



IMMUNE & RESPIRATORY HERBS

A Resource for Tribal Communities During COVID-19



FEED SEVEN
GENERATIONS



Urban Indian
Health Institute
A Division of the Seattle Indian Health Board



Funding for this document was provided by the Urban Indian Health Institute and the Indian Health Service Division of Epidemiology and Disease Prevention. Created by Elise Krohn, Valerie Segrest, Renee Davis, Rhonda Grantham, and Sofie Geist. Copyright © the authors, 2020. Creative Commons (CC: BY-NC-ND). Thanks to the many editors and contributors.

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A Resource for Tribal Communities During COVID-19

March 2020

by Elise Krohn, Valerie Segrest, Renee Davis, Rhonda Grantham, and Sofie Geist



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Introduction

by Valerie Segrest (*Muckleshoot tribal community herbalist, nutritionist, and educator*)

Washing hands like a surgeon. Standing six feet away from others – especially Elders. Disinfecting surfaces nonstop. Extinction of handshakes. This is the world we are currently living in, and we are told it could go on for some time. As a witness to the beautiful nation-building efforts in revitalizing and reenergizing our traditional food, medicine, and healing systems – social distancing seems physically and mentally defeating. Yet, social distancing does not, cannot, and will not stop us from standing together in social solidarity. This is the precise moment where we gather our collective strength and build a cohesive social response with the charge we all carry – to be advocates for the health of the land, the water, and the people.

Traumatic events, including pandemics, bring sudden change and illuminate our vulnerabilities as a society. Too often, our Native communities are at the epicenter and are disproportionately impacted. It's important to remember that being vulnerable does not make us weak. Rather it is an exercise, testing our resilience. We know we are stronger when we stand together. We can use this time to advance our common vision as tribal communities who are asserting our sovereignty by enacting cultural lifeways in the name of good health. This work is needed now more than ever before. We must stand by the gifts we hold and care for – our foods and medicines, cultural traditions, relations to the land and water, the inheritance of ancient research our ancestors diligently passed to us through generations – these are needed now more than ever before. It's time to stand together with clear messages that will support our people.

Sure, in this challenging time, these goals can seem distant and improbable, but don't forget the plants with their ability to adapt and assert resilience in challenging situations while simultaneously carrying big medicine. Let us remember how stinging Nettle rises from the soil and reaches for the light, becoming stronger as it grows from season to season. How can we learn to gather and fortify our strength so we can endure the marathon of challenges we are facing? These moments require the kindness and generosity of the Cedar Trees, which stand for centuries, offering so many gifts to support the health of our community. Forests filled with Alder teach us about meaningful partnerships, as they collaborate with fungus and soil bacteria to create the conditions necessary for a forest community to thrive. How can we, through community activism and forward thinking, spread a humane vision in this moment?

As a community of healers, we must honor each others' knowledge base, discuss perspectives, and empower one another. We can look to Dandelion as a model of strength and resilience. Time after time, as manmade materials try to push Dandelion out of existence, it returns to the land and heals the soil, opening up space for more medicine to enter the Earth. It shares its gifts of nutritious food and powerful medicine with so many species.



We are holding all of you and all of these teachings close to our hearts at this time as we collectively move forward to uphold our communities' health. That is the work we were put here to do, and this is how we will continue to do it – finding our inspiration from the plants we are beholden to and from people like you who we are committed to supporting. We are truly all in this together.

Herbal Support during COVID-19 Times

from Elise Krohn, herbalist and native foods educator

With the rapid spread of the novel coronavirus and COVID-19, most people are experiencing fear and anxiety. We can support ourselves, our family, and our community by staying calm, practicing good personal health habits, and remembering that our bodies are resilient. This is an opportunity for us to slow down and consider what will best support our health. It is also a potential time to strengthen relationships with the land. How can we cultivate and utilize local foods and medicines around us? How can we build a strong and resilient community?



The symptoms of COVID-19 include fever, cough, and shortness of breath. Older people and those with serious medical conditions are at greater risk. Please follow the Center for Disease Control and Prevention (CDC) for [updates](#). COVID-19 is new in humans, and we don't know what medicines will treat the disease yet. This handout includes general recommendations, including supportive plants and foods. It is not meant to diagnose or prescribe. Check with your health care provider to make sure herbs are safe to use with your medications.

Quick Guide to Herbal Support:

I am feeling fine, and want to boost my immunity

- Follow general recommendations including drinking plenty of water, eating well, and staying well-rested. (See next page.)
- Use immune-supportive plants: astragalus, echinacea, elderberry, licorice, and medicinal mushrooms (reishi, shiitake, lion's mane, turkey tail, etc.)
- Vitamins A, C, D-3 and zinc in sufficient amounts
- Incorporate medicinal kitchen spices into your foods and beverages including cinnamon, ginger, turmeric, garlic, oregano, rosemary, sage, thyme, etc. For nervous system support and energy: ashwagandha, ginseng, holy basil (see page 13).

I am having cold or flu symptoms

Take radical action to care for yourself. Stay home and make your health your priority. Drink plenty of fluids including teas and soups, and eat healthy foods with immune supportive and antimicrobial plants. Boost vitamin C intake. Use essential oils in a diffuser, bath, and/or respiratory steam. See the plant list for remedies to fit your symptoms. Be in touch with your health care practitioner if you are showing any signs of COVID-19.

Antibacterials – alder, cedar leaf, evergreen tree needles, garlic, ginger, goldenseal, oregano, Oregon grape, sage, thyme, usnea, yarrow

Antivirals – cedar, elderberry, lemon balm, *Lomatium*, licorice, medicinal mushrooms

Soothe coughs – elecampane, honey, licorice, marshmallow, mullein

Decongestants – cottonwood, elder flower, elecampane, horseradish, mint, sage

Expectorants – cottonwood, elecampane, garlic, goldenseal, horseradish, mullein, oregano

Fevers – boneset, catnip, cottonwood bark, elder flower, ginger, willow, yarrow

Immune Support – Medicinal mushrooms, astragalus, licorice, evergreen tree leaves including cedar, fir, pine, and spruce (used as syrup, tea, lozenges, steams, incense)

Sore Throats – alder, cinnamon, ginger, licorice, marshmallow, rose, slippery elm

General Recommendations

Minimize Exposure – Simple actions such as washing hands effectively and frequently, avoiding crowds, using hand sanitizer when you contact high-touch places, cleaning and disinfecting your home and workspace often, staying home if you are sick, and supporting immunity with good food, medicinal herbs, and supplements can make a difference.

Get Enough Rest – Sleep helps your body rejuvenate on a daily basis. Without it, your immune system is less able to fight off infection. For most of us, this means getting 7-9 hours a night.

Moderate Stress – What a stressful time! Yet stress and a lack of sleep makes us more susceptible to getting sick. When possible, seek things that help you to stay calm and bring you joy (music, dance, walking outside, being with animals, playing games). This is also medicine.

Stay Hydrated – Drinking plenty of water and keeping the mucosal lining in your throat, lungs, and sinuses hydrated will reduce your chance of getting sick. Drink water throughout the day, and gargle with saltwater or even just warm water to keep your throat clear.

Eat Well – Seek out the healthiest foods you can find now including whole foods that are high in vitamins, minerals, and antioxidants. This includes greens, veggies, fruits, proteins, and good quality fats found in fish, nuts, seeds, and avocados. Colorful veggies and fruits are high in Vitamin C. Vitamin D-3 is also important for immune health. Fermented foods like sauerkraut, yogurt, and miso promote gut health and immunity. Avoiding sugar, and also dairy if it tends to make you congested. Foods with preservatives, additives, and poor-quality fats also put an extra load on your eliminative organs and create fertile ground for harmful microbes.

Spend Time in Nature – Spending time in nature has many [positive effects](#) on our health including reducing anxiety, improving immune function, sleeping better, and improved mental health. Even sitting by a tree or in a yard can be rejuvenating.



Plant a Garden or Get Involved with a Community Garden – This is a good time to learn about growing your own food and medicine. Many communities have local seed banks, community gardens, and [gleaning organizations](#) where you can access free food.

Build Community – This is a powerful time to care for each other. Many communities are creating platforms for people to get support. For example, commit to staying in touch with another person or family so you can deliver supplies or find care for each other if needed. Who in your community needs support? See this example from [Seattle](#).

Immune Tonics

Astragalus – *Astragalus membranaceus*. Astragalus is a traditional Chinese herb that increases white blood cell counts and interferon, thereby increasing the body's resistance to disease. It supports the function of the spleen and is specifically for people who have had recurring respiratory infections, cancer, anemia, or chronic fatigue. It is best when used long-term in times when you need extra immune support. You can take tincture, capsules, or make tea. The root slices have a pleasant taste and can be added to soups or stocks; remove before serving. Astragalus is contraindicated in progressed Lyme disease.

Echinacea – *Echinacea purpurea*, *E. angustifolia*. Echinacea roots, seeds, leaves, and flowers are used for their antimicrobial and immune-stimulating properties. The plant is used for influenza virus, middle ear infections, vaginal candida, and wound healing. Use echinacea when you feel susceptible to getting sick or when you are exposed to sick people. You can take capsules, tincture, or tea. The root is the strongest part of the plant. Echinacea is generally not used with auto-immune disorders, and we are not sure if it should be used for advanced COVID-19, including shortness of breath and pneumonia, so I only recommend it as an early-stage remedy until we know more.



Elderflower and berry – *Sambucus cerulea*. Blue elder trees are native to the Pacific Northwest, and are used as a cough and cold remedy. The white flowers are gathered from May through June, are dried, and are drunk as a tea to break a fever, ease flu symptoms, and clear congestion. The highly nutritious berries are used as an immune stimulant and antiviral. You can purchase dried elderberry, tincture, capsules, syrups, and lozenges. You can also grow your own elder tree! Black elderberry (*S. nigra*) from Europe is also medicinal. Plants are available at many nurseries, or you can start your [own from cuttings](#). For recipes visit *Wild Carrot Herbs Blog* on [elderberry elixir](#) (great for coughs) and *Mountain Rose Herbs Blog* on [elderberry syrup](#) – by Tierona Low Dog. Some social media sources claim that elderberry causes a “cytokine storm” which is an extreme inflammatory condition, but there is no evidence that this is true in humans. If you are nervous about elderberry with acute flu or COVID-19, don’t take it.

Lomatium – *Lomatium* spp. Members of this large genus in the carrot family have umbel shaped flowers and roots that often have a strong celery-like smell. *L. dissectum*, or fernleaf biscuitroot, is commonly used by herbalists. The resinous aromatic roots are used as an expectorant, immune stimulant, and antimicrobial. *Lomatium* limits the replication of many viruses including Epstein Barr and is also used for chronic fatigue syndrome. It is a low dose plant and should only be used in combination with other plants.

Rose – *Rosa* spp. Rose leaves, stems, and hips are astringent, meaning they tighten inflamed tissue including sore throats. Try adding rose petals and hips to tea. Rosehips are used to prevent colds and flu. They are high in vitamin C and have a tart berry flavor. Flavonoids in rosehips have antioxidant properties and protect the heart, arteries, and veins. You can dry your own or purchase cut and sifted rosehips. Steep (covered) 1-2 teaspoons per cup for about 20 minutes and drink 2-3 cups a day. Rosehips combine well with mint.



Easy Rosehip Jam

This easy and nutritious jam only has two ingredients: dried, deseeded rosehips and apple juice.

No cooking needed! You can buy deseeded rosehips at local herb stores, food coops, and online. Remove any seeds or stems. Grind rose hips into a fine powder in a coffee grinder and then place them in a bowl. Add apple cider or apple juice to the powder until it forms a jam consistency. Let the jam sit 3-5 minutes, and then more fluid as needed. Spread on sliced apples, crackers or cookies. Keep jam in the refrigerator for up to two weeks.

Optional - Add honey, vanilla, or cinnamon to jam.

Medicinal Mushrooms

Thanks to Renee Davis for contributing to this section. See her [blog](#) for more info

Medicinal mushrooms can boost immunity by providing polysaccharides—complex sugars that stimulate an immune response. They are helpful as preventatives during cold and flu seasons but are also useful when actively fighting an infection. All edible mushrooms support immune function. Many support specific areas of the body, like Lion’s mane for the nervous system, and reishi for the heart. They can be grown on fresh logs to supply your household year-round.

Shiitake Mushroom – *Lentinus edodes*. Shiitake is highly prized as food and medicine. It is especially high in zinc and contains several types of polysaccharides that stimulate white blood cell activity and moderate immune function. It has antiviral and antibacterial properties and is showing promise as an anti-tumor medicine. It protects the liver and helps lower cholesterol. You can cook shiitakes fresh or make dried ones into a broth.

Reishi – *Ganoderma* spp. Reishi has been used in China and Japan for over 4,000 years. It is called the immortality mushroom and is believed to help one rise above the weight of the physical realm. Reishi is an adaptogen with organ-strengthening properties, especially to the liver, spleen, and lungs. It potentiates and modulates immune cell function and is anti-bacterial, antiviral, and antifungal against pathogens too numerous to mention. People with allergies may find reishi helpful in reducing inflammation and oversensitivity. Reishi is used for cancer because it inhibits tumor growth, protects the body from radiation damage during treatment, lessens pain, and improves appetite. Reishi also acts as an adaptogen, and helps mitigate the stress response in mind and body. Slices are boiled (decocted) for tea and can be added to soup broth.



Turkey Tail – *Trametes versicolor*. Turkey tail mushrooms are ubiquitous in the Pacific northwest and grow year-round on a variety of conifer and deciduous wood types. They are gathered and dried for uses in tinctures and teas. They support general immune function and are popular in cancer treatment and viral infections. Turkey tail also supports liver function.

Immune Soup

Soups with warming herbs and mushrooms are especially nourishing. A variety of fresh mushrooms are often available at grocery stores. If not, dried mushrooms can be made into a broth. Shiitake is high in zinc. Lion’s mane, porcini, and portobella are also immune modulating and delicious. You can add dry slices of reishi along with astragalus root, then remove them like a bay leaf when serving.

- 4-8 tablespoons butter or olive oil
- 2 large onions
- 6-8 cloves fresh garlic
- ½ pound fresh shiitake mushrooms
- 1 quart (32 oz) bone broth, chicken broth, or water
- 2 cups water
- 4-6 “sticks” astragalus root
- kitchen herbs of your choice: rosemary, thyme, sage, oregano, ginger, turmeric
- Veggies, meat, rice or other starch of your choice

Sauté chopped onions and garlic in butter or oil until transparent. Add sliced shiitake mushrooms and sauté on low-medium heat until cooked. Add the chicken broth, water, astragalus, herbs and other ingredients. Simmer about 1 hour, covered. Remove astragalus sticks before serving.

Kitchen Remedies

Your kitchen likely contains remedies that will build immunity and help ward off respiratory illnesses. Here are a few superstars:

Garlic – *Allium sativum*. Garlic has been used since the Stone Age for food and medicine. In addition to being antimicrobial, it promotes digestion through stimulating bile in the liver. Both garlic and onions may help to lower blood pressure and cholesterol. Chopped garlic cloves can be infused in olive oil for a day or two, then strained and used for cooking. This oil is also excellent for helping to combat ear infections, and as a topical rub for coughs and colds. The oil is applied to babies' feet as a safe way to help fight respiratory infections. You can smell it on their breath a few minutes later. When cooking with garlic, chop it, and let it sit several minutes to stabilize the medicinal properties.

Onions – *Allium* spp. Cascade Geller was firm believer in the efficacy of onions for breaking up lung congestion. She sautéed onions in a little olive oil, placed them on a cloth, applied it to the chest when still warm, and let it sit for about half an hour. This remedy has been popular around the world for centuries. The aromatics in [raw onions](#) can help calm a cough, and as educator Kim Gaffi points out, they also help promote social distancing. My German friend, Sonja Gee, grew up drinking onion tea (basically a thin onion soup) to break up lung congestion.

Oregano – *Origanum vulgare*. Like rosemary, sage, and thyme, oregano is intensely aromatic, warming, and antibacterial. It is a favorite remedy of herbalist Robynne Edgar, and she calls her oregano tincture “Winter Warrior.” I have used it effectively many times to ward off a sinus infection or a cough. Oregano oil is also used in capsule form, but be careful not to use it for long periods of time, as it is very strong and can be taxing to your liver.



Sage – *Salvia officinalis*. Garden sage is used for decreasing excess secretions in the body including respiratory and sinus mucus. It is cooling, drying, anti-inflammatory, and antimicrobial. Gargle sage tea for sore throats or add it to soup, infused vinegar, infused honey, and cough elixir. Do not drink sage tea if you are pregnant or nursing because it may dry up breast milk.

Rosemary – *Rosmarinus officinalis*. Rosemary is one of the most versatile culinary herbs and is hands down my favorite tasting kitchen herb. I add it to teas, soups, sauces, meats, vegetables, breads, and even desserts like cookies, cakes, and chocolate. It is antimicrobial, antioxidant, aids in circulation, has a warming quality, and promotes memory retention.

Thyme – *Thymus vulgaris*. Thyme might be one of my favorite remedies for coughs. It is full of volatile oils that excite lung tissue, break up congestion, fight bacteria and viruses, and promote expectoration. You can add the herb to many types of dishes including soups. I add it to my cough elixir, fire cider, and cough and cold teas.

Other Powerful Spices – Cinnamon, cardamom, and clove are antimicrobial and have been used traditionally to treat colds and flu. Hot peppers including cayenne stimulate circulation and help break fevers. Roasted peppers are used to promote expectoration in Central America. Fire-roasted salsa was my saving grace several times when I had a cough that turned into bronchitis – nothing worked better for breaking up the mucus and promoting expectoration. Nettle leaf, cilantro, chives, mint, and parsley are very nutritious additions to foods.

Fire Cider

Full disclosure – we sometimes call this “dragon breath cider” but it helps clear the crud! Try a tablespoon 3-6 times a day to boost your defenses or when you are feeling cold or flu. If you use dried herbs in place of fresh herbs, you will only need about half to 2/3 the amount. You can get creative with ingredients. Herbalist Nakia Demiero at Northwest Indian Treatment Center adds whole sliced lemon, mandarin, and dried elderberries to her mix, and patients and staff go through several gallons a year.

1 onion, chopped
3-6 large cloves of garlic, finely cut
1 cup chopped aromatic herbs including rosemary, sage, oregano, thyme
½ cup ginger, finely cut
¼ cup horseradish, finely cut
½ cup honey
About 3 cups apple cider vinegar
Optional: elderberry, cayenne pepper, turmeric, sliced lemon, spring evergreen tree tips

1. Chop all fresh ingredients
2. Place herbs in a quart glass jar
3. Heat apple cider and honey in a pan so they are warm but not boiling
4. Pour apple cider vinegar in the jar until all the ingredients are fully covered
5. Cover with a plastic lid or place a piece of wax paper under a metal lid, and close
6. Store in a dark, cool place for about 2 weeks. Shake the jar daily
7. Use muslin cloth or a press to strain out the solids, then pour the vinegar into a clean jar. Be sure to squeeze out as much of the liquid as you can
8. Store in a cool place or in the refrigerator for up to a year

Herbs for the Respiratory System

Our goal is to keep this virus from traveling down into your lungs where it causes extremely thick mucus to form. It may stay in throat tissue as long as three days. Drink water frequently to keep your throat hydrated and gargle several times a day. If you feel susceptible to getting sick, suck on licorice or other hydrating and antimicrobial herbs. Zinc lozenges may also be helpful, as well as drinking hot beverages and clear broths with warming herbs.

Boneset – *Eupatorium perfoliatum*. Boneset is an American herbal standby that was a popular remedy throughout the 1800-1900s. It is a member of the Asteraceae family with white clustered flowers and opposite leaves. It is extremely bitter but is most effective at relieving flu symptoms including aches, pains, and fever. It helps to clear respiratory congestion, eases bronchial spasms, and stimulates immune function. If taken in excess, boneset can cause vomiting and diarrhea, but in moderate doses, it is a digestive tonic. It is often taken as a tincture.



Cottonwood – *Populus trichocarpa*. Cottonwood buds and bark are powerful remedies for fighting infections, lowering fever, reducing inflammation, and acting as an expectorant. Peel the bark off branches and boil a handful in a few cups of water. Drink ½ to 1 cup 2-4 times a day. You can also make a tincture from buds and/or bark. A higher percentage of alcohol from 50%-95% is preferable for the buds as they are high in resin. Use 30 drops 3-4 times a day. It is a good addition to cough elixir or to a soothing respiratory tea for its expectorant and antimicrobial properties.

Elecampane – *Inula helenium*. Elecampane is native to Europe and has been grown in the U.S. for centuries. Mucilage in the root is soothing, while essential oils help break up mucus and act as antimicrobials. Elecampane helps the bronchioles relax and has been used to treat asthma, tuberculosis, and bronchitis. It is high in inulin, which supports gut flora, and bitter compounds that stimulate digestive juices. Dig up the root in the fall and process fresh as infused honey or tincture, or dry and infuse in tea. If you prepare honey, keep the pressed roots and dehydrate them, then eat them as a “candy,” or keep them in the refrigerator and prepare them as tea.

Ginger – *Zingiber officinalis*. Ginger is a warming remedy that promotes blood flow and can help break a fever. It contains potent anti-inflammatory compounds and is a useful remedy for sore throats, asthma, arthritis, prostate inflammation, and other conditions that are improved by reducing inflammation. Ginger also helps to expel mucus and can ease coughs and deep-seated respiratory congestion including bronchitis. You can make ginger tea with honey and lemon for sore throats and coughs, or add it to soups and other types of dishes.



Goldenseal and Oregon Grape – *Hydrastis canadensis* and *Mahonia spp.* Goldenseal root is a Native American medicine from the East Coast. By 1910 it was the most common item in herbal commerce and was nearly picked to extinction. Always buy goldenseal that is grown, not wild-harvested. Goldenseal has strong antimicrobial properties and is also decongestant and astringent. It is used to tighten tissue that is over-secreting fluids (including chronically drippy sinuses), and tones digestion through stimulating the liver, stomach, and spleen. Goldenseal is effective as a tea, tincture, or capsule. Oregon grape root and the stem bark of the tall species are similar to goldenseal and grow locally. Both have a potent yellow alkaloid called berberine that is antimicrobial. They can be grown in a garden. The tart berries can be made into juice or jelly.

Horseradish – *Armoracia rusticana*. Horseradish is in the mustard family. The large white roots are spicy and pungent. It is from Eastern Europe and Asia and has been cultivated since ancient times. It is high in mustard oil and has strong decongestant and antimicrobial properties. Once you grate the roots, put them into vinegar or honey immediately to prevent the loss of medicine. Most wasabi in Japanese restaurants is made from Horseradish.

Lemon balm – *Melissa officinalis*. This delightful smelling mint is useful for balancing the nervous system, promoting mental clarity, and easing wintertime depression. It also has specific action against many viruses including mumps, Epstein Barr, and other herpes viruses including cold sores, vaginal herpes, shingles, and chickenpox. Lemon balm is very high in antioxidant compounds that are useful for many disorders including chronic fatigue syndrome. It is effective as a tea or tincture.

Licorice – *Glycyrrhiza glabra*. Licorice root is a sweet and soothing medicine for sore throats and dry coughs. It is healing to irritated tissue and helps reduce inflammation and coughing (anti-tussive) while increasing immune function. Licorice also has antiviral properties. Try sucking on the root for sore throats, coughs, or when quitting smoking. Licorice is not advised with high blood pressure or during pregnancy.



Marshmallow – *Althaea officinalis*. Marshmallow is a beautiful, silky-leaved plant with fleshy white roots. The whole plant soothes irritated respiratory tissue and builds immune function.

Marshmallow leaves and especially the root are high in a thick, slimy substance called mucilage, which is very healing to irritated mucous membranes in the stomach, intestines, urinary tract, lungs, and throat. Hot water degrades mucilage, so it is most ideal to make a cold infusion. Soak 1 tablespoon of the root in 2 cups of cold water and let it sit overnight. Strain, and drink throughout the day. You can add peppermint for flavor.

Mint – *Mentha* spp. Mint is full of volatile oils that have antimicrobial, anti-inflammatory, and decongestant properties. It is most specific for respiratory infections that feel hot, inflamed, and congested with spasming. Just smelling crushed mint or mint essential oil helps some people to clear their sinuses and lungs. Try adding it to a roll-on, chest rub, or aromatherapy diffuser.



Mullein – *Verbascum thapsus*. Mullein is a common weed that thrives in well-drained soil. It has basal leaves the first year and grows a tall stalk with yellow flowers in the second year. Gather the leaves in spring through early summer and hang to dry. For tea, use a small handful per cup of hot water and steep 10-15 minutes. Mullein is gentle, yet powerful. It helps the lungs relax so expectoration can occur and aids the tiny hairs called cilia in removing mucus. It is used as a daily tonic for people with asthma and can be combined with horsetail and goldenrod to decrease lung inflammation.

Usnea – *Usnea* spp. Usnea is a lichen (a symbiosis of algae and fungi) that grows on a variety of trees. Usnic acid and other compounds in the plant have been researched for their potent antibacterial effects against *streptococcus*, *staphylococcus*, *pneumococcus*, *mycobacterium*, *trichomonas* and TB. Usnea is effective against many antibiotic resistant strains of bacteria, and in some cases is more effective than penicillin. Try it internally for bacterial infections of the respiratory, urinary, and gastrointestinal systems. It is also active against some viruses including herpes and Epstein-Barr. Like echinacea, astragalus, and reishi, usnea contains polysaccharides that stimulate immune function. These compounds are best extracted with heat and water. The antimicrobial compounds are best extracted with alcohol as a tincture. Usnea can be slightly drying and is excellent for wet coughs. It can be used with soothing, hydrating herbs like licorice or marshmallow for dry coughs.



Western Red Cedar – *Thuja plicata*. Cedar leaf is a powerful antibacterial, antifungal, and antiviral. It promotes immune function through stimulating white blood cell scavenging. You can drink cedar tea by steeping a tablespoon of fresh or dried chopped cedar leaf per cup of cold water. Let steep several hours to overnight. Drink ¼ to ½ cup twice a day. Do not use internally for children or elders, especially with kidney weakness. Use about ½ cup of chopped cedar to make a respiratory steam (see page 12). Dried cedar leaf also makes a good smudge. Look for cedar branches that have recently fallen down in wooded areas. You can also use other types of cedar including Port Orford Cedar, incense cedar, and yellow cedar.

Teas for Immune and Respiratory Health

Immunea

This is a delicious daily tonic to boost your immune system.

1 part each Astragalus, Cinnamon bark
½ part each Licorice, Orange, Elderberry, Ginger

Use 1 teaspoon per cup of water. Simmer for 15-30 minutes. Drink up to 3 cups a day. Star anise is also a nice addition to this tea.



Cold and Flu Tea

This traditional tea helps fight infection, is cooling and anti-inflammatory, and helps to ease discomfort from colds and flu.

Equal parts Elderflower, Peppermint, Yarrow
Elderberry, Rosehips, and Orange peel are also nice additions

Use 1 tablespoon per cup, steep 15 minutes. Drink hot to help break a fever.

Lung Restorative Tea

From Ingrid Abbatte, herbalist and herb farmer.

This tea is a great brew for those with coughs, congestion, asthma, or bronchitis.

2 parts Mullein
1 part each Marshmallow leaf or root, Peppermint, Thyme leaf
½ part rosehips, evergreen tree tips (spruce, Douglas fir, cedar)
½ part each roots of Licorice, Ginger, Elecampane

Use 1 tablespoon per cup of cool water, bring it to a boil, stir, and turn off. Cover the pot with a tight-fitting lid and let it sit for 30 minutes. Add honey and lemon. Drink 2-3 cups a day.

LEMON Balm Lovers

From Valerie Segrest, Muckleshoot Tribal Herbalist and Nutritionist

Lemony and fragrant, this tea is a seasonal winner for both children and adults. Lemon Balm is often overlooked and effectively carries antibacterial, antifungal and antiviral properties. As if that wasn't cool enough, its actions can address hyperactivity and impulsiveness, providing a calming effect for children. I said calming, not sedative. Sweetened with a perfectly paired lemon infused honey and a fresh squeeze of lemon, you will want to (and could) guzzle a cup daily with your kids! By the way, the ritual of daily tea making and consuming is proven to decrease stress and anxiety... no duh right!

2 tbsp lemon balm leaf (*Melissa officianalis*)
1-2 tsp lemon and elderflower infused honey
2 lemon wedges

To make the honey: Pour one cup of honey, preferably local, in a pan and heat it up on low. Wash one lemon thoroughly and then zest the peel. Slice up the lemon and add the slices and zest to the honey. Add 2 teaspoons of elderflower (optional). Warm the pan of lemon honey for 15 minutes. Pour in to a jar and let it sit for a couple hours or a couple of weeks. The longer it sits the stronger the flavor.

To make the tea: Pour 2 cups of hot water over 2 tablespoons lemon balm and steep for 10 minutes. Add 1-2 tsp lemon-infused honey and squeeze a lemon wedge into fragrantly hot beverage. Makes two cups of life saving tea.

Essential Oils for Immune & Respiratory Health

Essential oils can be inhaled directly, added to a diffuser, or used in a steam to thin mucus, increase expectoration, fight microbes, and boost the immune response. They are extremely concentrated, so you will only need a drop or two at a time. Make sure you buy pure essential oil and not fragrance or diluted oil. You can also add a few drops to a bath, but it is best to dilute it into a few teaspoons of oil like sunflower or olive, or swish it into the water so it does not stick together and cause skin irritation. If you are taking a shower, try putting a washcloth with 10 drops of essential oil in the bottom of the shower. As it heats up, you will inhale the scent and create your own wet sauna. Use caution with essential oils as some people can be allergic, and they can aggravate some allergies and asthma.

Bay Laurel – *Laurus nobilis*. This pleasant smelling oil is specific for stimulating lymph drainage and activating immune cells. A drop or two can be applied undiluted to lymph node regions at the side of the neck and collarbone, armpits, inside the elbows and knees, and on the outer part of the breasts. The oil is rapidly absorbed into the bloodstream and can have systemic effects.

Citrus Oils – All citrus oils are uplifting and have a reminiscent smell of summer sunshine. They are also disinfectant, hence their heavy use in cleaning products. Citrus oils are astringent and are added to skin toners to reduce puffiness and wrinkles. They are also used to stimulate lymph drainage.

Eucalyptus – There are two species of eucalyptus commonly on the market. *E. globules* thins mucus, opens respiratory passages, and stimulates expectoration. *E. radiata* is antiviral and is more appropriate during pregnancy, for elders, and for children. Eucalyptus is a favorite for saunas, room diffusers, and chest rubs.

Evergreen Trees – Many types of tree needles are distilled including balsam fir, grand fir, Douglas fir (not a true fir), and Scotch pine, and they all have similar properties in fighting microbes, thinning mucus, and promoting immune function. Seek local distillers, like [Cascadia Botanical Apothecary](#), that make essential oils from regional trees.



Peppermint – Peppermint oil is clearing, cooling, and anti-inflammatory to irritated or congested tissues. It promotes clarity and focus, and can be uplifting and invigorating to the mind. Peppermint is also used for muscle tension and spasms, and is used in chest rubs and pain-relieving salves.

Rosemary – Rosemary is a popular oil for topical use because it helps to rejuvenate cells, reduce wrinkles, and stimulate hair growth. It has antimicrobial properties and is used in salves and lotions to relieve aches, pains, cramps, headaches, and poor circulation. It has been used historically to energize, uplift, and help improve memory and thinking.

Lymph Massage

Mix 4 drops of bay laurel, 2 drops lemon, and 2 drops grapefruit in a tablespoon of base oil, like sunflower, sesame, or olive. Infused herbal oils can also be used as a base including calendula, chickweed, cleavers, and dandelion flower.

Use about a teaspoon and gently massage into the neck region, starting with your hands below the jaw and moving down along the sides of the neck. Think of butterflies – a very gently touch. Keep your strokes downward. Also massage around the ears and along the clavicle as there are many lymph nodes here. Avoid the front of the neck. This remedy can be used daily for massaging breast tissue as it facilitates healthy lymph flow.

Spruce – Like other evergreen needle oils, spruce is uplifting and invigorating. Molecules in black spruce are similar in shape to adrenal hormones, making it useful for combating exhaustion. People experiencing long-term stress or menopause may find it helpful in lifting their energy and mood. One to two drops can be applied over the adrenals in the morning.

Thieves Oil Blend – Herbalist Elizabeth Campbell makes a roll-on essential oil blend for winter coughs and colds. I rub it into my temples, over my eyebrows, the sides and back of my neck, and on my hands when I am traveling or showing signs of getting sick. It contains about 10-15 drops of combined essential oils including cinnamon, clove, eucalyptus, lemon, and rosemary in 10 mL of carrier oil like sunflower oil, grapeseed oil, or jojoba. You can also buy the blend [online](#). The story is that thieves during the bubonic plague robbed homes and escaped getting sick by using these plants.

For more info visit *Wild Carrot Herbs Blog*: [Breathe it in – Winter Wellness with Aromatics](#)

Facial Steams

Stears are like a mini sauna for your sinuses and lungs. They can deliver antimicrobial herbs to tissue and stimulate expectoration. Place a large handful of fresh finely chopped herbs or a small handful of dried herbs including cedar, eucalyptus, rosemary, oregano, peppermint, lavender, or thyme in a bowl. Add 1-2 drops of essential oil if desired. Pour boiling water over the herbs until the bowl is half full. Put your face at a comfortable distance and cover your head with a towel. Breathe deep! Try to steam for 3-5 minutes to get the full effect. Add more hot water if necessary and blow on the liquid to activate steam and aromatics. For severe coughs or sinus congestion, steam every few hours.



Dry Brushing

This practice eliminates dead skin cells, enhances circulation, stimulates the flow of lymph, and aids in detoxification. Bay laurel, eucalyptus, grapefruit, lavender, lemon, marjoram, rosemary, and rose geranium are good choices. Before showering, place 4-6 drops total of essential oil in your palm and rub along the bristles of a natural bristle brush or dry loofa. Begin at the bottoms of the feet and move upward toward the heart with gentle circular strokes. Brush both sides of the hands and move up the arms to the shoulders. Brush the torso area including the back. Let the oils absorb a few minutes then take a shower or bath.

Homemade Hand Sanitizer

This recipe follows CDC's recommendation of at least 60% alcohol to kill bacteria and viruses. Many essential oils can be used including cinnamon, lavender, lemongrass, orange, peppermint, rosemary, and thyme. Lavender, lemongrass, orange, and peppermint are favorites for kids. You can use rosewater, distilled water, or even boiled tap water in place of aloe.

2/3 cup 99% rubbing alcohol or 190 proof grain alcohol
1/3 cup aloe vera gel (purchased, not from a home plant)
25 drops essential oil

Blend all ingredients and place in a squeeze or flip-top bottle. Shake before using to blend aloe and essential oils! Use ¼ cup of aloe and 1 tablespoon of glycerin for more skin hydration. If you only have 70% rubbing alcohol, blend 2/3 cup with 2 T. aloe vera and 20 drops essential oil.



Calming Our Nervous System

This is a stressful time. What helps you to be calm, grounded, and resilient? What brings you joy? Though many people are stuck at home, we can still move, play, enjoy music, and stay connected. Time outside engaging all of our senses in nature can alleviate stress and increase immunity. Here are a few herbs that might be helpful during this time:

Ashwagandha – *Withania somnifera*. Ashwaganda is an Ayurvedic herb that has adaptogenic properties. It can be very useful for people who need grounding – both feet on earth – and for those who feel burned out from long-term stress. It can ease anxiety and promote relaxation. The dry root can be made into tea, mixed in smoothies, blended into food, taken as capsules, or tinctured. Use 30-40 drops up to 3 times a day.

Chamomile – Chamomile is a gentle, yet effective, nervine that can be used to lessen pain, ease spasms, and decrease inflammation. It is wonderful for children who are anxious, irritable, and sensitive to pain. The signature for chamomile is children (or adults) who are needy and in a bit of pain that is not terrible, but enough to make them complain a lot – like teething. They may want the comfort of a parent and be clingy. Chamomile soothes. Try a strong cup of tea, or 30-40 drops of tincture, for indigestion, gas pain, cramps, and liver pain associated with hepatitis.

Lavender – Lavender is well-known for easing stress, insomnia, and anxiety. Dried flowers can be sewn into a pillow to promote restful sleep, added to baths, and blended in teas along with other calming herbs. Lavender tea can also help with a poor appetite, gas, and indigestion, especially when it is linked with stress. Lavender in a tea, a chest rub, or a steam is useful for coughs, colds, and sinus infections.

Oats – The fresh milky seeds of oats are excellent for anxiety and depression that occur after long periods of emotional and physical stress – especially in individuals who are normally fairly strong and steady. They help regenerate the myelin sheath that wraps around nerves, which can become damaged from drug use and withdrawal. Oat straw, or the entire flowering top, is an excellent source of calcium and silica, making it useful in building and repairing bones and connective tissue. Oats also have an alkalizing effect on the blood, which can help with certain kinds of arthritis and gout.

Passionflower – *Passiflora incarnata*. Passionflower is a vine that generally grows in tropical climates. The beautiful flowers are named after the Passion of Christ. It is used for anxiety, tension, and insomnia. Passionflower may help those who wake up several times during the night. Tincture of fresh passionflower vine, leaf, and flower is stronger than dried herb.

Skullcap – *Scutellaria lateriflora*. Skullcap grows wild in wet places throughout the U.S. It is a mineral-rich nerve tonic with strengthening and supportive qualities. The flowering tops can be made into tea or tincture. Skullcap eases nerve pain, tension, irritability, and inflammation in people who feel overwhelmed and overworked. It is also used for muscle twitching, tremors, and epilepsy because it reduces peripheral nerve stimulation. Skullcap is calming, but not sedating, and can be useful for people with caffeine overuse or drug withdrawal when nerves feel overstimulated and exhausted.

Finding Medicinal Plants

You can find medicinal plants and immune-boosting foods at many health stores, food coops, and local herb stores. Now is a great time to support local food producers and medicine makers. Many products can be bought online if you are not leaving your home. And perhaps some useful foods and medicines can be found right outside your door!

Plant a Garden or Get Involved in a Community Garden!

All of the plants in this handout can be grown in the Pacific Northwest. Many are beautiful and will easily fit in a small yard, and some can be planted in pots. Growing your own plants can be fun, stress-relieving, and empowering. There is nothing better than getting to know plants throughout the seasons, and many Native Elders remind us that you can spend a lifetime getting to know just one plant.

Harvesting Guidelines

During this public health crisis, people could easily put extensive pressure on medicinal plants. Plants are living beings who have family, neighbors, and friends. They communicate with and care for each other. When we are in their space and are gathering them for food and medicine, how can we be respectful? How do we make sure we leave enough for the plant community to thrive? We can glean fallen branches of cedar and cottonwood without damaging living trees. We can utilize “weeds” like dandelion, cleavers, chickweed, plantain, and yarrow in yards and communal spaces. We can plant home and community gardens. It is an opportunity to connect with the land, become more self-sustaining, and build a more resilient community. Here are some guidelines to consider when harvesting plants:

Accuracy – If you are just learning, make sure you have the right plant!

Be Safe – Avoid harvesting from roadsides, railroad corridors, agricultural areas, or other areas that might be contaminated or sprayed with herbicides or pesticides. These chemicals can make us sick.

Ask Permission – Acknowledge whose land you are on. Do you have permission to harvest?

Slow Down and Look Around – How many plants are there? Are they healthy? How many can you harvest while still leaving a strong community? Many foragers take a maximum of 10-20% of the plants in a place. Leave enough for other animals that rely on the plants for food like pollinators, birds, and mammals.

Leave No Trace – Clean up so that you don’t make a visible impact. Fill in holes, etc.

What Can You Give Back? Some people leave a gift, a song, or a prayer as thanks for the gift they have received. Others may pick up garbage or remove invasive plant species.

Anticipate Processing Time and How Much You Need – Sometimes the bulk of the work comes when you get home and process the plants. Will you have time? And how much will you be able to actually use?



In Gratitude

This herbal knowledge in the previous section is from the *Healing Roots Apprenticeship Program* taught by Elise Krohn. It has been adapted for GRuB's Wild Foods and Medicines Program and Urban Indian Health Institute during the 2020 coronavirus outbreak. Big thanks to the [Tend, Gather and Grow Curriculum](#) Development Team for insights – especially Mariana Harvey, Kim Gaffi, Valerie Segrest, and Elizabeth Campbell. Thanks to Joyce Netishen, June O'Brien, Krista Olson, Jody Berry, Ingrid Abbate, Renee Davis, Janet Partlow, Chris Smaka, Fiona Devereaux, Robynne Edgar, Nakia Demiero, Clare Follmann, and Fae Scherling for your herbal wisdom and editing. Thanks to Annie Brule for the cover design and editing. We hope it is useful to you during this challenging time.



Resources

For more information on plants including alder, blue elder, cottonwood, Douglas fir, Oregon grape, rosemary, and Western red cedar visit the [Wild Foods and Medicines Blog](#).

Visit our GRuB website at goodgrub.org for the [Plant of the Month Blog](#), [Free Resources](#) on wild foods and medicines, upcoming educational events, and opportunities to connect with community.



Disclaimer: Many of you may have already experienced herbal medicine's positive effect on your health. That said, please remember to consult with your doctor before starting any new supplements or plant therapies. The information provided here is intended for educational and reference purposes and should not be construed as medical advice. We've made every effort at accuracy to provide you with the most up-to-date, evidence-based research, most of which have not been evaluated by the United States Food and Drug Administration (FDA).

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Crisis, Healing, and Growth

A conversation with Canoe Journey Herbalists on COVID-19, community care, and the teachings of the plants with Rhonda Lee Grantham (Cowlitz) & Sophie Geist



Canoe Journey Herbalists is an Indigenous-centered, community-supported project. From our beginnings at Standing Rock and the annual Intertribal Canoe Journey, to our year-round efforts in community – we stand in solidarity and in action with plant medicines at our side. And in this time of crisis, uncertainty, and great change, one thing is clear. In addition to rising up to meet the immediate needs of those who are suffering, healing also means deepening our relationships and planting seeds for our collective future.

Medicinal Tree Sap: Rapid Response in times of crisis

Physically and emotionally, our communities are wounded and hurting, ravaged by uncertainty and fear. We must collectively protect our Elders, our vulnerable, and all community members who lack tangible resources or social supports. By centering on prevention and care, we are acting as the trees do in times of injury: powerful medicinal sap is wisely directed to where the tree is most susceptible to infection, concentrating its efforts in both protection and healing.



As an example of this in action, our organization has formed a rapid response project in collaboration with local mutual aid efforts. By creating and distributing hundreds of No Barrier Herbal Care Kits to vulnerable community members, we are offering hope alongside safe herbal remedies for preventative care. All kits have no contraindications with medication or pre-existing conditions, no alcohol, and are clearly labeled instructions in both English and Spanish. There are basic kits that require no water, cook kits for those with access to hot water or cooking, and Indigenous kits with additional sacred plants specifically for Native folks.

There are many possibilities for how community members can gather together plant medicine resources using the bio-regional plants available to them. For example, a kit may include sanitation supplies, an immune support tonic, herbs for the throat, a warming chest rub, lung herbs, and medicines for overall nervous system support. By sharing the resources that are available to us, we can make a difference – it can be as simple as a cup of tea and kindness.

Feeding the Roots: Self Care and Sustenance

As we look to the weeks and months ahead, we know that we will not be able to get through this on adrenaline alone. Caring for our caregivers and being honest about the challenges and collective traumas that are upon us is essential to a healthy ecosystem. This stage of healing will be a time of invisible, underground work, a time to be HONEST about our fears, to TALK about our struggles and our burnout, to REMEMBER our strengths. And while crisis is a powerful time of awareness and waking up, with each turn of the seasons the wisdom of the plants also teach us the importance of rest and renewal. In anticipation of this time ahead, as we move from crisis to stabilization, we encourage you to remember the nervous system herbs that can support and guide you towards balance. As an example, we offer you this Canoe Journey Remedy, called “Wired but tired.”

REMEDY RECIPE

Wired but Tired

An Adaptive Tea Blend for Relaxing and Soothing the Body and Mind



Ingredients

Licorice - Adaptogen, warming and demulcent, aids the body in handling stress with grace

Oat straw - Nutritive, food for taxed nerves

Reishi - Neutral, rebuilds energy reserves and supports a healthy immune response

Hawthorn - Gentle yet powerful heart medicine and soother

Motherwort - Cooling nervine relaxant

Skullcap - Soothing nervine, grounding and relaxing

Formulation Recipe

Mix bulk herb ingredients in desired ratio in a large bowl. Sift through with clean hands to remove large twigs and break plants down into smaller pieces. Blend well and portion into tea bags.

Tips for Brewing Tea

Hot Infusion: Draws out vitamins, enzymes, and aromatic volatile oils.

1. Scoop 1-3 tablespoons of dried herb into a strainer.
2. Heat 1 cup of water until it just comes to a boil.
3. Place strainer in your cup.
4. Pour hot water over herbs and cover to keep the essential oils from escaping.
5. Steep for 15 minutes to 1 hour and strain.

(Adapted from Mountain Rose Herbs)

Growing New Branches: Crafting a future together

New growth happens where there is space and light, shrouded in the beauty of hope and possibility. We are truly excited as we busily answer questions on herbal medicine, home gardening, and Indigenous healing. There is a resurgence of community members who are remembering the importance of sustainability, natural healing, and making commitments to tend to new growth. As we look to the future and the focus of Canoe Journey Herbalist Programming, we are honored to support those who understand the healing power of planting seeds. To share in knowing that there are thriving healers in our Indigenous Herbalist Apprenticeship Pathway program who are answering a calling by their communities. To share in remembering what our Ancestors have known all along.

So even though it may feel as if we are all still treading water against tumultuous waves, we want you to also breathe in hope. As the unsustainable world of industry and globalization holds its breath, the Earth is showing signs of healing. The flowers are continuing to bloom and we sing songs for the future. What future do you wish to craft together? What might this look like in your home, backyard, neighborhood, or on your reservation? Support your healers, those who care for the land, and most importantly, find your own way back home. That is the place where true healing can be found.

Please follow us on [Facebook](#) or [Instagram @CanoeJourneyHerbalists](#)

“Everything on Earth has a purpose, every disease an herb to cure it, and every person a mission. This is the Indian theory of existence.”

*—Morning Dove
(Christal Quintasket, Salish)*