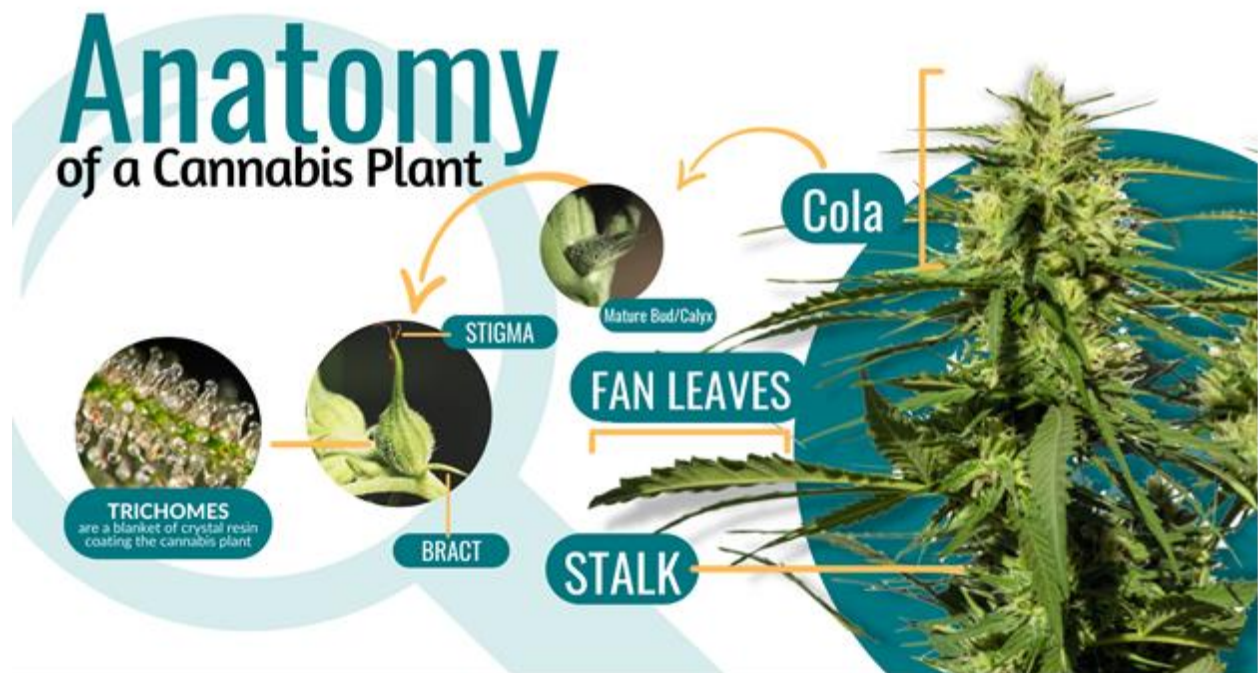


Anatomy of a Cannabis Plant



Medical Cannabis Home Cultivation Guide

Released September 26, 2022
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Office of Cannabis
Management

Beginning October 5th, 2022, **only** certified patients or their designated caregiver aged 21 and older living in New York may cultivate (grow) medical cannabis in their home.

This guide is designed to share the rules related to growing cannabis at home and offer some basic tips, whether growing indoors or outdoors. This guide will help provide some information to keep you and your loved ones safer when growing medical cannabis at home. These are just some tips to help get you started.

Please note: This guide is intended to educate certified patients and designated caregivers about medical cannabis home cultivation. The OCM is not liable for any damages, injury, or cultivation misuse. Patients and caregivers who are interested in home cultivation should research safe practices and understand the regulations (which can be viewed [here](#)) before getting started.



Certified patients are people who received a certification from a health care provider to use medical cannabis to treat a health condition. Not all health care providers in NY are able to certify patients for medical cannabis – a list of some providers can be found [here](#). To learn how to become a certified patient, please visit: <https://cannabis.ny.gov/patients>.



Designated caregivers provide care to patients under 21 or to patients who have physical or cognitive impairments that keep them from being able to grow cannabis on their own. Only certified patients or their designated caregivers will be allowed to grow medical cannabis.

Know the Rules



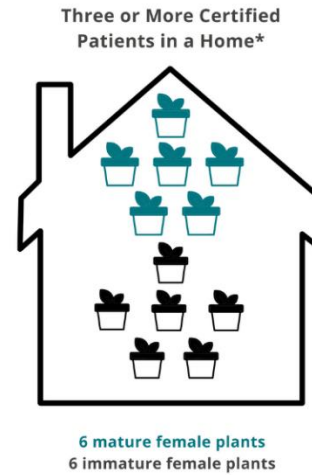
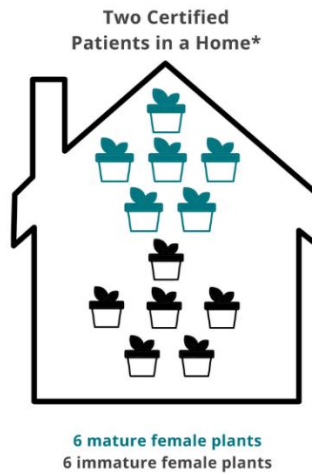
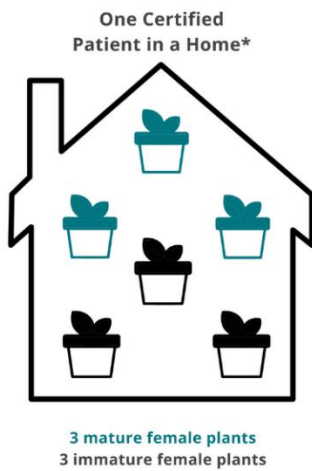
Certified patients can only have **1** designated caregiver growing cannabis on their behalf.



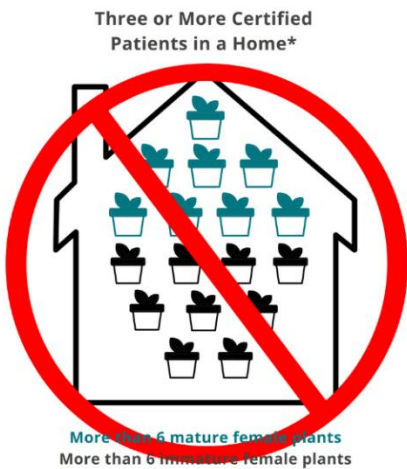
Certified patients and designated caregivers can **only grow in or on the grounds of their private residence**. This may be a residence where you own or rent. **You cannot grow in an assisted living facility, rehabilitation center, or similar location**. A room, home, apartment, co-op, or mobile home are some examples of a private residence.

Cannabis may not be grown in any federally funded or federally recognized public housing site. **Growing cannabis, even for medical purposes, at a federal public housing site could result in your loss of housing support.**

HOW MANY PLANTS CAN I HAVE?



Even if a designated caregiver is growing for multiple patients, including themselves, they cannot grow more than six mature female and six immature female plants per household



If you have more mature or immature female plants than allowed, you must dispose of those plants or give to another certified patient.

Once trimmed, a certified patient or designated caregiver may possess up to five pounds of cannabis in or on the grounds of their private residence.

***in or on the grounds of a private home/residence**

What is Not Allowed?

No certified patient may have more than **one** designated caregiver growing on their behalf. **You cannot grow for yourself and have a caregiver grow for you.** Certified patients may choose to grow cannabis themselves or they may choose a designated caregiver to grow for them.

As a certified patient or caregiver, it is **illegal to sell or barter homegrown medical cannabis** to others.



If your landlord has a smoke free policy (meaning you are not allowed to smoke in your unit or common areas), **they are not required to permit the smoking of medical cannabis products.** However, you can consume other forms of cannabis (such as edibles). Be sure to check your lease for this language.

No landlord, homeowner association, co-op board, or the like, may harass and penalize a certified patient or designated caregiver solely for engaging in medical cannabis activity except if the landlord would lose a benefit under federal law or regulations.

If you have any concerns or questions, please email info@ocm.ny.gov.

Designated Caregivers

A designated caregiver can grow for a maximum of **4 patients** at a time.

Designated caregivers can grow up to **6 plants** per certified patient, however a designated caregiver cannot grow more than 12 plants at their home at any one time. If a designated caregiver is also a patient, the 12-plant limit includes any plants they may grow for themselves.

If you are growing for more than one patient, you must keep each patient's plant(s) separated from each other and be able to easily determine who the plant belongs to. You may consider tagging the plant or plant pot with the certified patient's ID number.

Designated caregivers can only receive reimbursement for the cost of the plants, goods, materials, and utilities. Designated caregivers **cannot** charge nor be paid for their time, effort, knowledge, or expertise.

To become a designated caregiver or to learn more, go to cannabis.ny.gov/designated-caregivers.

Safety Tips

Throughout this guide you will see important safety tips to help protect you and your family and when growing medical cannabis at home.

✓ **Keep young people and pets safe.**

If you have any cannabis products in your home, be sure to store them away in a locked storage container and out of sight and out of reach of young people and pets. Control access to any growing cannabis with a dedicated grow space. Make sure to have the Poison Control Center number readily available in case someone accidentally consumes a cannabis product: **(800) 222-1222**. Call **9-1-1** if someone is having a life-threatening emergency.



✓ **Lower the risk of electrical fires.**

Growing cannabis plants indoors often requires high-powered lamps, temperature controls, and expanded levels of ventilation which can overload electrical circuits and cause fires. To lower your risk of electrical fires, consult a licensed electrician to ensure you are following all relevant fire codes. Always comply with building electrical and fire codes. You will reduce the risk of fire and save money and energy by using high efficiency, lower power LED lights. Follow safety and installation instructions or hire certified installers for new equipment.

✓ **Reduce your risk when extracting cannabis oil at home.**

When making concentrates (for example waxes, hash, oils), extracting cannabis oil with flammable materials (such as propane and butane) is **not allowed**. Home extractions with alcohol are **not recommended**. These materials release vapors that can easily trigger explosions. Consider alternative extraction methods like the use of cold water for hash or cooking butters and oils.

✓ **Be mindful of dosing with cannabis-infused edibles.**

Be mindful: When making edibles at home, such as cannabis-infused beverages or baked goods, it can be challenging to distribute cannabis evenly throughout the product. This can make it difficult to control potency and dosage of the edible. Calculate the minimum effective dose necessary for the medical consumption. Label your edibles to help distinguish from other products in your home.

✓ **Be careful of pesticides.**

Keep the growing area clean, uncrowded, and well ventilated. Avoid pesticide use if possible. If you are going to use pesticides, limit their use and avoid those that have not been specifically approved for use on cannabis plants. **There are currently no approved synthetic pesticides for use on cannabis, and only minimum-risk pesticides that pose little or no risk to human health or the environment and are not subject to regulation should be considered, if used at all.** Make sure to follow applicable guidance on the safe use of pesticides and read and follow the directions on any labels of products that you use.

Please consult the New York State Department of Environmental Conservation rules for using pesticides, [here](#).

✓ **Monitor indoor air quality**

Control mold and fungus by reducing moisture sources by opening windows if the weather permits or by using a dehumidifier, humidity monitor and fans to ensure proper ventilation. Increasing ventilation or the use of monitors is especially important if you are raising the levels of carbon dioxide in your grow space. **Throw out mold infested plants quickly and safely.** Be sure to equip your home with a carbon monoxide detector and test it regularly.

Know Your Rights

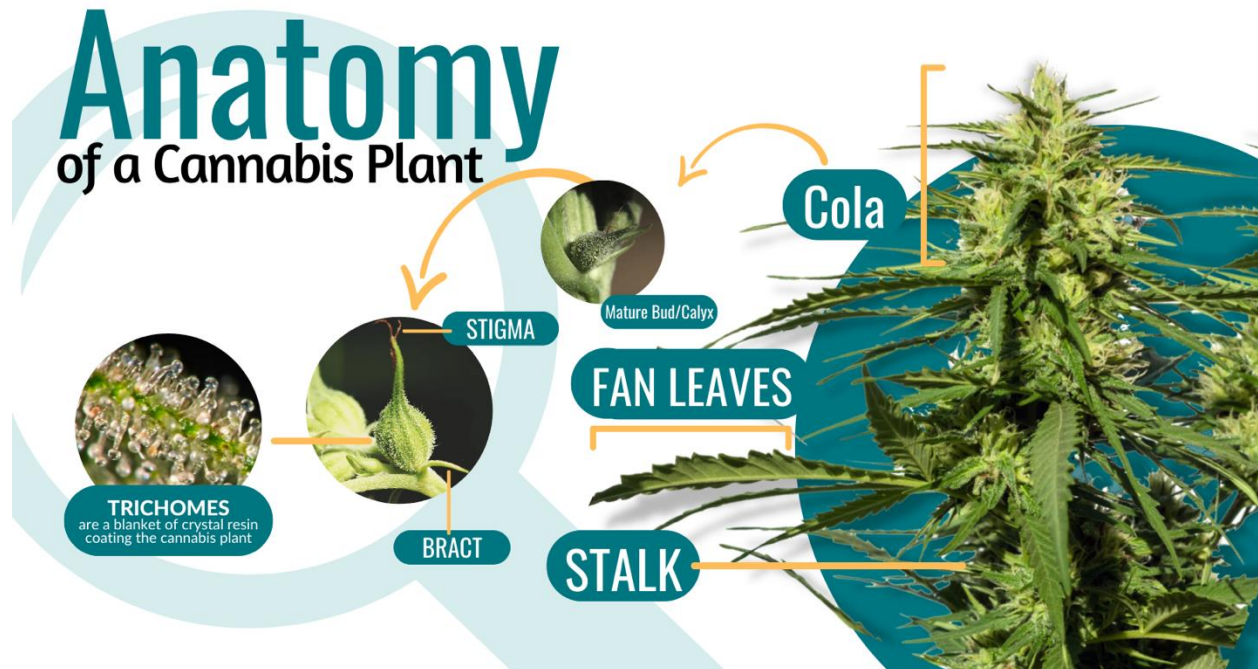
Cannabis may not be grown in any federally funded or federally recognized public housing facility. **Growing cannabis, even for medical purposes, in a public housing facility could result in your loss of housing support.**

Some individuals may receive questions from neighbors, landlords, or others based on the scent of cannabis. Disclosing medical patient status to landlords or persons of authority and demonstrating proof of registration, may avoid ongoing issues. Some things to keep in mind:

- Medical cannabis is legal in New York State for certified patients and designated caregivers and they are allowed to grow medical cannabis in their homes.
- The scent is naturally produced from the plant, not just from smoking. While it is a strong scent, it is not toxic or harmful to human health.
- Be aware of the terms of your lease and my responsibilities in case there is any property damage. Share the new law and rules allowing certified patients and designated caregivers to grow at home.
- Keep in mind, landlords can prohibit smoking on their property.
- Encourage people to check out resources online or at the Office of Cannabis Management website to learn more.

Cannabis Plant Anatomy, Life Cycle and Maturity

Below is a starting point to learning about the cannabis plant and the function of its different parts. We'll provide some tips on how to start your grow, how to identify male and female plants and the life cycle of a cannabis plant. These are some basic tips, please continue to look through additional information online to learn how to have the most success with your medical home grow.



Starting your Grow

You can start growing cannabis from either a seed or a clone. These can be purchased from participating registered organizations and other entities licensed by the Office of Cannabis Management. Call your local dispensary before visiting to check their supply. To find medical dispensaries, go to cannabis.ny.gov/medical-use.

Choosing your Cultivar

Whether starting from a seed or a clone, there are many cultivars or strains that have different and varied amounts of cannabinoids to help with each medical condition. It is important to do your research and find a cultivar (strain) that has the terpenes (smell of cannabis) and cannabinoids (like THC, CBD, CBN) that you need to aid each medical condition. There are hundreds of different cannabis cultivars (strains) to help you achieve your medical needs. Here are some tips to keep in mind:



Cannabis Plant Anatomy: Seeds vs. Clones

SEEDS

CLONES



Tan color with brown
"TIGER STRIPES" across the top.
Hard to the touch: Lightly soak in
water to allow the cannabis plant to
break free of the hard exterior.



Immature plants cut from a mother
plant and share the same DNA.
A clones' roots grow laterally:
They do not have a tap root.



Seeds may not always sprout
If not properly propagated.



Clones help you get a jump start
on your grow cycle.

Male and Female Cannabis Plants

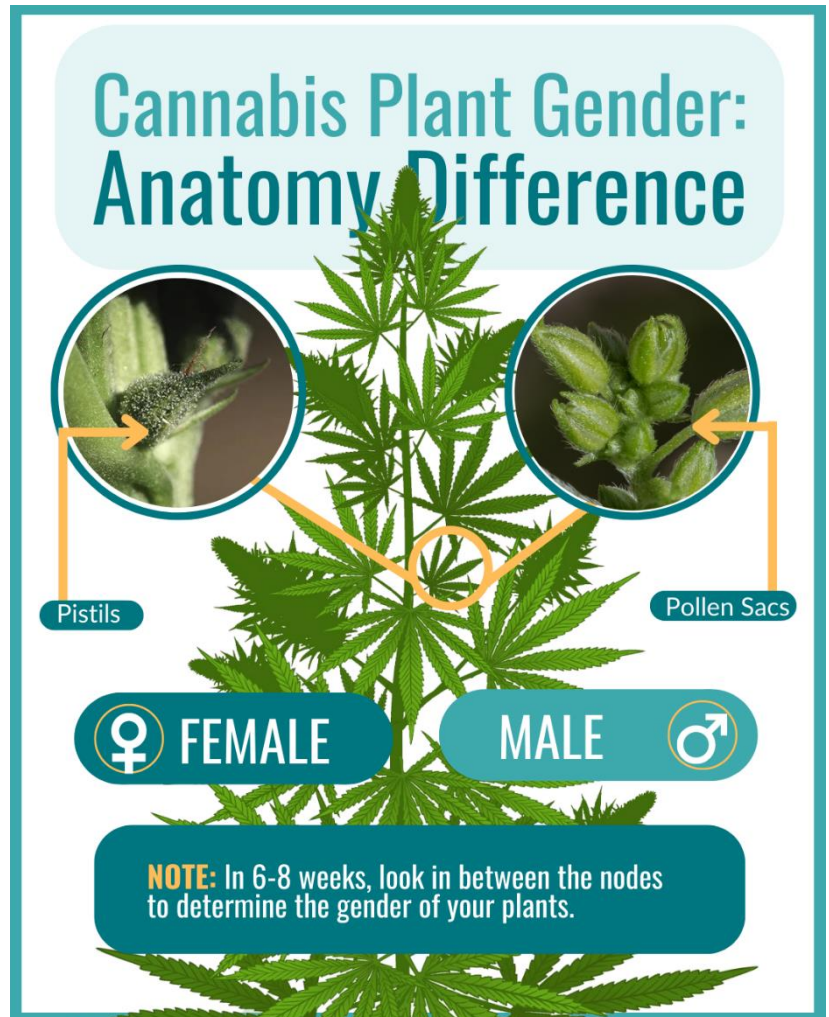
Just like other plants, cannabis plants are either male or female. After around 4 weeks, when the immature plants start to grow, their sex can be identified.

The sex of the plant is important to know for two reasons:

1. **Female plants count towards the limit you can grow in your household.** Too many female plants - both mature and immature - is in violation of the rules. Additional female plants may be given to another certified patient/designated caregiver or be disposed of.
2. **Male plants are used specifically for breeding different cannabis cultivars (strains) and female plants are preferred for consumption purposes due to their higher yield of cannabinoids.**

Telling the difference can be tricky, so here are a few questions for when identifying your plant:

- Do you see small hairs on the bract? It looks like a small leaf where the leaves and branches extend? **If so, its female.**
- Do you see an anther or a pollen sac between the main stem and a branch? It will look like a small ball. **If so, its male.**



There are also hermaphrodite cannabis plants that produce both male and female reproductive organs. These are considered similar to male plants in that they can germinate other plants as well as themselves and not ideal for flower or cannabinoid consumption.

If you have male plants or are still waiting to identify their sex, keep them away from your female plants to avoid cross-pollination and seeds in your female plants.

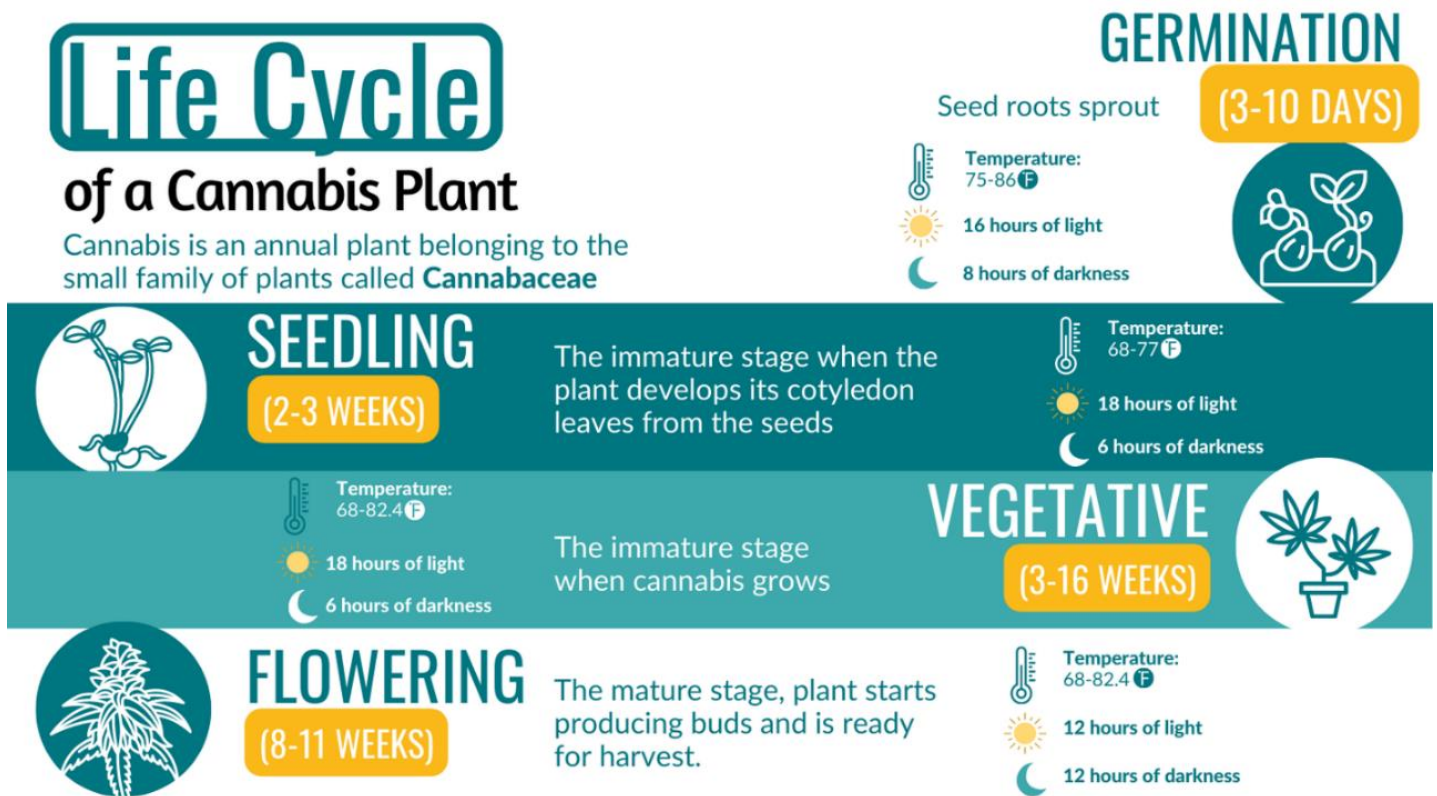
Cannabis Life Cycle

Cannabis is an annual plant, meaning it will go through a whole life cycle in one growing season, anywhere from 10 weeks to 6 months. Understanding the life cycle and when your cannabis officially matures is critical to caring for your plant and how to stay within the legal growing limits.

Light is an essential source of energy for your plant's growth. Plants will need different amounts of light in each stage and how much light your plants are given will determine how long your cannabis remains in a vegetative or flowering growth state for indoor or outdoor growing.

Growth Stages

Generally, cannabis plants take around 3-5 months to grow. The cycle goes from germination of the seedling to the vegetative state, and finally the flowering state (where you can harvest the flower). The amount of light needed will depend on the growth stage - these are just some averages to start with.



Save Energy, Save Money

Growing cannabis at home can end up significantly increasing your electricity bill (by 33% or more) if the plants are grown indoors. Grow lights are a significant additional source of energy use. Fans and dehumidifiers may be necessary to control mold and protect indoor air quality,

which will also increase energy use. If growing indoors, choose **energy-efficient LED lighting**, which can deliver significant savings over other lighting types, and select the **minimum wattage necessary** to ensure healthy plant growth. Selecting an **EPA Energy Star-certified** dehumidifier and fan will reduce also reduce energy costs and your impact on the environment. You can find an Energy Star products list [here](#).

Growing outdoors saves energy and money. Consider taking advantage of natural lighting and grow outdoors, if you have a suitable location, when the season permits.

Choosing a Safe Location to Grow

When choosing where to begin growing cannabis at home, you will need to make sure your grow isn't **easily seen** from the street or on the grounds of your home and **how accessible** your plants are.

The plants must be stored in a secure location at the certified patient or designated caregiver's private residence or its grounds. Some efforts could be keeping them behind gates, doors, fences, and/or other barriers.

Cannabis doesn't need a lot of space! A 4x4 space for one 3lb planter's pot is the standard growing diameters needed to allow your cannabis plant space to grow.

You can grow in:

- A closet
- A shed or garage
- A basement or attic
- A garden covered with shrubs or flowering plants that makes it hard to see
- Behind walled, private fencing
- On open space on your property not seen or accessible by others

If you're tight on space

- Consider potted plants on a rooftop or backyard
- A cupboard or cabinet with a lock, out of sight and out of reach
- A locked locker
- A locked shed
- Corner of a room or basement

Indoor vs. Outdoor Growing Methods

Choosing between growing indoors or outdoors is up to you and what works best for your environment. Ultimately, where you choose to grow should be based on whether you have the right environment to limit the visibility and accessibility of others into your grow area.

In considering **outdoor** grows, you can save costs and have a **smaller environmental footprint** using natural sunlight, watering, and soil. However, there are special considerations:

- Because of New York's cold winters, you may want to start your plants indoors and then move them outdoors when the temperature permits.
- If your outdoor space is shared or has high visibility from the street, consider growing in a canopy, hoop house or other structures where plants can be locked. This can also prevent theft or loss of plants by animals who may roam your property.
- Use organic and regenerative growing practices to protect and improve both soil and plant health. For more information, click [here](#).

While **indoor** grow environments may be easier to control, there are special considerations:

- Growing cannabis safely indoors will require additional lighting, temperature controls, and ventilation systems. The added electricity usage from growing indoors and may overpower home electrical circuits. If growing indoors, be sure to know the wattage required of the equipment and the maximum of your home circuits to avoid electrical fires.
- Look for opportunities to **“green your grow”**. For example, select energy-efficient LED grow lights. Choose the lowest wattage necessary for plant growth and avoid over-lighting.
- A dedicated or enclosed grow space such as a grow tent, helps reduce risk for hazardous conditions in a home.
- Growing indoors can cause high humidity. Use dehumidifiers to improve air quality in the home. Choose an Energy Star-certified product to save energy and money. You can find an Energy Star products list [here](#).
- Fans can assist with ventilation and reducing heat, creating ideal temperatures for your growing space. Choose an Energy Star-certified product to save energy and money.

Maintaining A Safe Growing Area

- Ensure that the growing environment is clean, uncrowded, and well ventilated.
- Keep your growing area as clean as possible to eliminate pests and pathogens from entering the growing canopy.
- Be sure to keep growing cannabis and harvested cannabis stored away from pets and minors.

Test Your Water

It is important to test your water for acidity and heavy metals before watering your plants. This can help create the perfect growing conditions for your plants and avoid heavy metals leaching into the cannabis which is unsafe for consumption. More information on water testing is available [here](#).

Cultivation Considerations:

- Choosing your plant media and nutrients is also an important step in starting your grow. Be sure to seek organic growing methods (such as compost tea), and know what can/cannot be decomposed if using a compost pile (like rockwool).
- Immature plants need plenty of NPK (Nitrogen, Phosphorus, Potassium) in their soil to grow.
- It is important to make sure the plant root system has plenty of drainage and the soil aerated, incorporate perlite or vermiculite with this in mind.
- Too much calcium in your water can lead to a nutrient deficiency in the plants; be sure to test your water for nutrients, heavy metals, and alkalinity (cannabis plants tend to grow best with a slightly more acidic water with optimal levels of 6.0-6.3 pH for soil and 5.8 for hydroponics).

Mold is harmful!!

It is super important to take steps to prevent mold. Creating a growing environment that is not too humid but not too dry can sometimes be very complicated. Plants let out water which can create a humid grow room and may result in mold or root rot, especially if overwatered. Keeping distance between plants can also help prevent the spread of disease.

SAFETY TIP: If your cannabis plants become infested with mold, **throw them away**. Moldy cannabis should **not** be consumed.

Odor Management

Due to the terpenes present in cannabis, there is a strong odor that comes with the plants during the flowering period. To increase discretion of cannabis cultivation and reduce complaints & risk of theft:

- Indoor use of a carbon filter, ozone generator, negative ionizer, and exhaust ducting (near your grow can help reduce cannabis odor during the growing cycle and during processing).
- For both outdoor and indoor grows, natural herbs and flowers can be used to mask the scent such as basil, lavender, or mint. Plant these around your cannabis grow, they also help limit the visibility of your grow!

Pest and Pathogen Mitigation

Both indoor and outdoor grows can attract pests. Spider Mites, Fungus Gnats, Thrips, White Flies, Aphids, Caterpillars, and rodents are common in cannabis cultivation. Pathogens such as Botrytis, Mildew, Root Rot, and Fusarium are also common.

To avoid crop loss, it is important to:

- Keep your space as sanitized as possible
- Quarantine any new plants introduced into the grow canopy
- Create fencing to deter pests if cultivating outside
- Be sure to not overwater and provide proper drainage to avoid root rot
- Co-plant with other nutrient dense plants

- Create proper ventilation and use air filters to keep grow rooms from attracting mold/mildew

If you already have a pest or pathogen issue, be sure to:

- Avoid pesticide use, toxic chemical sprays (especially during flowering) could cause negative health problems depending on the ingredients. If in the vegetative state, the use of neem oil is common, however cannabis must be thoroughly rinsed/washed out and tested before consumption
- Dispose of plants that are infested with mold
- Introduce beneficial bugs into the grow space to deter unwanted pests

Pesticides

No one wants to spend the time, money, and energy growing plants - just to have pests infest them and make them un-usable for consumption. Though pesticides seem like a quick fix, many are not approved to be used with cannabis consumption for fear of accidental leaching into the plants that can cause unwanted side effects when consumed and because when they are heated and inhaled the chemicals can be harmful. Home growers should consider organic and regenerative agricultural practices to reduce the threat of pests, maintain health soils and plants, and protect your own health. Home growers should also consider researching integrated pest management techniques, and good agricultural practices which may help ensure pests are detected early and the least toxic chemical interventions are applied. Avoid pesticides wherever possible. Use of synthetic pesticides on cannabis is prohibited. If using minimum-risk organic alternatives, be sure to follow the instructions on the label and seek expert advice.

SAFETY TIP: Seek organic methods first and consult your local municipality for guidance on which pesticides are safe for your region.

Protection From Potential Safety Hazards

Fire Safety

With the increasing number of states that are now allowing the home cultivation of medical cannabis, there has been an increase in electrical fires from indoor grows. This is due to overloading the capacity of the electrical load your home can carry. Be sure to have an electrician estimate the load capacity of your electricity before creating an indoor growing space.

SAFETY TIP: Consider the use of high efficiency, lower power LED lights to reduce the amount of power used.

Radiation

High powered lamps can increase over exposure to UV light, known to cause skin cancer. If you'll have prolonged exposure, look into alternative light options, and use sunscreen and protective gear.

SAFETY TIP: Unplug your grow lights or use sun protection when working with your plants.

CO₂ Pollution Poisoning

Use of CO₂ generators or practices are not necessary for home grow and should be avoided to eliminate the risk of carbon monoxide poisoning and reduce environmental impact.

Processing or Extracting Homegrown Medical Cannabis

Harvest

In order to identify when a cannabis plant is ready for harvest, it is important to examine the trichomes. Though these resin glands look sparkly to the naked eye, it may be helpful to utilize a magnifying glass to clearly distinguish each color phase. You can then see the resin glands (which look like tiny mushrooms) and observe the three stages of a trichome's lifecycle.

Harvest a Cannabis Plant

To determine if your cannabis is ready for harvest, note the color of the **TRICHOMES** on the colas of your plants



Here, harvested cannabis means cannabis that has been collected from its growing medium. Harvesting your plants early or later may change the overall quality of the cannabis harvested.

When harvesting, the top of your plant may mature faster than the bottom. To avoid early/late cultivation, harvest different sections of your plants with a disinfected cutting tool depending on the color of the trichomes.

Curing

The process of curing will dry out cannabis so that it can be consumed or processed into multiple forms. Curing takes about 1-3 months after harvest and is best achieved at 60-70

degrees Fahrenheit and no more than 50% humidity. Excessive humidity can create an environment for mold to grow so take note of the moisture in the room the buds dry in.

Safety tip: If your cannabis gets moldy there is no way to fix it and the cannabis must be disposed of. Consuming the mold is incredibly risky and not good for your health.

The process to cure cannabis is:

- First the buds are hung either upside-down or on drying racks to get any excess water content out.
- Once the buds are springy to the touch and the stems snap instead of bending, (meaning they are not crunchy or wet), the buds can be stored in air & light tight containers to avoid light degradation of the resin glands.
- Child resistant packaging can be purchased from retailers to keep young people safe from consuming dried flower.

Safe Storage of Home-Grown Cannabis

Medical cannabis should be stored in an air-tight container to protect against physical deterioration, chemical and microbial contamination. Lock both the location that you grow in and wherever you store your cannabis.

Whether you're growing indoors or outdoors, locking, and storing cannabis prevents theft, loss, or access by an unauthorized person, including pets and young people under 21.

Concentrates/Extractions

Once cannabis is properly dried, it can be made into a cannabis concentrate. There are several ways to extract cannabis to produce oil and other cannabis forms, however many require sophisticated equipment in order to be safer and successful. Home extractions using alcohol are not recommended. Home extractions using volatile gases is **prohibited**. Instead, utilizing mechanical extraction methods, low risk solvents such as vegetable oils, or solventless extractions such as butters or ice/cold-water, for oral or topical applications, can be safer ways to create extractions without additional solvents. All extracts should be kept locked away from children and pets.

Cannabis Waste Management Guidelines

Recycling Trim

Cannabis trim can be utilized for creating concentrates, before throwing away stems and leaves, consider recycling them back into concentrates that can be utilized in edibles, topicals, and other modes of consumption.

Water Recycling


In a closed loop watering system, you can recycle your plant water waste back into your grow canopy. Check your local water municipality for cannabis water waste instructions.

Composting

To reduce waste, composting is a great option to consider. However, it is important to note that **not all plant media is safe for composting**. Rockwool, a common plant growing media - does not decompose. Choosing compostable plant media and nutrients should be considered.

Disposal

Destroy your cannabis beyond recognition to deter others from searching through your trash. If there is still waste after doing so, consider recycling and composting options and mix thoroughly with non-cannabis waste to ensure any remaining cannabis is unusable when it is discarded with household trash.

 **Reminder** – young people and pets sometimes get into trouble with cannabis when it is openly discarded in the trash (such as residue from concentrates on q-tips, cannabis cigarette butts, edibles). Be sure to have a closed lid trash wherever you toss your cannabis.

More Information & Additional Resources

- Personal Home Cultivation of Medical Cannabis regulations, [Click Here](#)
- Medical Home Grow One Pager, [Click Here](#)
- To learn how to register as a medical cannabis patient, [Click Here](#)
- To learn how to register as a designated caregiver, [Click Here](#)
- Medical Home Cultivation FAQs, [Click Here](#)
- New York State Energy Research and Development Authority (NYSERDA) Energy Efficiency Resources, [Click Here](#)
- New York State Department of Environmental Conservation Pesticide Resource, [Click Here](#)

Contact The Office of Cannabis Management

Website: cannabis.ny.gov

Email: Medical@ocm.ny.gov

Call: 1-888-OCM-5151 (1-888-626-5151)