doctors, cells in the body that grow uncontrollably, as it grows, certain amount of time left to live, will tell to him/her.

Lifestyle Changes – Lifestyle refers to how a person lives his or her life everyday – what they eat and drink, whether they smoke cigarettes or chew tobacco, what they do for work, how well they care for their bodies, etc. Changes from traditional lifestyles to more modern lifestyles are thought to contribute to an increase in cancer rates among many tribes of Native Americans. For example, consuming more processed foods compared to natural foods from the land has been a significant lifestyle change for many Native Americans. Modern technologies and conveniences such as fast foods, piped running water, paved roads and cars and pickup trucks has made it much easier for many people to live, but this has resulted in less physical activity and more sedentary lifestyles. These changes in diet and physical activity may be linked to the development of certain types of cancers (as well as overweight, obesity and diabetes).

T'áa ákwííjí iiná joot'ihígíí éí ajiyánígíí dóó jidlánígíí, la'da éí kindéé' nát'oh éí doodago nát'oh yit'aalí chojool'í, naanish ájil'íigi dóó t'áa hó jizíigi hats'íís baa áhojilyá. Áko dííjí lahgo át'éego iiná nidaat'i', t'áa éí biniinaa ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí díí bitsi' yishtlizhii kéedahát'íigóó t'áa yéego bee baaḥ dahaz'á silíí'. Ch'iyáán tsxíilgo doodíligíí yiyá, alk'idáá' éí k'éé'dídléehgo nizhónigo ch'iyáán deiyáá nít'éé'. Yee bigáál naat'i'ii hóló dóó tó bił yah adaazlí, atiin hashdléézh dóó chidí bee ch'aana'adá t'éí chodeiyool'í. Doo bitah dahodisééhgóó ayóó ádaníldíil éí biniinaa ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí dóó ats'íís ch'iyáán doo hazhó'ó choyool'íida ádaat'éhígíí t'éí ayóó bidadéélní.

Every day, life, one walks/lives, that eating and drinking, some store-bought tobacco or chewing tobacco, use it, their work style and just up to one, taking care of one's body. Today lifestyles have changed, for that reason, cells in the body that grow uncontrollably, Native Americans, the rate has increased among them. Fast foods are, mostly, eaten, long ago, farming, good food, they ate. Transportation and running water in homes, paved roads and use of vehicles are used. Lack of exercise, for these reasons, overweight, cancer and diabetes, are worse among them.

Localized Cancer – A localized cancer is a cancer that has stayed in one area in the body and has not spread (metastasized) beyond the original place where it first began to grow.

Ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí ats'íís biyi'di díníseehgi t'éi hóló, nááná lahgóó ats'íís biyi' doo náádíníseehda.

Cells in the body that grow uncontrollably, in the body, it grows, only, existing there, to other area of the body, it has not grown.

Lymphatic System – The lymphatic system includes the tissues and organs that produce, store, and carry lymph and white blood cells (called lymphocytes) that fight infections and other diseases. This system also includes the bone marrow, spleen (near the stomach), thymus (near the heart), lymph nodes, and lymphatic vessels (a network of thin tubes that carry lymph and white blood cells). Lymphatic vessels branch, like blood vessels, into all the tissues of the body.

Akááz yee hadít'éhígíí dił ligaií íl'íí dóó hasht'e' nidayiikaah dóó ats'íístahgóó hólóogo ádayósin. Awól, atéí, akááz dah naaznilígíí, dóó akááz bitoo' éi ats'oos nahalingo t'áá át'é ats'íís yee hadít'é.

Tonsil/lymph nodes, and, with it, the makeup of it, blood, white ones, it makes, and, keeps it in one area/storing it, and, among body, it exists, it keeps it.

Bone marrow, spleen, lymph node fluid, like blood vessels, all of the body, with it, the makeup of it.

- **Lymph** – Blood flows in the body from the heart to the arteries, then to the smaller arterioles and then to the even smaller capillaries. From the capillaries, it flows into veins and then back toward the heart. Most capillaries in the body are designed so that they “leak” clear fluid of the blood (but not blood cells) as the blood is passing through the capillaries. This clear fluid from the blood that leaks out of the capillaries makes up the lymph. It “bathes” the cells of the body but also picks up bacteria and any loose metastasized cancer cells that may be present. The lymphatic vessels carry the lymph to the lymph nodes, where bacteria, loose cancer cells and any other materials that do not belong may be filtered out by the lymph nodes.

Baah háál'ééligíí, bits'áhálts'aalígíí niltóólígo akááz dah naaznilígi yaah hayiil'eel.
It filters, the leaked, clear fluid, lymph nodes, filtered.

- **Lymph Node** – Lymph nodes (also called lymph glands) are the small bean-shaped parts of the lymphatic system that act as filters, protecting the body from infection and disease. Each lymph node is a rounded mass of lymphatic tissue that is surrounded by a strong protective covering of connective tissue. As lymph filters through the lymph node, the lymph node removes cells that may be carried in the lymph. These may be bacteria cells from an infection in the body, or they could also be cancer cells that have broken off from a tumor and are being carried to other parts of the body in the lymph. This is why cancer sometimes spreads from its original location (such as in the breast) to nearby lymph nodes (such as in the armpit). Lymph nodes are located along the lymphatic vessels, and are concentrated in such areas as the armpit, groin and side of the neck. Lymphocytes, which are one type of white blood cell, are present in lymph nodes and attempt to destroy any bacteria that are caught in the lymph node and filtered out from the lymph.

Akááz ats'íís yee hadít'éego ádaalts'íísigo dah dadijoolgo dah naaznil.
Díi hakááz ats'íístahgóó ha'át'íí shíí doo yá'adaat'éhígíí nahgóó hadayiil'eel dóó adił daalgaiígíí hólóogo áyósin.

Tonsil/lymph nodes, body, with it, make up of it, very small, round lumps in place. This, tonsil/lymph nodes, among the body, bad stuff, filters out, and blood, the white ones, inside it, making it exist.

Malignant Tumor – See the entry on page 48 under “Tumor” in this Glossary.

Mammogram – A mammogram is a picture of the breast made with x-rays. Mammograms can often show a lump in the breast before it can be felt. When a mammogram is made, it squeezes the breast. Mammograms also can show a cluster of tiny specks of calcium. These specks are called micro-calcifications. Lumps or specks can be caused by cancer, or by precancerous cells, or by other conditions in the breast. Further tests are needed to find out if abnormal cells are present. If an abnormal area shows up on a mammogram, more x-rays or a biopsy may be needed. A biopsy is the only way to tell for sure if cancer is present.

Habe' bighá'díldla'. Habe' biyi'di nitl'izgo si'áago éi bee bééhooziih.

Ákót'éego éi hazhó'ó habe' há naalkaahgo bee hazhó'ó bééhooziih.

Abe' bee agháda'díldlaadígíi éi yaago yiljishgo yighádíldla'.

One's breast, x-ray is done. One's breast, inside it, hard lump, in place, that, with it, it is examined. That way, that, carefully, one's body, test, for one, searching it, with it, carefully, it is known/detected.

Breast, x-ray mammogram, that, downward, squeezes it, x-ray done.

Mammograms are the best screening tests that health care providers have to find breast cancer at an early stage. However, mammograms are not perfect:

- A mammogram may miss some cancers.
(This result would be called a “false negative.”)
- A mammogram may show things that turn out not to be cancer.
(This result would be called a “false positive.”)
- Some fast-growing tumors may grow large or spread to other parts of the body before a mammogram detects them.
 - Naalkaahgo habe' bighá'díldla'ígíi lahda díi ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehgo nayiisíih.
 - Naalkaahgo habe' bighá'díldla'ígíi lahda ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíi doo éi át'éégóó iilki'.
 - Ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehgo lahda nitsaa yileeh dóó náána lahgóó díníiséehgo índa naalkaahgo habe' bighá'díldla'.
 - Test, breast, x-ray/mammogram, sometimes, this, cells in the body that grow uncontrollably, will miss it.
 - Test, breast, x-ray/mammogram, sometimes, cells in the body that grow uncontrollably, not it, takes a picture of it.
 - Cells in the body that grow uncontrollably, sometimes, big becomes, and to another area, it grows, finally, test, breast, x-ray/mammogram.

Mammograms (as well as dental x-rays and other routine x-rays) use very small doses of radiation. The risk of any harm is very slight, but repeated x-rays could cause problems. The benefits nearly always outweigh the risks. The patient should talk with the health care

provider about the need for each x-ray. A shield (such as a covering or “apron” with lead in it) is used to protect other parts of the body that are not going to be in the x-ray picture.

Medicine

- **Traditional Medicine** – Traditional healing practices and ceremonies used by Native People.
Bitsi’ yishtlizhii be’aze’ dóó binahagha’. Native People, their medicine, and ceremonies.
- **Western (“White Man’s”) Medicine** – Medicine as practiced by people who have an M.D. (medical doctor) or D.O. (doctor of osteopathy) degree or license, and by other health professionals, such as dieticians, physical therapists, psychologists, and registered nurses. Other terms for Western or “conventional” medicine include allopathy and allopathic medicine, mainstream medicine, orthodox medicine, regular medicine and biomedicine.
Bilagáanají azee’ dóó azee’íil’íní yaa ílta’ii.
Anglo, medicine, and medical doctor with degree.

Menstruation – Menstruation is the periodic (“monthly”) discharge (bleeding) of blood and tissue from the inner lining of the uterus. From puberty until menopause, menstruation occurs about every 28 days, but menstruation does not occur during pregnancy.

Ch’ikéí dóó asdzání bee nínádízi’go dił aḥdii néiyiiltsééh.

Biishch’id biyi’déé’ bik’ésti’ígíí nahgóó kót’íih éí bits’áádóó chooyin nádleeh.

Young ladies, and, women, with them, every month, blood, menstrual, when they see it. Their uterus, from inside it, coverings, to there, it does/removes itself, that, from it, menstrual, she becomes.

Metastasis – Metastasis refers to cancer cells breaking loose from a tumor and then traveling, spreading or moving from one part of the body to another part of the body. These cancer cells often end up in lymph nodes or in organs such as the lungs or liver. That is why the lymph nodes, lungs and liver are often the first parts of the body to which a cancer may spread, but a cancer may also metastasize or spread to other organs of the body.

Hats’íistahdi haa’ída ats’íis bitl’óól dah díníisééh

áádóó ba’át’e’ hóló yileehgo éí náána lahdiida dah náadíníisééh.

Among one’s body, somewhere/a part, cells in the body that grow uncontrollably, from there, to another part, it will start growing there.

- **When Cancer Spreads** – The spread of cancer from one part of the body to another is called “metastasis.” Metastases share or keep the name of the original (“primary”) tumor where the cancer first began to grow. For example, a melanoma (a cancer of the cells that make pigment to give us our complexion) that begins in the skin can have cells that enter the bloodstream and spread to organs in other parts of the body such as the liver or brain. This kind of cancer cells that spread to the liver would be called metastatic melanoma, not liver cancer.

Ats’íis bitl’óól dah díníisééh áádóó ba’át’e’ hóló yileehígíí haa’íshíí

áltse díníisééh, t’áá éí ba’át’e’ náána lahdi t’áá ákót’éego náadíníisééh.

Cells in the body that grow uncontrollably, somewhere, primary growth, just that, cancer, another area, just the same one, grows.

- **Primary Site** – The primary site is the place in the body where the cancer first began growing. The word “primary” means “first.”

Ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí
 éi hats'íís ts'ídá áłtsé bii' díníshégi óolyé.

Cells in the body that grow uncontrollably,
 one's body, very much, the first site, it grows inside it, it is called.

Microscope – A microscope is an expensive type of equipment that is used to look at objects that are too small to see with the eyes. A microscope uses lenses made of glass to make objects appear larger. When a doctor removes a sample of flesh from a patient in a biopsy, the sample will be examined through a microscope to see if the cells have become cancer cells.

Bii'jì' adéest'íí' t'áadoo le'é ádaalts'íísigo anáá' doo bee yit'ínígíí nitsaa áyósingo
 ayóo bee nél'í. Azee'ííl'íní hatsì'da hailts'ihgo, díí bii'jì' adéest'íí'ígíí yee yinél'íí doo.
 Into it, one looks, something, too small, one's eyes, not able to see it, well, with it, big
 makes it, very, with it, one sees it. Doctor, one's flesh, pinched out, this, into it,
 one looks, with it, one looks at it.

Monoclonal Antibodies – A type of protein made in the laboratory that can attach to substances in the body or onto the surface of cells. There are many kinds of monoclonal antibodies; each one is specially made so that it can find and attach to a different substance or cell. Monoclonal antibodies are being used to treat some types of cancer and are being studied for the treatment of other types. They can be used by themselves or they can also be made so that certain drugs or radioactive materials are attached to them and are then carried with the antibodies in the blood directly to the cancer cells in a tumor.

(See the entry for “Antibodies and Antigens” in this Glossary.)

Ats'íís yee ádaa áhályáago bee doo bohodéelnígíí bée'ályaago haah ál'íihgo
 hats'íístahdi ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí hainítá.

Ats'íís bitl'óól ba'át'e' hóló yileehgo yik'ínítáahgo áadi yídeiljah.

Azee', éi doodago ha'át'iida ba'át'e' hólónígíí, éi doodago t'áadoo le'é
 ayóo ábóodziilgo bits'áziilígíí bił'altah ál'íihgo hats'íístahdi hats'íís bitl'óól
 dah díníisééh áádóó ba'át'e' hóló yileehígíí yaah í'íil'íih.

Body, with it, one takes care of self, with it, not, one not being harmed, copied,
 on one, applied to, among one's body, cells in the body that grow uncontrollably,
 looks for it/searches for. Cells in the body that grow uncontrollably, when it
 finds it, there at, applied itself to. Medicine, or, something, one that is harmful,
 existing, or, something, very much, is strong, radiation from it, with it, mixing
 together, among one's body, one's cells in the body that grow uncontrollably,
 on to, it applies to it.

Mortality – Mortality refers to death.

- **Mortality Rate** – The mortality rate is the number of deaths that occur in a population during a specific period of time, such as the average number of cancer deaths each year for every 1,000 persons in a state or tribe.

Bíla'ashdla'ii noonéligíí wólta'. Bíla'ashdla'ii noonéligíí éi díí
 ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí bits'áádóó

be'iina' dah nídahidiit'éeéh, t'áá niháháhááh wólta', lahda t'ááláhídi dimiil bíla'ashdla'ii dah naazhjaa'góó bee wólta'.

Five fingered people, their deaths, are counted. Five fingered people, their deaths, cells in the body that grow uncontrollably, from it, deaths, every year, counted, sometimes, in thousand persons, counted.

Oncology – Oncology means “the study of cancer.”

Ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí baa ólta' dóó naalkaah.
Cells in the body that grow uncontrollably, the study of it.

Oncologist – An oncologist may be a scientist who does research on cancer or a doctor who specializes in the treatment of patients who have cancer. There are also different specialties among oncologists, such as a medical oncologist and a radiation oncologist. Some oncologists also specialize in specific types of cancer such as breast cancer or colon cancer.

Ła' azee'íil'íní ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí nideilkaah dóó ła' éi t'áá áájí azee' aḡh ádeil'í.

Some, medical doctors, cells in the body that grow uncontrollably, research it and some are doctors who treat cancer.

- **Medical Oncologist** – A medical oncologist is a doctor who specializes in treating cancer. Some medical oncologists specialize in a particular type of cancer or a particular type of cancer treatment.

Ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí azee'íil'íní t'áá éi t'éi binaanishígíí neilkaah dóó azee' bee ni' ádooníligíí aḡh íil'í.

Cells in the body that grow uncontrollably, doctors, specialized, doing lab test, and, medicine, toward it, cells in the body that grow uncontrollably, with it, stopping it, to be, applies to it.

- **Radiation Oncologist** – A radiation oncologist is a doctor who specializes in treating cancers that require radiation for the most effective treatment. The radiation that is used may be with x-rays or from other forms of radiation. (For more information, see the description of “Radiation Therapy” under “Cancer Treatment” on page 18 of this Glossary.)

Azee'íil'íní bee agháda' dildlaadí éi ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí yee yinaalnish.

Doctor, radiation/x-ray, cells in the body that grow uncontrollably, that, with it, the one it works.

Palliation / Palliative Care – The cancer cannot be cured or controlled, but the goal of treatment is to decrease the discomfort caused by the disease so that the patient may have pain relief and relief from nausea, vomiting or other effects of the disease. In some cases a person may have surgery to remove most of a very large cancer so that the tumor will not cause damage to other organs by crowding; for example: a brain tumor may be decreased in size (through surgery) to slow the effects of the disease but it may not be possible to remove it completely to cure the person.

Sih hasingo, yíní dilyingo aa áháyá.

Assurance, with holy people's thought, comfort care.

Prostate Cancer – Prostate cancer is a cancer that forms in tissues of the prostate. Prostate cancer most often occurs in older men. The prostate is a gland in the male reproductive system that is located just below the urinary bladder and in front of the rectum. The prostate is part of a man's reproductive (sexual) system. It surrounds the urethra, which is the tube through which urine flows out of the body. A healthy prostate is about the size of a walnut. The prostate makes most of the seminal fluid which helps carry sperm out of the man's body as part of the semen. If the prostate grows too large, it squeezes the urethra. This may slow or stop the flow of urine out of the body, and for many men with an enlarged prostate this may be the first sign that they have a problem with their prostate. (There is more information about the Prostate under “Cancer Screening.”)

Ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí hastóí bilizh bikááz bii' díníisééh lahda éí biniinaa ná'ádlishgo yinílt'ah.

Cells in the body that grow uncontrollably, older men, their urine, lymph nodes/prostate gland, growth, sometimes, for that reason, urinating, it becomes difficult.

Prostate cancer is not contagious. A person cannot "catch" prostate cancer from another person, and a person with prostate cancer cannot give it to someone else. Prostate cancer is not caused by sexual activity.

Díí bee ach'í' anáhóót'i'ígíí doo t'áá háida bits'áádéé' yit'ihda.

Doo naalniih át'éeda. Doo ida'dilna'da.

This, with you, problem, not from another person, you got.

It is not contagious. You cannot give it to another person.

Risk factors for prostate cancer are:

- Age: Age is the main risk factor for prostate cancer. This disease is rare in men younger than the age of 45 years. The chance of developing prostate cancer goes up sharply as a man gets older. In the United States, most men with prostate cancer are older than 65.
Náás jootihígíí Getting older
- Family History: A man's risk is higher if his father or brother have had prostate cancer, or if men in his mother's family have had prostate cancer.
Bii' oochígíí Family history
- Race: Prostate cancer is more common in African-American men than in white men, including Hispanic white men. It is less common in Asian and Native American men.
Bitsi' yishtlzhii jílłigo Being Native American
- Certain Prostate Changes: Some men have cellular changes that cause them to be at an increased risk for prostate cancer and these changed cells do not appear to be normal when they are examined using a microscope.
Halizh bikááz lahgo át'jłhgo Prostate changes
- Diet: Some studies suggest that men who eat a lot of animal meat and fat may be at increased risk for prostate cancer. Men who eat a lot of fruits and vegetables may have a lower risk for prostate cancer.
Ch'iyáán atsi' yéego neesk'ahgo yidánígíí bits'áádóó ihodidoołt'ih.
Food, meat, very fatty, one eats, from it, problems.

PSA or Prostate Specific Antigen – PSA is a substance that is produced by the prostate that may be found in an increased amount in the blood of men who have prostate cancer or benign prostatic hyperplasia (BPH) or an infection or inflammation of the prostate. A lab test is used to check the level of PSA in a man's blood. A high PSA level is commonly caused by BPH or prostatitis (inflammation of the prostate). Prostate cancer may also cause a high PSA level. (See more information about BHP and the PSA Test under “Cancer Screening,” and also the entry on “Antibodies and Antigens.”)

Halizh bikááz bihodiit'ihgo bich'í' bitoo' íl'ínígíí hadil bii' yileeh éi ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileeh.

One's urine, its tonsil/lymph nodes, affected, it becomes, toward it, its fluid/juice, the one that makes it, cells in the body that grow uncontrollably, becomes.

Psychology : Coping in Response to a Diagnosis of Cancer – learning to accept the fact that one has cancer, dealing with it in a positive way and making thoughtful decisions regarding treatment. A positive emotional response to dealing with cancer (“fighting” cancer, as some people would say) may strengthen a person's body, whereas a negative response to dealing with cancer (such as “giving up”) may actually weaken the body's ability to resist the growth of cancer.

Ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí hohodiilt'i'go há bééhooziighgo bich'í' hadziil dóó ha'jólniigo ázh'dólzín.

Cells in the body that grow uncontrollably, when it harms, for one, it is known, toward it, one's strength, and, one's faith/hope, coping with it.

- **Acceptance** – Acceptance means that the person understands that he or she has cancer and has begun to make decisions and actions in response to that knowledge. This can include cancer treatment plans and actions as well as talking with friends and relatives about what may happen in the future.

Ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí hohodiilt'i'go há bééhooziighgo haah í'doolnílígíí éi doodago doo haah í'doolnílígíí bohozhdi'ááh.

Cells in the body that grow uncontrollably, when it harms, for one it is known, treatment or no treatment, one plans it.

- **Denial** – Denial is a way of defending oneself, by not wanting to recognize and accept a diagnosis of disease.

Ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí hohodiilt'i'go há bééhooziighgo t'óó ádajíní jiníigo doo joodláágóó ázh'dólzín.

Cells in the body that grow uncontrollably, when it harms, for one, it is known, merely/just, they are saying, I think, one says it, not believing it, one keeps himself/herself.

- **Anger** – Anger is an emotional response to a negative situation. Anger is a common reaction to a diagnosis of cancer.

Háháchí' dóó háníjiz'á.

One is angry and short tempered.

- **Stress** – Stress is something in the social or physical environment that can cause mental tension or even a physical reaction that may lead to illness.

Hanaanish dóó honitsékeesda hadei'ánát'íhgo nííł nijighá.
 One's work, and, one's thinking, tension, one is living with stress.

- **Anxiety** – Anxiety is a condition of strong nervousness, uncertainty and fear resulting from the expectation of a threatening situation. A feeling of anxiety can be so strong that normal physical and emotional functioning is affected.
 Nitséjilti' dóó tsxííł ázhdíł'íigo bíghahí bik'ee hoł hóyéé'.
 One becomes emotional with fear and very anxious or nervous of fear.
- **Supportive Behaviors** – Supportive behaviors may include providing support or assistance to someone, offering to listen, or giving helpful advice or kind assistance.
 Lahdóó áká anijilwo' hanahji' diné dabidziil. Ach'í' yáti' dóó ajiists'áá' bee áká'anijilwo'. Hwe'ajooba' hóló. Yá'át'ééhjigo t'éi nitsídzikees dóó yájiłti'.
 From one area, one helps, on one, people, keeping their strength.
 Toward one, speaking, and listening, with it, one helps. One's faith/kindness, one has. Toward the good side, only, one thinks, and, one talks.
 - **Caregiver** – A caregiver is a person, such as a doctor, nurse or social worker, who helps in the prevention or treatment of an illness or disability. A caregiver may also be a person such as a family member who takes care of a child or a dependent adult. The caregiver may help with bathing, meal preparation or daily care.
 Azee'íil'íní yil nidaalnishgo haa ádahalyá.
 Hooghandóó hashchíinii, hak'éida haa ádahalyá.
 Medical doctor, with him/her, they work, to one, one who takes care.
 From home, parents or relatives, they care for you.

Risk Factor – A risk factor is something that increases the chances (or likelihood) that a person may develop a disease. Some examples of risk factors for cancer include older age, a family history of certain cancers, use of store-bought tobacco products, certain eating habits (such as too much meat or fat in the diet), obesity, lack of exercise, exposure to radiation or other cancer-causing agents, and certain kinds of genetic changes.

Nahasdzáán bikáá' hoł haz'ánígi hanaagóó hoł áhoot'éhígíi t'áadoo le'é ách'í' kójił'í dóó bééjigháhígíi t'áá bits'áádóó kahodeezt'i'.

On earth, one's home, surrounding, state of being, things, taking in, and, expose to, from it/exposed to, may develop diseases.

- **Heredity** – Heredity refers to information that is contained within the genes of our cells and that can be transmitted or passed down from parent to child. Cancer is not considered to be an inherited illness because most cases of cancer (perhaps 80 to 90 percent of cases) occur in people with no family history of the disease. However, a person's chances of developing cancer can be influenced by the inheritance of certain kinds of genetic alterations (changes). These alterations tend to increase an individual's susceptibility to developing cancer in the future. (See also the entry for “Genetic Risk Factors” on page 28 of this Glossary.)

Àąh dahwiidool'aalii lahda t'áá bił náás oolchíil leh.

Illness, sometimes, just with it, inherited within birthing.

- **Lifestyle** – Lifestyle factors such as a poor diet, not enough physical activity or being overweight may result in a person being at increased risk for developing several types of cancer. For example, studies suggest that people whose diet is high in fat have an increased risk of developing cancers of the colon, uterus and prostate. Lack of physical activity and being overweight are risk factors for cancers of the breast, colon, esophagus, kidney and uterus.

(See also the entry for “Lifestyle Changes” on page 32 of this Glossary.)

Doo hazhó’ó ch’iyáán yá’át’éhii jiyáágóó dóo doo ádaa áhojilyáágóó t’áá éi bits’áádóó ats’íis bitl’óól dah díníisééh áádóó ba’át’e’ hóló yileehígíi doo hákásti’da dooleef.

Not eating healthy food, and not taking care of self, from it, cells in the body that grow uncontrollably, is a risk factor.

- **Environment** – Where we live, where we work and what we are exposed to may influence our risk for developing cancer. This may include pollution or other chemicals in the air, soil and water, and other sources of exposure such as:

Ba’át’e’ dahólóonii bideezla’, nílch’ih dóó tó, leetsoda bééjígáago bits’áádóó kahodeezt’i’go doo hákásti’góó át’é.

Exposure to chemical, air and water, uranium, from it, is a risk factor.

- **Sunlight (Ultraviolet or UV Radiation)** – from the sun itself or also from sunlamps and tanning booths. Ultraviolet light from the sun and from sunlamps can cause early aging of the skin and skin damage that may lead to skin cancer.

Shánídíin bits’áádóó hakági bąh ats’íis bitl’óól dah díníisééh áádóó ba’át’e’ hóló yileeh. Hakági t’áadoo hodina’í shánídíin bee hajiltihgo lahda bits’áádóó ats’íis bitl’óól dah díníisééh áádóó ba’át’é hóló yileeh.

From the sun light, on the skin, cells in the body that grow uncontrollably. One’s skin, rapidly, sunlight, with it, aging, sometimes, from it, cells in the body that grow uncontrollably.
- **Ionizing Radiation** – Ionizing radiation can cause cell damage that leads to the development of cancer. This kind of radiation comes from high energy rays that enter the Earth's atmosphere from outer space, from radioactive fallout, from radon gas that comes from the earth, and from x-rays and other sources.

Yá dóó nahasdzáán bideezla’ ats’íis bitl’óól yilchọhgo lahda bits’áádóó ats’íis bitl’óól dah díníisééh áádóó ba’át’e’ hóló yileeh.

From the sky and the earth, exposure to radiation, cell damage, sometimes, from it, cells in the body that grow uncontrollably.

Radioactive Fallout can come from accidents at nuclear power plants or from the production, testing or use of atomic weapons (nuclear bombs). People exposed to radioactive fallout may have an increased risk of cancer, especially leukemia and cancers of the thyroid, breast, lung and stomach.

Radon is a radioactive gas that you cannot see, smell or taste. It forms in soil and rocks. People who work underground in mines may be exposed to

radon. Radon may get into a house from the soil that is under the house. People exposed to radon are at increased risk of developing lung cancer.

Medical Procedures are a common source of ionizing radiation. Health care providers use radiation (low-dose x-rays) to take pictures of the inside of the body. These pictures help to diagnose broken bones and other problems. Health care providers may also use radiation therapy (high-dose radiation from large machines or from radioactive substances) to treat cancer. The risk of developing cancer from exposure to low-dose x-rays is extremely small. The risk from radiation therapy is slightly higher, since stronger doses of ionizing radiation are used in radiation therapy. For both x-rays and radiation therapy, the medical benefit almost always outweighs the small amount of risk.

Risk Reduction – Risk reduction refers to actions that we can take for ourselves that may decrease our chances for developing cancer. Examples include: maintain a healthy weight, get at least 30 minutes of exercise each day, don't use store-bought tobacco, eat a healthy diet, limit consumption or do not drink alcohol, protect yourself from the sun, and protect yourself and your partner from sexually transmitted diseases.

T'áá hó jizíigi ájít'éhígíí dóó ájoot'ííhígíí bee ádaa áhojilyá.
 Áko ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí bits'aa ájít'ée dooleef.
 Ázhnildásígíí yaa ájósín, tádiin dah alzhinji' hatah hozhdiséehgo hwee aná'át'ááh,
 kindéé' nát'oh doo chojool'íígóó, ch'iyáán yá'át'éhii jiyáago, tó tsi'na'iiláhígíí
 doo ayóo jidláágoó, shánidíín t'áá bee ádaa áhojilyáago bii' nijíghá, dóó hach'ooni
 t'áálá'í ájósingo hazhó'ó jiiná.

One's behavior and actions, based on it, one takes care of self.

That, cells in the body that grow uncontrollably, from it, one can stand.

Keeping weight down, exercise for 30 minutes each day, do not smoke store-bought tobacco, eat good food, limit use of alcohol,

walking in the sunlight with care, and having one sex partner, living a good life.

Side Effects – Side effects are effects on the person that may be caused by the treatment that they are given for cancer. Some cancer treatments cause conditions that can be very uncomfortable. Some of the most common “side effects” are hair loss, nausea, vomiting and fatigue. There are other side effects that the person may experience depending on what medicine is used. When a person receives radiation treatment they may also experience side effects such as those that are described above. The person may become very sick from these side effects in addition to the sickness they are experiencing from the cancer. These side effects diminish or disappear when the treatment is completed.

(There is more information about side effects in the first entry under “Cancer Treatment.”)

Ats'íís bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehgo azeé' bee hona'anishgo
 bits'áádóó hats'íís lahgo áyósín, hatsii' bét'ood dóó níjkwih leh.

Cells in the body that grow uncontrollably, medicine, with it, working on it/treatment, from it, one's body, different, keeps it that way, hair loss and vomiting, usually.

Sigmoidoscopy – Sigmoidoscopy is the examination of the large intestine from the rectum through the last or lower part of the colon (large intestine). This section is not difficult to reach with the equipment. The doctor uses a thin lighted tube and a little

camera to see inside the colon and rectum and may decide to remove (cut out) one or more small pieces to do lab tests for cancer. Sigmoidoscopy is used for screening for colon and sigmoid cancer. Sigmoidoscopy is similar to but not the same as colonoscopy.

Sigmoidoscopy only examines up to the sigmoid, which is the lowest part of the colon, while colonoscopy examines the entire large intestine.

(See also the description of sigmoidoscopy in “Cancer Screening” on page 11 of this Glossary.)

Ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí há'déest'íi'go

bee dínóol'ííhígíí dóó bee nidoolkahígíí bee ajichii'í góne' iilt'ih.

Ach'íidííl hóyahdóó nineel'ánígi dóó ajilchii'gi bee nél'í.

Yii' díldla' dóó yida'ale'go éi bee ach'íidííl dóó ajilchii' bii'dóó nél'í.

Díí binahjí' áldó' nél'í'áagi haalts'ihgo naalkah.

Cells in the body that grow uncontrollably, looking for it,
with it one sees, and instrument, rectum, extend into it.

Large intestine, the lower end and, at the rectum, it is examined.

The light enters and it takes pictures, inside the colon and rectum, it is examined.

This, with it, also, that part examined, pinched out/taken out, and, they do lab test/test it.

Staging – Staging is done by performing tests or surgery to determine the size of a cancer and the extent it may have spread from the place where it started (the “primary tumor”).

Ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí haashíí nízahgóó

ats'íistah silíí'ígíí naalkaah.

Cells in the body that grow uncontrollably, how far it has gone,
among the body, that it has become, lab test/studying it.

- **Stages of Cancer** – To plan the best treatment for cancer, the doctor needs to know the extent or stage of the disease. The doctor may have x-rays, lab tests and other tests or procedures done in order to learn the extent of the disease. This information is used to plan the best treatment for the cancer.

Ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí ats'íistahgóó náás

yigáalgi bééhózin. Díí' al'áah át'éego alkéé' honí'áago ats'íistahgóó náás díníisééh.

Binahjí' azee' áah ádoolnígíí bohodit'ááh.

Cells in the body that grow uncontrollably, among the body, forward,
it moves. Four, different ones, one after another, spaces, among the body, forward,
spreading, it grows. Treatment is planned.

- **In Situ (Stage One)** – “In situ” means “in place.” This term refers to a cancer that is still in the location where it began and has not spread or moved to additional parts of the body. It is considered to be curable at this stage.

Íinda ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileeh.

T'ahdoo ats'íis náána lahdi bii' dah díníisééhgóó.

Just now, cells in the body that grow uncontrollably.

Not yet, body, to another part, it grows.

- **Local (Stage Two)** – A Stage Two cancer is larger than in Stage One and may or may not have spread to nearby lymph nodes.

Ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí ats'íis biyi'di

díníisééh dóó binaahgóó t'éiyá hóló dóó akááz biyi'di lahda díníisééh.

Cells in the body that grow uncontrollably, in the body, it grows, and, around it, only, when it exists, around it, only, exist, and, lymph nodes, may grow inside it.

- **Regional (Stage Three)** – A Stage Three cancer is larger than in Stage Two and has spread into the lymph nodes. This stage is also called “regional metastasis.”
Ats’íís bitl’óól dah díníisééh áádóó ba’át’e’ hóló yileehígíí haniísánídóó binaagóó ats’íís biyi’di díníisééh.
Cells in the body that grow uncontrollably, from where it starts to grow, around it, inside the body, it grows.
- **Distant (Stage Four)** – A Stage Four cancer has spread to a different area of the body from where it started. This is also called “distant metastasis.”
Ats’íís bitl’óól dah díníisééh áádóó ba’át’e’ hóló yileehígíí náána lahgo ats’íístahgóó nahaz’ánígíí biyi’di díníisééh.
Cells in the body that grow uncontrollably, at another area, among the body, somewhere, inside, it has grown.

Surgeon – A surgeon is a doctor who removes or repairs a part of the body by operating on the patient.

Azee’íil’íni ats’íís neilgizh éi doodago ats’íís yá’át’éeéh ánáyoodlíilgo yinaalnish.
Doctor, body, cutting it/doing surgery, or, good/whole, he makes it, works.

Surgery – The word “surgery” is used to refer to the medical procedure of treating diseases or injuries by operating on the patient in order to remove or repair a part of the body or to have access into the part of the body where a disease may be present. If the patient is suspected to have cancer, the purpose of the surgery may be to find out if the patient actually does have cancer or the extent of the cancer.

Ats’íís bitl’óól dah díníisééh áádóó ba’át’e’ hóló yileehígíí hats’íís biyi’di díníiséehigi t’éi nahgóó haalgishgo hona’anish.
Cells in the body that grow uncontrollably, in the body, it grows, remove by operation.

Symptoms of Cancer – There are many different symptoms known to be associated with certain types of cancer. As cancer grows in the body, it causes changes to take place, producing symptoms. The symptoms that appear depend on the size of the cancer, the location, and which organs or body parts are nearby to the cancer. The symptoms are the feelings that the patient has that something is not right inside his or her own body, and they should be promptly reported to the health care provider.

Ats’íís bitl’óól dah díníisééh áádóó ba’át’e’ hóló yileehígíí hats’íís biyi’di díníiséehgo hatah doo ákóhoot’éeégóó áyósínígíí bee baa ákozniizíìh.
Cells in the body that grow uncontrollably, in one’s body, when it bothers/harms one, producing symptoms, with it, one will know.

- **Changes in Bowel or Bladder Habits** – Diarrhea, constipation or changes in the size of stool may indicate colon cancer. Pain with urination, blood in the urine or feces, or change in bladder function or difficulty urinating could be related to

bladder or prostate cancer.

Łahda hach'íidíil dóo halizh bízis biyi'di dóo halizh bikááz biyi'di ats'íis bitł'óól dah díníisééh áádóo ba'át'e' hóló yileehgo hatsá hodiniih, hachaan nátl'iz, hachaan t'áa al'ąą ádaníltso, neezgaigo ní'jidlish dóo díł halizh bitahgo, hachaan díł bitahgo éi doodago ch'éehda ajilizh łeh. Sometimes, colon, and, bladder, and prostate, inside, cells in the body that grow uncontrollably, diarrhea, constipation, changes in the size of stool, painful urination, blood in the feces, or difficulty urinating.

- Sore that Stays for a Long Time** – Skin cancers may bleed and resemble sores that do not heal. Sores in the mouth that do not heal may indicate oral (mouth) cancer, especially if the person smokes store-bought tobacco, chews tobacco, or frequently uses alcohol.

Hakáa'gi éi doodago hazéé' góne' lóód dinidleeh.
Skin or mouth, sore, stays for a long time.
- Unusual Bleeding or Discharge** – Blood in the sputum (spit or saliva) may indicate lung cancer. Blood in the stool may indicate cancer of the colon or rectum. Abnormal bleeding not related to menstrual periods may indicate cancer of the cervix, vagina, or uterus.

T'áadoo hooyání hazhéé' díł bitahgo łahda hajéiyilzólii ats'íis bitł'óól dah díníisééh áádóo ba'át'e' hóló yileehgo ákót'įįh. Hachaan díł bitahgo łahda ach'íidíil éi doodago bee ajichį'ígíi bii' ats'íis bitł'óól dah díníisééh áádóo ba'át'e' hóló yileeh. Asdzání t'áa hoolzhishgi díł bighánánahgo łahda biishch'id biyi'déé' ats'íis bitł'óól dah díníisééh áádóo ba'át'e' hóló yileeh. Unusual, spit saliva, blood, in it, sometimes, lung, cells in the body that grow uncontrollably. Stool, blood, among it, colon, rectum, cells in the body that grow uncontrollably. Woman, any time, blood, discharging, sometimes, reproductive organs, inside it, cells in the body that grow uncontrollably.
- Thickening Lump, Swelling** – Many cancers can be felt through the skin, particularly in the breast, testicle, lymph nodes (glands) and the soft tissues of the body. Any lump or thickening should be reported to your health care provider.

Hats'íis haa'ída neezhcháád yileeh éi doodago nitł'izgo bii' niilts'i'.
One's body, somewhere, swollen, become, or, when it is hard, inside it, forms.
- Indigestion, Feeling Bloating or Difficulty Swallowing** – Indigestion, feeling bloated (but not actually being bloated) or difficulty swallowing may indicate cancer of the esophagus, stomach, or pharynx (throat).

Łahda hazági, habid biyi'di éi doodago hayáyi'di ats'íis bitł'óól dah díníisééh áádóo ba'át'e' hóló yileehgo hatsá na'alyol dóo habid hadei'át'é éi doodago ch'ééh a'jilneehda łeh. Sometimes, esophagus, stomach or pharynx, cells in the body that grow uncontrollably, may cause, indigestion, feeling bloated or, difficulty swallowing.
- Recent Changes in a Wart or Mole** – A change in color, loss of definite borders (edges), or an increase in size of any wart or mole should be reported to the doctor without delay. The skin lesion may be a melanoma, which, if diagnosed early,

Dinééh éí doodago hastóí bicho' biyëezhii biyi'di ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileeh. Kót'éego aah dahoo'aahígíí naaki al'aah át'é, la' doo hah noosélda dóó la' éí t'áá tsxíilgo nanise'.

Young men, or, older men, his sperm, where it is made, inside it, cells in the body that grow uncontrollably. When he becomes that way, illness, two, different types; one grows slowly, and, one grows fast.

- **Testicular Self Examination (TSE)** – A Testicular Self Examination is when a man checks his own testicles to detect any lumps or growths that might indicate an abnormality in the tissue.

Dinééh éí doodago hastóí t'áá bí biládiníbiní yee bicho' biyëezhii yik'ih nidilnihgo nitl'iz bii' nidoolts'ilígíí yee neilkaah.

Young men, or older men, just, themselves, their own testicles, feeling with their fingers, for lumps that might indicate, from having it, they do self examination.

Tissue – A tissue is a group or layer of cells that are of the same kind and that work together to perform a specific function. Most organs of the body have several different types of tissue, such as the layers of tissues that make up a stomach or the different tissues that make up an eyeball.

Ats'íis bitl'óól éí alk'inaazkaad, t'áálá'ígíí danilínígíí dóó ahil nidaalnishgo ats'íis yee naalnish. Ats'íis biyi' siléii éí t'áá al'aah ádaat'éego yee hadít'é, abid dóó anáá' ákót'é. Body cells, are in layers, they of the same kind and work together, the body works with it. Body, inside, organs, are different ones, it is made up, the stomach and eyes are like that.

Treatment

- **Local Treatment** – Local treatment is a treatment or medicine that is applied only to the diseased area of the body.

Ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí hats'íis íiyisíí yainít'ínígi dóó binaagi bina'anish.

Cells in the body that grow uncontrollably, only on one's body, where it bothers it, at that area, treatment.

- **Systemic Treatment** – Systemic treatment is a treatment or medicine that will reach and affect the entire body even if the disease cannot be seen everywhere.

Ats'íistahgóó t'áá át'é azee' baah ál'í.

Throughout one's body/among one's body, just all of it, medicine, on it, applied to/treated.

Tumor – A tumor is an abnormal mass of tissue that results when cells multiply more than they should or when they do not die when they should. Tumors may be benign (not cancerous) or malignant (cancerous). A tumor may also be called a “neoplasm.”

Hats'íis biyi'di ats'íis bitl'óól dah díníisééh áádóó ba'át'e' hóló yileeh éí doodago haashíí nízah bá nidahwiizt'i' yëe biláahgóó nooséél. Kót'éego hats'íistahdi haa'ída dínéesáago éí la' doo ba'át'e' hólóógóó t'áá láhígi hasht'edít'é.

La' ba'át'e' hóló yileehgo t'áá bóhóníihgóó díníisééh dóó hats'íis yéego yaah dahool'aah. One's body, inside it, cells in the body that grow uncontrollably, or,

they live beyond their time. When it becomes that way, among one's body, somewhere, growing, that, one, not, harmful, existing, in one place it stays.
One, malignant, existing, just, anywhere, grows, and, one's body, very, on it, harms it.

- **Benign Tumor** – Growth (lump) of cells that is not harmful. A tumor that does not spread to invade other areas of the body that were not already affected.

Ats'íís bitl'óól doo ba'át'e' hólóógóó dínisééh éí doodago hatsi' bii' ni'alts'i'go doo ba'át'e' hólóógóó dínisééh. Hats'íís kót'éego noosééligíí éí t'áá láhígi hasht'edít'é, doo nááná háajigo hats'íís biih nisééh da.

Cells, among the body, not, harmful, that way, as it grows.

One's body, in this way, that grows, that, at one point, stays,

not another, to a different place, one's body, it does not grow into a new area.

- **Malignant Tumor** – A malignant tumor is an abnormal mass of tissue (cancer) that results when cells divide more than they should or do not die when they should. Malignant tumors are generally more serious than benign tumors. They may be life-threatening. Malignant tumors often can be removed, but sometimes they grow back. Cells from malignant tumors can spread or travel (metastasize) to other parts of the body (such as to nearby lymph nodes). Cancer cells spread by breaking away from the original (or “primary”) tumor and entering the bloodstream or lymphatic system. The cancer cells can invade other organs and form new tumors that damage those organs.

Hats'íístahdi lahgo dínéesánígíí t'óó náás nooséél.

Hats'íís bitl'óól doo hah daninéeda daaleehgo hats'íís nááná lahji' yii' dínisééh.

Lahda éí hanáánisééh. Hats'íís kót'éego éí ats'íís bitl'óól dah dínisééh áádóó ba'át'e' hóló yileehígíí hadił bitah yileehgo éí hats'íís nááná lahgóó bii' dínisééh.

Among one's body, somewhere, the growth, just, forward, it grows.

Body cells, do not die as they should, becomes, one's body, another part,

grows in it. Sometimes, it, just grows again. One's body, this way, that,

cells in the body that grow uncontrollably, one's blood, among it, it becomes,

that, one's body, another area, inside it, it grows on.

Ultraviolet (UV) Rays (Ultraviolet Radiation) – Ultraviolet rays are high energy invisible rays that are part of the energy that comes from the sun. UV radiation also comes from sun lamps and tanning beds. UV radiation can damage the cells in the skin and cause melanoma and other types of skin cancer. UV radiation that reaches the Earth's surface is made up of two types of rays, called UVA rays and UVB rays. UVB rays have greater energy and are more likely than UVA rays to cause sunburn, but UVA rays pass deeper into the skin. Scientists have long thought that UVB radiation can cause melanoma and other types of skin cancer. They now think that UVA radiation may add to skin damage that can lead to skin cancer and also cause premature aging of the skin (such as wrinkles and age spots). For this reason, skin specialists recommend that people use sunscreens that reflect, absorb, or scatter both kinds of UV radiation. The chíih that Navajos use (red clay mixed with mutton fat) also provides good protection from UV radiation.

Jóhonaa'éí bits'áziil doo yit'iinii naaki ał'ąąh át'éego bits'áziil,

UVA dóó UVB bee wójí, éí ayóo bii' nijigháago ats'íís bitl'óól dah dínisééh áádóó ba'át'e' hóló yileehígíí hakáá' dínisééh.

Sun, its rays, not, visible ones, two, different, when one is like that,

rays from it, UVA, and, UVB, with it, name/call, that, very much, inside it, one walking/contacting it, cells in the body that grow uncontrollably, grows on the skin.

Watchful Waiting – “Watchful waiting” is a term that is used to describe careful observation (monitoring) of a cancer patient’s disease through ongoing testing and follow-up instead of beginning treatment immediately with chemotherapy, radiation, or surgery. This approach may be taken with a disease that is known to be slow growing so there is not an urgent need to begin treatment, especially when that treatment is likely to have a lot of uncomfortable side effects. For example, “watchful waiting” is often used in relation to patients with early prostate cancer. However, the patient should be sure to follow up with their doctor during the following months and years to make sure that the cancer has not returned during the period of watchful waiting.

Ats’íís bitl’óól dah díníiseeh áádóó ba’át’e’ hóló yileehígíí doo náás nooséligíí yee haah dahool’aahgo t’óó náhodi’nél’íih leh. Azee’íí’íní t’áá ahááh baa níjídáahgo hazhó’ó bił nidajilnishgo bee haa áháyáá dóó bee ádaa áhojilyá. Cells in the body that grow uncontrollably, not, growing fast, with it growth, only, one gets seen by visiting a doctor. Doctor, often, visit him/her, carefully working with them, one is cared for, and one is taking care of self.

APPENDIX I.

Additional information that we decided not to include in the “basic” Glossary.

Cancers are divided into five main groups:

Ats'íís bitł'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí ashdla' ál'aa át'éego dah naazhjaa':
Cells in the body that grow uncontrollably, five, different, types, in groups:

- **Carcinoma** (see the full entry on page 9)
- **Sarcoma** – A sarcoma is a cancer that begins in [bone](#), [fat](#), [muscle](#), [nerve](#), [joint](#), [blood vessel](#), or [deep skin](#). It is a spreading cancer that grows from tissues (flesh) that connect different parts of the body together, such as bones, tendons (which attach muscles to bones), cartilage (found in the joints and in other places), muscle and fat.
Ats'íís bitł'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí hats'in biyi'di, hak'ah bitahdi, hadoh bitahdi, hats'óóz bee ajiniihígíí biyi'di, ahādzhdit'āgi, hats'oos biyi'di, éi doodago hakági alk'ih sikaadígíí biyi'di díníisééh.
Cells in the body that grow uncontrollably, one's bone, inside it, one's fat, among it, one's muscle, among it, one's nerves one feels with, inside it, at one's joints, in one's blood vessels, or, deep inside one's skin, it grows.

There are five basic types of Sarcoma.

- **Osteosarcoma** – [Bone cancer](#).
Hats'in biyi'di ats'íís bitł'óól dah díníisééh áádóó ba'át'e' hóló yileeh.
One's bone, inside it, cells in the body that grow uncontrollably.
- **Fibrosarcoma** – Cancer that develops from [fibrous](#) or [connective](#) tissue, such as the tissue that normally forms tendons and ligaments.
Hats'id dóó ooshgēzh biyi'di ats'íís bitł'óól dah díníisééh áádóó ba'át'e' hóló yileeh.
One's bone, and cartilages, inside it, cells in the body that grow uncontrollably.
- **Rhabdomyosarcoma** – Cancer of [skeletal muscles](#) (muscles that control voluntary movement; muscles that make the bones and joints move).
Ats'íís bitł'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí hadoh hats'áoz'a' neiyiínáhígíí biyi'di díníisééh.
Cells in the body that grow uncontrollably, one's muscle, the one that moves the limbs, inside it, it grows.
- **Leiomyosarcoma** – Cancer that develops from [smooth](#) muscles (also called involuntary muscles, such as in the intestines and stomach).
Ats'íís bitł'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí

hach'íí' dóo habid bidoh biyi'di dínisééh.
 Cells in the body that grow uncontrollably,
 one's muscle, one's intestines and stomach muscle, inside it, it grows.

- **Liposarcoma** – Cancer of fatty tissue.
 Ats'íís bitl'óól dah dínisééh áádóó ba'át'e' hóló yileehígíí
 ats'íís bitl'óól ak'ah biyi'di hólónígíí bii' dínisééh.
 Cells in the body that grow uncontrollably, body cells in the fatty tissue,
 it grows in it, cells in the body that grow uncontrollably.

- **Leukemia**
- **Lymphoma** (see the full entries for these 3 items on page 10)
- **Myeloma**

Chemotherapy Classifications: Types of Chemotherapy Medicines (Drugs)

The chemicals that are used to treat different types of cancer work in different ways and they also have different effects on the body of the person being treated. The healthcare provider should explain these different types of medicines and their effects before beginning to treat the patient with one of these medicines.

Ats'íís bitl'óól dah dínisééh áádóó ba'át'e' hóló yileehígíí
 t'áá al'ąąh át'éego bik'ihjí' na'anish.
 Azee' t'áá al'ąąh ádaat'éego bee bik'iji' adinish.
 Ła' azee' daaldeel, ła' daadlá, ła' bił aa'ada'atsih, dóo ła' bee ádadiltłah.
 Cells in the body that grow uncontrollably, just different kinds, use to treat it.
 Different types of medication, used to treat it.
 Some medicines are pills, some you drink it, some given as shots,
 and some apply like creams.

Alkylating – The effect is not limited to a specific period of cancer growth. The medicine interferes with the development of the cancer cells. Cytoxan may cause bleeding from the bladder, and Cisplatin may cause kidney damage and commonly causes a large amount of vomiting.

Anti-Metabolites – The effects are limited to a specific period of growth of the cell. These medicines interfere with all stages of the beginnings of the cancer cells. 5FU can be in a lotion form and applied like cream to the skin, or also in the form of a liquid to go into the veins.

Anti-Tumor Antibiotics – These medicines have non-specific, multiple actions. The effects are not limited to a specific period of cancer cell growth and these drugs work in the same way as antibiotics to kill the cancer. Adriamycin is known for causing a high risk for heart complications. Bleomycin is known to cause the lungs to become fibrous and to make it difficult to breathe. Both of these drugs have a limited amount (dosage) that a person can receive during their lifetime.

Plant Alkaloids – The effects are limited to a specific period of cancer cell growth. They interfere with the ability of the cancer cells to multiply. Taxol may cause a slow heart rate while it is being given to the patient.

Hormones – These are molecules that are made by the body and that may interfere with the cancer's surroundings and make it difficult for the cancer to grow.

Anti-Angiogenesis – These medicines prevent blood vessels from growing in the area around the tumor. All cells in the body require a regular supply of blood, which provides them with oxygen and nutrients for growth. A major area of recent advances in cancer research and treatment is the development of drugs that prevent or inhibit the growth of new blood vessels (angiogenesis) into areas where the cancer cells are growing. Since cancer cells typically grow very rapidly, this treatment slows down or inhibits the growth of the cancer cells by preventing or inhibiting the growth of new blood vessels in the area around the cancer cells.

The Goals of Chemotherapy are to cure the cancer, control the disease, or control the effects of the symptoms of the disease, while causing as little damage as possible to the normal healthy cells in the person's body.

Phases of Clinical Trials

- **Phase I Clinical Trial** – The goals are to evaluate how a new medicine should be given (by mouth or by injection, for example), how much should be given in each dose and how often it should be given. There is a major emphasis on whether the new medicine would be safe (even if it does work), what its side-effects might be, and what safety guidelines should be used when giving this medicine to a patient.
- **Phase II Clinical Trial** – The goals are to study and determine the safety of the medicine as well as the action or effectiveness of the medicine. For a new cancer medicine, a Phase II Clinical Trial will also study how it works with specific types of cancer and how successful it is when fighting the type of cancer for which it will be prescribed.
- **Phase III Clinical Trial** – The goals are to determine the ability of the patient to survive the disease (such as cancer) as a result of being treated by the new medicine and also to compare the new medicine to other methods of treatment to see if the new medicine improves the patient's length of life and quality of life.
- **Phase IV Clinical Trial** – A Phase IV Clinical Trial is usually done after the new medicine has already been approved for use with patients, in order to further evaluate the long-term effectiveness and safety of the new medicine and possibly also to test the medicine for other uses (perhaps for use in treating other diseases) and for other dose amounts (larger or smaller doses) that might be used.

APPENDIX II.

Explanatory notes from various discussions of the “Glossary Working Group.”

Navajo language terms that have been used in the past to refer to cells:

Iná bik'óó'	Life, its seed
Ats'íisk'óó'	Body seed
Hinááhts'óóz	Life cell
Hiinááh ats'óóz	(similar, from some older materials)

A presentation on the draft Glossary was made in January 2007 to a group of nurses and health educators who work with cancer patients. They reported that they used the cancer term *atát'ah nanise' doo yá'át'ééhígíí*. They also discussed the more familiar terms

Hinááh
Hinááhts'óóz

The Glossary working group discussed this further and decided to continue using the word *Hinááh* for *cell*. Others also voiced concerns over the new term *atát'ah nanise'* as this was the first time they had heard of the usage of that term for cell.

Hats'íistah, hats'íistahdi hats'íis haa'ída
Among the body, among the body, at, one's body, somewhere.

Ats'íis biyi' haa'ída nooyéél silíí'.
Body, inside it, somewhere, a fast growth, it became.

T'áa ádzaagóo nooséél.
Just any direction, it is growing.

T'áa bóhólníihgóo nooyéél.
Just anywhere, it is growing fast.

T'áadoo ééhózingóo nooséél.
Just without known direction, it is growing.

T'áadoo ééhózingóo nooyéél.
Just without known direction, it is growing fast.

T'áa ádzaagóo dínisééh.
Just any direction, it starts to grow.

Hinááh tídil'íihgo t'áá b'óhólníihg'ó'ó nooyéél yileeh.
 Living cell, when it is injured, just any where, it is growing fast, it becomes.

Nizhónígo hats'íís nooséelgo haa'íshíí hoolzhishgo lahgo át'íih.
 When well beautifully, one's body, somewhere in time, it changes.

Doo ákót'éégóó dah díníisééh.
 Not, the way it should, it starts to grow.

In April 2009, Susie John, Ida Bradley, Sally Joe and Martha Austin-Garrison were discussing the recent “Community Conversation on Genetics” conducted at the Shiprock Campus of Diné College. **They arrived at the consensus agreement that:**

DNA in cells should be called
iiná bitł'óól (“life cells”).

Cells of the body should be called
ats'íís bitł'óól (“body cells”).

These are the terms (immediately above) for “DNA” and for “Cells” that have been used in the development of this edition of the Glossary.

In the Navajo language there are two ways to view abnormal growth :

1. **Nooséél.** This refers to the growth from its earliest beginning toward its completion, like the way a seed would grow to be a normal tree or plant. This is a normal state of growth and development. However, when the adverbial phrases t'áá ádzaagóó – “just without direction” or t'áadoo ééhózingóó – “just without knowing where” (probably refers to “without a definite plan” or “without a defined normal pattern”) are used with nooséél then it explains the abnormal growth or growth that is out of control.

2. **Nooyéél.** This refers to spreading and it means a multiplication of something. This phenomenon could be a normal process of a kind of growth. Again, when the phrases t'áá ádzaagóó and t'áadoo ééhózingóó are placed before nooyéél then they explain the nature of this growth that is out of control.

The Glossary working group members felt that **nooséél** “it is growing and developing” is the best description because nooséél creates an image of growth from a small beginning to some end. As Dr. Susie John noted, this concept lends itself much more effectively to the diagnosis and treatment goals of early detection and intervention, since early detection and intervention provide the greatest benefits to the patient when (tumor) growth is still in the small beginning stage.

Abnormal growth begins with mutation of normal cells. Mutation can result in uncontrolled growth. To explain why mutation happens, Glossary working group participants explained that as follows:

Hinááh tídíl'íihgo t'áá bóhólníihgóó nooyéél yileeh
 When a cell is injured (also “affected” or “harmed”)
 just without direction, spreading, it becomes.

The group discussed whether “injured” is the correct description. However, in clinical interpretation scenarios, an identification or assumption of the cause is usually provided to make sense of what has happened to the body. The members of the Glossary working group discussed and listed some known causes:

1. Genetic factors – bil azhchíígo; bil oochííl silíí'go
2. Reasons for mutation – uncontrolled growth and development:
 - a. Virus
 - b. Sunlight
 - c. Radioactivity
 - d. Chemicals
 - e. Toxins from air, water, and other pollution

It was noted that cancer begins at the point of mutation in a cell. Discussion followed, and there was a consensus on the explanation below:

Nizhónigo hats'íis nooséelgo haa'ishíí hoolzhishgo lahgo át'íih.
 Doo ákót'éégóó dah díníisééh.

In a normal and healthy way the body grows and at a certain time it changes.
 In an incorrect way it begins to grow.

Growth (of a tumor) has a beginning; the sooner detected, the better for life. These statements are often used by providers in the clinical setting:

Doo ách'í' ni'jódliida.

Not, toward one self, expected to happen.

Ha'át'íish biniiyé ádaḡah yit'íi doo.

What reason for, that one does not want to detect it.

Doo bee ach'áḡah na'anishda.

One should not avoid it.

From the Meetings at the Northern Navajo Medical Center, Summer 2007

Cancer	Ats'íís bitł'óól dah díníisééh áádóó ba'át'e' hóló yileehígíí Hak'aasht'ah nanise'
Prevention:	T'áá bitséedi ádaa áháyá
Risk:	Bits'áádóó ohodiit'ihígíí
Treatment:	Bee bik'iji' na'anishígíí Bee ni' ádoolníhígíí Bidéélnínígíí Bidídóolnihígíí Bee bii' hazhdoogálgíí Bee yisdázhdoogálgíí

	<u>Singular form</u>	<u>Distributive Plural form</u>
Survival rate:	Yii' hááyáhígíí Bii' háádzoodzáhígíí Yikáá' hááyáhígíí Nídzoodzí'ígíí Yik'eh deesdlí'ígíí Yisdááyáhígíí	yii' haakaiígíí bii' hajookaiígíí yikáá' haakaiígíí, yikáá' hahaaskaiígíí nídaadzí'ígíí yik'eh dadeesdlí'ígíí yisdáákaiígíí, yisdáhaaskaiígíí

The “Five Ladies of the NNMC” met on February 12, 2008, and considered which terms they needed to focus on. They decided to look again at the Cancer 101 curriculum and at the Diabetes Glossary materials, and that there were about 3 or 4 terms that should receive special attention. They agreed to *reverse some of the Navajo word order*, so that the site would be identified first, followed by the cancer description:

Lymphoma: ats'íís bitł'óól ba'át'e' díníisééhígíí hakáázts'oos biyi'di
We probably should reverse that, to site first and then cancer.

Hakáázts'oos biyi'di ats'íís bitł'óól ba'át'e' hólóogo díníisééh.
Reverse the word order; the same for prostate cancer (immediately below).

Halizh bikááz biyi'di ats'íís bitł'óól ba'át'e' hólóogo díníisééh.

Discussion on Lymphatic System (Lymph Nodes) and Endocrine System (Glands)

The **lymphatic system** parallels the **circulatory system**, leading to potential confusion. Ida suggested the functional distinction that the lymph system acts as a filter - **kááz**, which differs from the capillaries, arteries, veins, nerves, endocrine glands, etc.

Ida: **Alk'idáá'** **éí lóód doo nádzihi dabiidí'ní nít'éé'** then I use the new term. Long ago, that, sore, does not heal, we used to call it. They know what I am talking about.

Ida: **ats'óóz nerve** **ats'oos blood vessels**
Akááz bits'óóz **to me, that is the nerve**

Lymph system to me is **éí akááz dah yikahjí**

Gland – because they produce, they do not filter. They produce,
éí alohk'e' dah yikahjí, just like the **pancreas**,
éí alohk'e' dah yikahjí, similarly for the **thyroid**,
it produces, it is not a filter. The lymph nodes **éí** they are filters, that is why we call it **akááz éí** all the lymph nodes, they are filters. The first **akááz** I learned about is the tonsil, **éí éí akááz át'é**.

tó biyáázh – small unit of fluid

tó álnáshchíín – male fluids, mixes with female fluids to make the baby
(goes back to the Origin Myth)

hats'oos – anything to do with the circulatory system

hats'óóz – nervous system

FEEDBACK AND SUGGESTIONS

For a period of more than 3 years (from the Fall of 2006 through the Fall of 2009), a core “Glossary working group” of more than a dozen persons met about 50 times to develop this Glossary. This core group is listed and described as the “Major Contributors to the Working Group that Produced this Navajo Cancer Glossary” at the beginning of the Glossary. There were an equal number of additional participants who attended one or more meetings on an occasional basis. Nearly all of the Glossary entries were discussed multiple times, with different combinations of persons, and many of these discussions involved lengthy dialog in the Navajo language. One of the key elements of the Mission of Diné College is to strengthen the study of the Diné language and culture, and the extended “deep knowledge” discussions in the Navajo language on these topics of culture, health and disease provided significant satisfaction to all of the participants in this process.

Nevertheless, we are well aware that knowledgeable persons will have different preferred ways of describing the topics in the Glossary in different ways, in both Navajo and English. We intend this to be a “*first edition*” of the Glossary, and the collaboration between Diné College and Mayo Clinic which resulted in the development of this Glossary will continue for years to come, so we definitely expect to produce a revised “second edition” and perhaps more revised and/or expanded editions in the future. Accordingly, we sincerely solicit your comments, suggestions for additional entries or revisions to the entries presented here, and, especially, corrections in either English or Navajo that users of this Glossary would like to submit to us. The “Glossary working group” will continue to function (meeting at the Shiprock Campus of Diné College) as an advisory group for additional cancer-focused projects and activities of Diné College and Mayo Clinic, and this group would gladly accept comments and suggestions from Glossary users. Such comments and suggestions should be addressed to Dr. Garrison (contact information below), but specific comments regarding the Navajo terminology and texts should be addressed to both of the persons identified below. We thank everyone who finds this Glossary to be of value, and hope that this resource will be widely used within both the provider community and the general community of the Navajo Nation.

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