GLOSSARY OF TERMS, ABBREVIATIONS & ACRONYMS

A

AASLD: American Association for the Study of Liver Disease

Abdomen (abdominal): The middle front part of the body between the ribs and legs; it includes the stomach and liver.

Abstinence approach: An approach to help people stop using drugs or alcohol completely.

Active disease: A disease that is in a state of inflammation causing damage to the liver.

Acquired Immune Deficiency Syndrome (AIDS): A syndrome caused by infection with the human immunodeficiency virus (HIV) characterized by suppression of the immune system, rendering the body susceptible to various illnesses.

Acupuncture: A treatment where small needles are stuck into the skin at specific points, usually to help relieve pain.

Acupuncturist: A person who is trained in acupuncture.

Acute infection: An illness/infection that comes on quickly and usually does not last too long.

Acute liver failure: Rapid deterioration of liver function in a person with no pre-existing liver disease.

Adherence: Following a prescribed treatment regimen, including correct dosage, timing, and number of doses per day.

Adjunct therapy: Therapy given in addition to primary treatment. Also called adjuvant therapy.

Adverse event: An unwanted or unforeseen side effect of a medication.

AFP: See alpha-fetoprotein.

AIDS: See acquired immune deficiency syndrome.

Alanine aminotransferase (ALT): A liver enzyme released when liver cells are damaged; raised ALT levels may indicate liver inflammation.
**Albumin**: An important protein produced by the liver; low levels indicate liver damage.

**Alpha-fetoprotein (AFP)**: A protein, measurable in the blood, that is may be elevated in people with liver cancer.

**ALT**: See *alanine aminotransferase*.

**Ammonia**: A by-product of the protein metabolism in the body that is normally removed by the liver.

**Amino acids**: A building block of proteins used by the body.

**Anemia**: Reduced number of red blood cells or reduced ability of blood to carry oxygen. Symptoms may include fatigue, weakness, pale skin, and difficulty breathing.

**Antibody (antibodies)**: Blood proteins the body makes in response to an antigen.

**Anti-depressant drugs**: Drugs prescribed to treat depression.

**Antigen**: A part of the virus or toxin that stimulates your immune system to produce antibodies.

**Anti-inflammatory drugs**: Drugs that help settle down inflammation or swelling.

**Antiviral medicines**: Drugs that work against viruses.

**Ascites**: Collection of fluid in the bowel cavity, causing swollen abdomen; can be a symptom of advanced liver disease.

**ASO**: AIDS service organization.

**Aspartate aminotransferase (AST)**: A liver enzyme released when liver cells are damaged; raised AST levels may indicate liver disease.

**Assay**: A test used to detect the presence or amount of a virus in the blood.

**AST**: See *aspartate aminotransferase*.

**Asterixis**: See *flapping tremor*.

**Astrocyte**: A type of brain cell that helps neurons carry out important brain functions.

**Asymptomatic**: Not feeling or showing outward symptoms or signs of a disease.

**Autoimmune disorder**: Any type of disorder where your immune system attacks healthy cells and organs in your body.

**Autoimmune hepatitis**: Chronic inflammation of the liver caused by your own immune system attacking healthy liver tissue.
BCCDC: British Columbia Centre for Disease Control

Bile: Fluid made by the liver to help digest foods.

Bile duct: the passageway where bile moves from the liver and gallbladder to the duodenum of the small intestine

Bilirubin: Product of hemoglobin (red blood cells); when increased levels are found in the blood, this can indicate liver disease, and can result in jaundice.

Biopsy (Bx): The removal of a small sample of tissue to look for signs of disease.

Blood glucose level: Amount of sugar in your bloodstream

Body mass index (BMI): A calculation based on your height and weight; result reflects either a healthy or unhealthy weight

Brain edema: Abnormal fluid accumulation around brain tissues resulting in increased pressure on the skull

Brain fog: Difficulty concentrating or remembering things; feeling ”spaced out”, “unclear” or “foggy”.

Bx: See biopsy.

CADTH: Canadian Agency for Drugs and Technologies in Health.

CAG: Canadian Association of Gastroenterology

CAHN: Canadian Association of Hepatology Nurses

Carrier: see Genetic carrier.

CASL: Canadian Association for the Study of the Liver

CDC: Centers for Disease Control and Prevention

CDDW: Canadian Digestive Diseases Week

CDEC: Canadian Drug Expert Committee

CDR: Common Drug Review

CHE: Continuing Health Education
Cholecystectomy: Surgical removal of the gallbladder.

Cholesterol: A fat-like substance made by the body and found naturally in animal foods such as meat, fish, poultry, eggs and dairy products.

Chronic infection: An infection that continues over a long period of time. Approximately 75% of people who become infected with the hepatitis C virus develop chronic infection.

CIHR: Canadian Institutes of Health Research

CIHR-III: Canadian Institutes of Health Research – Institute of Infection and Immunity

Cirrhosis: Permanent scarring of the liver caused by long-term inflammation from various forms of liver disease

Clinical trial (clinical study): Clinical trials are studies that explore whether a medical treatment or device is safe and effective for humans.

CME: Continuing Medical Education

Coagulation factors: Also known as “clotting factors”; substances in the blood that assist in a series of chemical reactions to stop bleeding

Co-infection: Being infected with more than one virus at a time.

Combination therapy: Use of two or more drugs together to improve the effectiveness of treatment.

Compensated: When the liver is coping with or “compensating” for the damage caused by cirrhosis.

Constipation: Having difficult or less frequent bowel movements because the stool is hard and dry.

Contaminated: Something that contains, or has touched, bacteria or a virus.

DALYs: See Disability-adjusted life years.

Decompensated: When cirrhosis is so extensive that the liver can no longer cope with the damage and can no longer carry out its essential functions.

Dehydration: Not having enough fluids in the body.

Deoxyribonucleic acid (DNA): A double-stranded nucleic acid that encodes genetic information. DNA is made up of four chemical building blocks (nucleotides): adenine, cytosine, guanine, and thymine.
**Direct-acting antivirals (DAA’s):** DAAs are molecules that target specific proteins of the virus and results in disruption of viral replication and infection. They are defined by their mechanism of action and therapeutic target and include: protease inhibitors, polymerase inhibitors (nucleoside and non-nucleoside inhibitors), and NS5A inhibitors.

**Disability-adjusted life years (DALYs):** A measure of overall disease burden, expressed as the number of years lost due to poor health, disability or early death.

**DNA:** See *deoxyribonucleic acid*.

**Dyslipidemia:** Abnormal (either elevated or low) lipid levels in the bloodstream.

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**Early virological response (EVR):** Measurement of response to hepatitis C treatment at week 12. Occurs when hepatitis C virus RNA cannot be detected in a patient’s blood or decreases by more than 2 logs (a 100 fold change) from the starting level by week 12.

**EASL:** European Association for the Study of the Liver.

**Efficacy:** Effectiveness; the ability to achieve a desired result.

**Eligibility criteria:** The criteria of a clinical trial that is used to select patients for clinical trials.

**Elimination:** Reduction to zero of the incidence of disease or infection in a defined geographical area. Intervention measures are still required since the disease is persisting elsewhere.

**Encephalopathy:** Disrupted brain function, causing memory loss and confusion; hepatic encephalopathy occurs when a damaged liver is no longer able to filter toxins from the bloodstream.

**Endoscopy:** A procedure where a flexible tube with a light and camera are inserted into a person’s digestive tract for examination.

**Enzyme:** A product of the body that speeds up chemical reaction.

**Epidemiology:** The study of the frequency, distribution, and behavior of a disease within a population.

**EPO:** See *erythropoietin*.

**eRVR:** See *extended rapid virological response*.

**Eradication:** Permanent reduction to zero of the worldwide incidence of infection.

**Erythropoietin (EPO):** A hormone used to treat certain types of anemia; anemia can be caused by certain medications used to treat hepatitis C

**ESLD:** End-stage liver disease.
Esophagus: The tube that runs from the throat to the stomach; food travels down the esophagus into the stomach.

eRVR: See extended rapid virological response.

Essential fatty acids: A group of fats the body needs to stay healthy, which must be taken in the form of food or supplements.

Extended rapid virological response (eRVR): Occurs when a patient has undetectable hepatitis C virus RNA at weeks 4 and 12.

EVR: See early virological response.

Fatigue: Feeling very tired or weary; exhaustion.

Fatty liver: Excess storage of fat in liver cells that can lead to liver damage

Fibroscan: A non-invasive machine using a sound wave to measure the elasticity of the liver; as damage to the liver increases, so it becomes stiffer - the stiffer or less elastic the liver, the faster the sound wave travels.

Fibrosis: Forming of scar tissue in an inflamed liver, the build up of which can lead to cirrhosis.

Flapping tremor: Also known as “asterixis”; uncontrollable, jerky hand movements when the arms and wrist are extended in front of the person; can be a sign of hepatic encephalopathy.

Fluid retention: When extra fluid collects in the tissues or cavities of the body; often causes swelling.

Fulminant hepatic failure: See acute liver failure.

Generic drug: A drug that is not protected by a patent and may be produced by any manufacturer.

Genetic carrier: This person would have the abnormal gene but does not necessarily have manifestations of the disease. Carriers can pass on the defective gene to their offspring.

Genotype: The genetic make-up of an organism or a virus. Hepatitis C virus has six major genotypes and many subtypes. A person’s virus genotype may be important in determining a type of therapy and predicting response to treatment.

Gilbert's syndrome: Mild, inherited liver disorder caused by a missing enzyme responsible for metabolizing bilirubin; results in elevated bilirubin levels
Glycogen: A form of sugar stored by the liver and other tissues; it is broken down into glucose for energy when the body requires it.

HALYs: See Health-adjusted life years.

Harm reduction: Techniques and policies that help people change the way they use alcohol or drugs to cause them less harm.

HCC: See hepatocellular carcinoma.

HCV: See hepatitis C.

HCV antibody (Anti-HCV): The antibody specific to hepatitis C virus. Its presence in the blood tells that a person was infected with the hepatitis C virus at some point in time; however, it does not tell whether the infection is new (acute), long-term (chronic), or if the infection is still present.

HCV RNA: Genetic material of the hepatitis C virus found in people with hepatitis C. Hepatitis C RNA in the blood indicates a patient is currently infected with the hepatitis C virus.

Health-adjusted life years (HALYs): Health-adjusted life years (HALYs) are population health measures that are useful for overall estimates of burden of disease and comparisons of the impact of specific illnesses and conditions on communities, and in economic analyses.

Healthcare provider(s): The professionals who help people take care of their health. They can include doctors, nurses, nurse practitioners, dietitians, counsellors and social workers.

Hemochromatosis: Inherited disease where the body absorbs more iron than required; results in iron accumulation in and damage to vital organs

Hemodialysis: A way of cleansing the blood, with the help of a special machine, once the kidneys can no longer do the job.

Hepatic artery: Carries the blood to the liver, pancreas, gallbladder, stomach and the small intestine.

Hepatic encephalopathy: See encephalopathy.

Hepatitis: Inflammation of the liver.

Hepatitis A: A liver disease caused by the hepatitis A virus contracted through contaminated food or water; does not become chronic.

Hepatitis B: A liver disease caused by the hepatitis B virus transmitted through blood and bodily fluids; highly infectious and can become chronic.
Hepatitis C (formerly non-A / non-B hepatitis): A liver disease caused by the hepatitis C virus. Hepatitis C is a blood-borne disease. Chronic hepatitis C can lead to cirrhosis and liver cancer.

Hepatocellular carcinoma (HCC): A type of primary liver cancer seen in some people with long-term liver damage due to chronic liver disease and other risk factors

Hepatocytes: Liver cells.

Hepatologist: Doctor who specializes in liver diseases.

Hepatomegaly: Enlarged and tender liver.

Homeopathy: Treating a disease by taking (usually through the mouth or skin) small amounts of natural substances, such as herbs.

Hormones: Chemicals released by cells that affect cell metabolism.

Human immunodeficiency virus (HIV): The virus that causes AIDS. It attacks the immune system, making it harder for the body to fight disease.

Hyperlipidemia: Elevated lipid levels in the blood stream.

IDU: See injection drug user.

Immune: Having or producing antibodies capable of defending your body against bacteria, viruses, and substances that are harmful to the body.

Immune system: The complex way the body’s parts work together to fight disease. The immune system’s job is to look for, and get rid of, bacteria and viruses that do not belong in the body.

Immunity: Resistance of an organism to infection or disease.

Immunization (immunized): A way of making a person’s immune system able to recognize and prevent infection. A person is usually immunized, or vaccinated, using a needle, but sometimes the vaccine can be swallowed.

In Vitro: Studies done in a test tube or culture medium in the laboratory.

In Vivo: Studies done using human or animal subjects.

Inactive disease: The disease is not progressing or increasing; or the progress is slow.

Incidence (also incidence rate): The number of new cases of a disease or condition in a specific population during a given period of time. The incidence rate is determined by dividing the number of new cases by the total population. Contrast with prevalence.
**Inflammation**: The body’s response to injury or infection causing pain, redness, heat, and swelling in the area.

**Injection drug user (IDU)**: A person who uses a drug (e.g., heroin, cocaine) administered with a needle and syringe. The terms intravenous drug user (IVDU) and people who inject drugs (PWID) are also sometimes used.

**Interferon (IFN)**: Naturally occurring protein made by the immune system in response to viral infection and inflammatory diseases.

**Internal bleeding**: Bleeding inside the body that may not be obvious because the blood cannot be seen.

**Intranasal**: Inside the nose.

**IVDU**: See injection drug user.

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**Jaundice**: Yellowing of the skin and whites of eyes caused by a build-up of bilirubin.

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**Lethargy**: When a person does not want, or feel able to do much of anything.

**Limit of detection**: The level at which a test cannot detect any trace of virus in the blood.

**Liver biopsy**: A procedure used to monitor the progression of certain forms of liver disease, including hepatitis C, after diagnosis. During a liver biopsy, a small sample of liver tissue is collected and then examined under a microscope to evaluate liver disease.

**Liver cyst**: Small fluid-filled growth that develops within liver tissue.

**Liver enzyme tests**: Liver enzymes (AST and ALT) are made in the liver cells and leak out in the blood when liver cells are damaged. These tests indicate the degree of inflammation in the liver.

**Liver function tests**: Tests used to determine how well the liver is working. They include INR (blood clotting factor), albumin (protein) and bilirubin.

**Log**: A measure based on the logarithmic scale that refers to quantities in factor of ten. A log change is an exponential, or 10-fold, increase or decrease. Viral load is sometimes expressed in logs.

**Low-grade fever**: A continuous or fluctuating oral temperature that is above 37°C (98.6°F) but lower than 38°C (100.4°F).

**Lymph nodes**: Oval-shaped glands that trap foreign substances as they pass through in the lymph fluid; also houses white-blood cells that help to fight infection.
Marijuana: A psychoactive drug produced from parts of the Cannabis plant. It is also called cannabis, weed, ganja or hashish.

Metabolism: Chemical reactions occurring in the body, consisting of catabolism (break down of large molecules to obtain energy) and anabolism (build up of smaller molecules to larger ones)

Monogamous: Sex with only one partner.


Morbidity: Disease

Mortality: Death

MSM: Men who have sex with men.

Mucosa: The lining inside the body such as the lining of the mouth.

Muscle wasting: Shrinking or weakening of the muscles that can make a person feel less strong and appear skinny.

NAFLD: Non-alcoholic fatty liver disease.

Naïve: Inexperienced; often used to describe an individual who has never taken a certain drug.

NASH: Non-alcoholic steatohepatitis.

Nausea: Feeling sick to the stomach or the need to throw up.

Neuron: A nerve cell in the central and peripheral nervous system; processes and transmits information in order to carry out brain functions.

Neuropsychiatric tests: Assessments of memory, reasoning, problem solving, and concentration

NPNU: Non-prescription needle use.

Non-invasive: A device or procedure that does not require puncturing the skin.

Non responder: A person who does not show improvement while undergoing treatment. In hepatitis C, a non responder does not achieve normal ALT levels or an undetectable viral load.

Null responder: A patient who does not achieve a 2 log drop at 12 weeks of treatment.
Off-label: Use of a Health Canada approved drug for an indication other than that for which it was approved.

Opiate (narcotic): A class of drugs (e.g., heroin, codeine, methadone) that are derived from the opium poppy or produced synthetically and have opium-like effects. Opiate drugs relieve pain, dull the senses, and induce sleep.

Orientation: Awareness of person (who they are), place (where they are), and time (what season or month it is).

Over-the-counter medication: A medication that does not require a prescription to purchase.

Paracentesis: A procedure to remove fluid that has accumulated in the abdominal cavity – a condition called ascites.

Parenteral: Nutrients given by injection into a vein, bypassing the gastrointestinal tract.

Partial responder: A patient who achieves a 2 log drop in viral load there is still evidence of the virus in his blood.

PCR: See polymerase chain reaction.

Pegylated Interferon (Peg-IFN): A synthetic (man-made) version of interferon alpha that may be used in combination with the drug ribavirin to treat hepatitis C infection.

Peripheral edema: Accumulation of fluid in the tissues; commonly seen in the legs for those with chronic liver disease.

Phase I trial: The first stage of human testing of a new treatment. Phase 1 trials evaluate drug pharmacokinetics, safety, and toxicity at different dose levels, typically in a small number of healthy volunteers or in those who have the condition or disease.

Phase II trial: The second stage of the evaluation of a new treatment in humans. Phase II trials evaluate safety and preliminary efficacy in a larger number of participants than Phase I studies.

Phase III trial: The third stage of human testing of an experimental treatment. Phase III trials are designed to determine the safety and efficacy of a treatment, often by comparing it to an existing standard therapy or a placebo.

Phase IV trial: Post-marketing studies done after a new treatment is approved and offered for sale. These trials provide additional information about safety and efficacy in large numbers of patients under “real world” conditions.
pH factor: A measure of acidity or alkalinity; low pH indicates acidity and high pH indicates alkalinity.

Phlebotomy: Removal of blood to reduce the number of red blood cells and iron in your blood.

Placebo: An inert, inactive agent (e.g., pill, injection) that has not treatment value.

Polymerase chain reaction (PCR): A test that determines whether you currently have hepatitis C by detecting the presence of the genetic material of the virus in the blood.

Polymerase inhibitor: A class of compounds that inhibits the polymerase enzyme, which is necessary for hepatitis C virus replication.

Portal hypertension: High blood pressure in the portal vein (which carries blood to the liver), caused by cirrhosis of the liver; can cause varices.

Portal vein: Carries blood from bowel to spleen to liver.

Prenatal: before birth.

Prevalence (or prevalence rate): The proportion of people in a population who have a particular disease at a specified point in time, or over a specified period of time. It includes not only new cases, but also old cases (people who remained ill during the specified point or period in time). Contrast with incidence.

Primary biliary cholangitis (PBC): Formerly known as primary biliary cirrhosis, is a liver disease characterized by damage to the bile ducts caused by the immune system, leading to accumulation of toxic waste products and liver scarring.

Primary care physician: A physician who is responsible for the overall long term health maintenance of a patient.

Primary sclerosing cholangitis (PSC): Liver disease characterized by inflammation of bile ducts where the ducts continue to decrease in size so bile accumulates in the liver, resulting in liver damage.

Probiotics: Friendly bacteria that can change the balance of bacteria in the intestines and aids in digestion.

Prophylaxis: Measures taken to prevent disease from occurring.

Protease: An enzyme that cuts proteins into smaller pieces. The hepatitis C virus protease plays in essential role in the replication of the virus.

Protease inhibitor: A class of compounds that inhibits the hepatitis C virus protease enzyme, a protein necessary for making new viruses.

Proteins: One of three major sources of food energy that is contained in meat, eggs, dairy products and some vegetables.

PWID: See injection drug user.
Q

QALYs: See Quality-adjusted life years.

Quality-adjusted life years (QALYs): A measure of the state of health of a person or group in which the benefits, in terms of length of life, are adjusted to reflect the quality of life. One QALY is equal to 1 year of life in perfect health. It is often measured in terms of the person’s ability to perform the activities of daily life, freedom from pain and mental disturbance.

R


Ribavirin (RBV): An antiviral medication which may be used in the treatment of chronic hepatitis C.

Ribonucleic acid (RNA): A single-stranded nucleic acid that encodes genetic information. The presence of viral RNA in the blood indicates that a virus is actively replicating. Hepatitis C is an RNA virus.

RNA: See ribonucleic acid.

Relapser: Patient in whom the virus was undetectable after treatment, but in whom it is detected six months after treatment. Risk factors: Habits, traits or conditions in a person or the environment that are associated with increased chance of disease.

RVR: See rapid virological response.

S

Scarification: Making cuts and scratches in the skin to produce scars, usually for decoration.

Sexually transmitted infection (STI): A disease that is transmitted person to person, through sex, including vaginal, anal and oral sex.

Social housing: Housing that is owned by a government or a not-for-profit organization rather than a private landlord.

Somnolence: extreme sleepiness.

Stage I: The earliest stage of liver damage, characterized by liver inflammation without fibrosis or cirrhosis.

Stage II: A stage of liver damage characterized by small scarring of the liver (fibrosis).

Stage III: A stage of liver damage characterized by more scarring (bridging fibrosis).
Stage IV: The most advanced stage of liver damage, characterized by a lot of scarring (cirrhosis) and loss of normal liver architecture.

Sterile (sterilize): Something that has no bacteria, viruses or any other substance that can cause disease.

Stool: The waste the body expels through the bowels; a bowel movement.

Stupor: State of decreased consciousness and unresponsiveness where the person can only be aroused by strong stimuli.

Sustained virological response (SVR): Hepatitis C virus RNA remains undetectable six months after stopping treatment.

SVR: See sustained virological response.

Symptoms: The body's signs and indications that a person may have an illness.

T

Toxic: Capable of causing injury especially by chemical means.

Toxins: A poisonous substance produced by living cells and organisms or found in the environment.

Transplantation: Replacing a damaged organ, such as a heart, liver, or lung, with a healthy one taken from a deceased or living donor.

Traumatic (rough) sex: Sex that results in breaking or tearing the body’s tissues that put a person at risk of infection.

Treatment-experienced: A person who has had prior treatment for a particular condition.

Treatment-naïve: A person who has never been treated.

V

Vaccine: see immunization.

Varices: Dilated (expanded) blood vessels along the lining of the upper part of the gastrointestinal tract (esophagus) and stomach area; can be caused by portal hypertension.

Venesection: see phlebotomy.

Vertical transmission (perinatal transmission): Transmission of an infection (e.g. a virus, such as hepatitis C) from a mother to a child during or around the time of birth.

Viral load: Amount of virus in the blood. The presence of genetic material (HCV RNA) indicates that a virus is actively replicating.
Viremia (viremic): The presence of a virus in the blood.

Virus: A form of life too small to see, even with a microscope, that causes disease.

Virus reactivation: When the virus becomes active from an inactive state.

Vitamins: Organic compounds required as nutrients by an organism.

WHO: World Health Organization.

Xanthoma: Deposit of fat under the skin.

Year-equivalents of reduced functioning (YERF): The measurement of the years of healthy life lost due to reduced functioning as a result of a disease or disability.

Years of life lost due to premature mortality (YLL): Years of life lost (YLL) are calculated from the number of deaths multiplied by a standard life expectancy at the age at which death occurs. YLL takes into account the age at which deaths occur by giving greater weight to deaths at younger age and lower weight to deaths at older age.

YERF: See Year-equivalents of reduced functioning.

YLL: See Years of life lost due to premature mortality.