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Medical Cannabis Program

Cannabis *N*_{ugs} *O*_f *W*_{isdom}

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Disclaimer

- The opinions shared during this meeting do not necessarily reflect the position of the Medical Cannabis Program.
- The Medical Cannabis Program does not endorse any specific product, producer, or vendor.

Objectives

- Introduce MCP Team
- Review items from patient portal
- Cannabis pharmacokinetics
- Discuss Cannabis use in the setting of HCV

Portal Proficiency

- Where to find instructions
- Verifying the email
- Distinct emails
- Spelling the email
- Caregiver question
- The invitation box
- Red banner
- Patient email invite

Instruction Sets

← → ↻ mcp-patient-tracking.nmhealth.org 🔍 📄 ☆ ⚙️ 🗪



Welcome

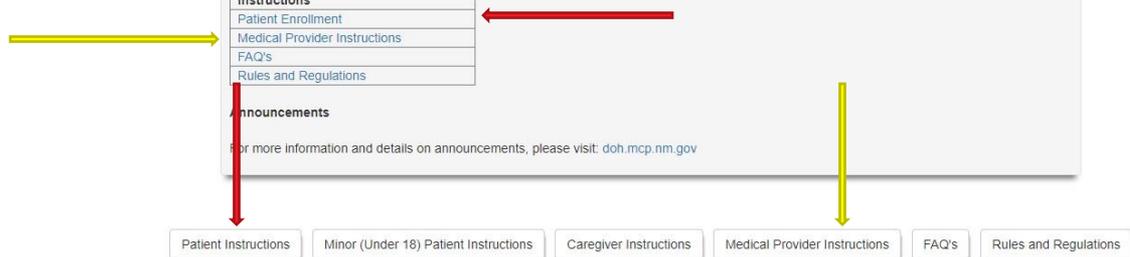
All potential patients and caregivers are encouraged to thoroughly review the information on the Medical Cannabis Division's website:
<https://www.nmhealth.org/about/mcp/svcs/>

Before you start and application, please see these [instructions](#) for all the necessary information and documents you will need.

- Instructions**
- Patient Enrollment
- Medical Provider Instructions
- FAQ's
- Rules and Regulations

Announcements

For more information and details on announcements, please visit: doh.mcp.nm.gov



- Patient Instructions
- Minor (Under 18) Patient Instructions
- Caregiver Instructions
- Medical Provider Instructions
- FAQ's
- Rules and Regulations

Create an Account



Login To Your Account



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1190 S. St. Francis Drive • Santa Fe, NM 87505 • Phone: 505-827-2613 • Fax: 505-827-2530 • nmhealth.org

Verify your registered email

From: no-reply@biotrackthc.org
To: [Patient_MCP_DOH](#)
Subject: [EXTERNAL] Create an Account mcp-patient-tracking.nmhealth.org
Date: Wednesday, November 16, 2022 2:19:04 PM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Hi Mcp,

You are now registered in the New Mexico Medical Cannabis Online Portal.

To confirm your registration, please click this link:

<https://mcp-patient-tracking.nmhealth.org/?action=registration&confirmation=eyJwI49TVr5KvZvJsQ0XpQM0HeP9YI9FT0UNxMPr2YiVKQv20OEpgMMNStikZ912>

By confirming this email, you are accepting communications from the New Mexico Department of Health Medical Cannabis Program via email and understand and accept the potential risk. If you choose not to have communications via email, please notify the New Mexico Department of Health Medical Cannabis Program. Your email address will not be given to any other party without your prior authorization.



If you have any questions or have received this notification in error, please contact the New Mexico Department of Health Medical Cannabis Program at 505-827-2321 or email at Medical.Cannabis@state.nm.us

Thank you for using the New Mexico Department of Health Medical Cannabis Program Online Portal.

Provider vs Personal

Medical Provider Information

First Name	<input type="text" value="Gary"/>	Last Name	<input type="text" value="French"/>
Phone	<input type="text" value="(505) 827-8231"/>	Fax	<input type="text" value="() - -"/>
Email	<input type="text" value="nmdohmcp@gmail.com"/>		
NM Controlled Substance License #	<input type="text" value="CS0123456"/>		

Office Mailing Address

Address	<input type="text" value="1474 Rodeo Rd, Suite 200"/>		
ZIP Code	<input type="text" value="87505"/>	State	<input type="text" value="NM"/>
City	<input type="text" value="Santa Fe"/>	County	<input type="text" value="Santa Fe"/>

[Review](#)

Email and Dropdowns

mcp-patient-tracking.nmhealth.org/?action=applications&type=patient

Patient Application

Application Type

New Application Re-Certification

Contact Information

First Name Last Name

Suffix Middle Name

Date of Birth MM-DD-YYYY

Phone Email

Upload Drivers License or State Issued Identification

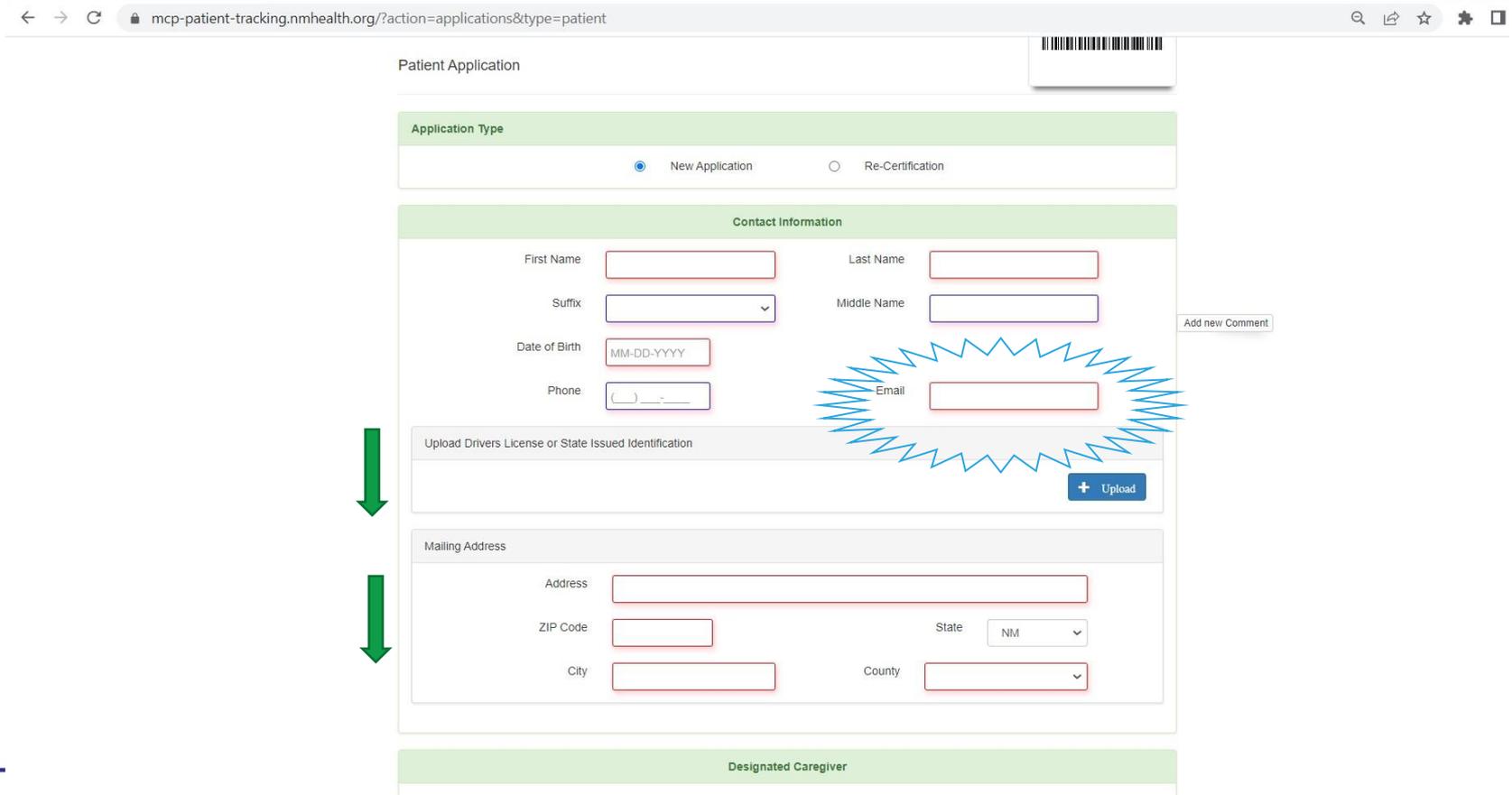
Mailing Address

Address

ZIP Code State

City County

Designated Caregiver



Caregiver question

mcp-patient-tracking.nmhealth.org/?action=applications&ttype=patient

First Name Last Name

Suffix Middle Name

Date of Birth

Phone Email

Upload Drivers License or State Issued Identification

Mailing Address

Add new Comment

Designated Caregiver

Does the Applicant wish to have a Caregiver? Yes No

Caregiver Information

First Name Last Name

Middle Name Date of Birth

Email Address

Medical justification for the patient's need for a Primary Caregiver

Sign, click, save

Medical Provider Signature

By Signing below you are certifying:

- * I have conducted an appropriate examination of the qualified patient during the preceding twelve months as indicated (in-person or telemedicine).*
- * The qualified patient continues to have the qualifying debilitating medical condition identified above.*
- * I believe the potential health benefits of the medical use of cannabis would likely outweigh the health risks for the qualified patient.*

Signature Date

Must be dated no more than 90 days prior to the receipt of the application by program

[Add new Comment](#)



Questions in this area are optional, if you do not want to answer them you may leave blank

Send invitation to an applicant

False alarm

The screenshot shows a web application interface for the New Mexico Department of Health. At the top left is the logo for the New Mexico Department of Health, Medical Cannabis Division. To its right are navigation links for 'Account' and 'Applications'. On the far right of the top bar are icons for a user profile, a globe, and a document. Below this is a breadcrumb trail: 'Home / Security'. In the center of the page, a pink warning box contains the text: 'Warning! You don't have an access to this area.' At the bottom left of the page, there is a copyright notice: '© New Mexico'.

Patient invite email

From: no-reply@biotrackthc.org
To: [Patient_MCP_DOH](#)
Subject: [EXTERNAL] State of New Mexico Medical Cannabis Program Invitation
Date: Wednesday, November 16, 2022 2:12:12 PM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Hi Mcp Patient,

This email is to notify you that your medical provider has completed their portion of your application for the participation in the New Mexico Department of Health Medical Cannabis Program using our Online Portal.

1

If you have not registered in the system, please login and complete a registration. Please go to: <https://mcp-patient-tracking.nmhealth.org/> to register.

You must complete your portion of the application and include an image of your New Mexico State ID or Driver's License. Once complete, you can submit the application for review. Please know, it can take the New Mexico Department of Health Medical Cannabis Program up to 30 days to process applications from the day of receipt of a completed application.

2

DO NOT DELETE THIS EMAIL. After you register, please come back to this email and click on the following link:

https://mcp-patient-tracking.nmhealth.org/?action=applications&type=patient&invitation=eE9HdCL1_1668633124878274862



If you have any questions or have received this notification in error, please contact the New Mexico Department of Health Medical Cannabis Program at 505-827-2321 or email at Medical.Cannabis@state.nm.us

Thank you for using the New Mexico Department of Health Medical Cannabis Program Online Portal.

Any questions?



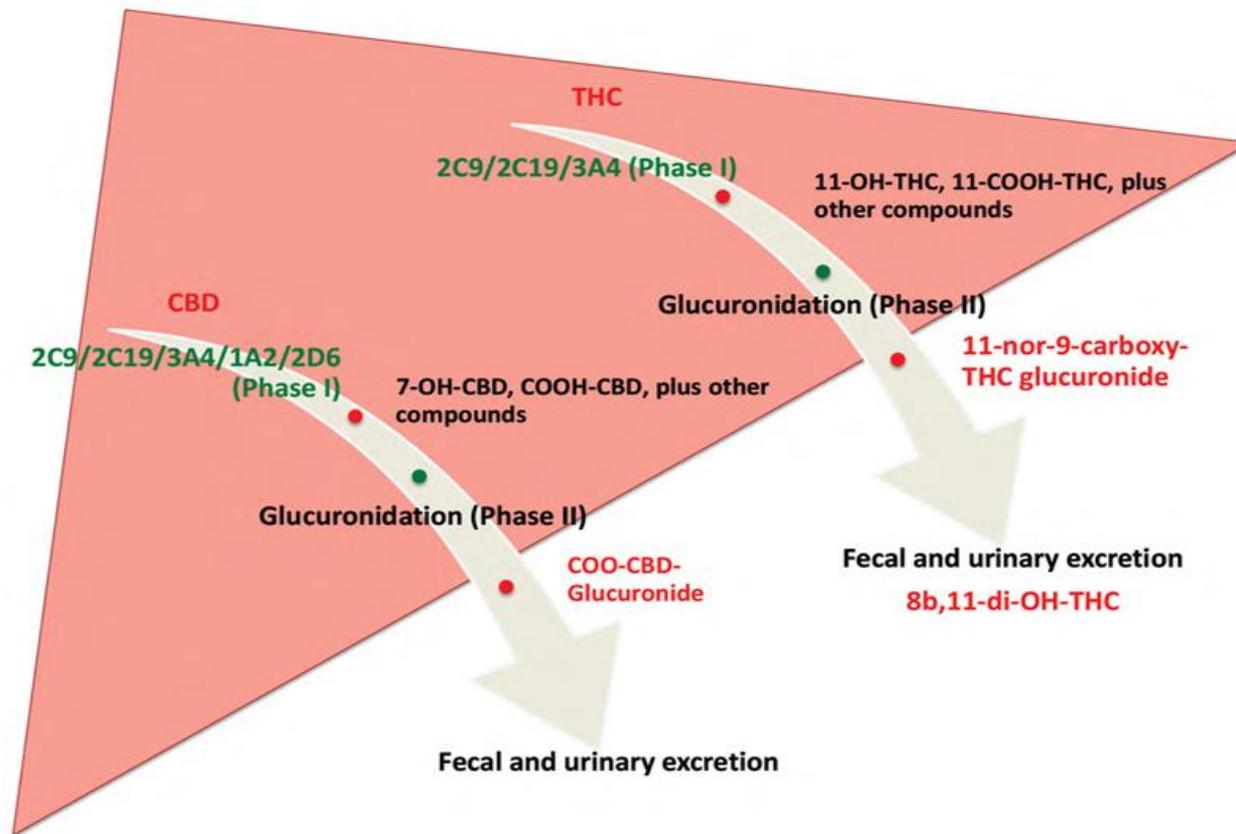
Hepatitis C

- Added to the list of qualifying conditions in 2009
- Currently 116 patients list Hepatitis C as their primary qualifying condition.
- Does not treat Hepatitis C, but helps to manage many symptoms.

Pharmacology ¹

- Two phases of metabolism in the liver
 - Phase 1
 - Cytochrome P450 system - THC is metabolized in the liver by cytochrome P450 enzymes (mainly by CYP2C9 and to a lesser extent by CYP3A4). These enzymes convert THC into a metabolite called 11-hydroxy-THC, which is also psychoactive and can have stronger effects than THC itself.
 - Phase 2
 - Glucuronidation of phase 1 metabolites

Metabolism of THC and CBD ²



Cannabis and CYP450 system ²

CYP450 Isoenzymes	Inducers (lowering cannabis effect)	Inhibitors (increasing cannabis effect)
2C9	Rifampicin	Ketoconazole Fluconazole Amiodarone Cimetidine
2C19	Artemisinin	Fluvoxamine Fluoxetine Omeprazole Ticlopidine Cimetidine Ketoconazole
3A4	Azole antifungals, Macrolide antimicrobials, Selective serotonin re-uptake inhibitors (SSRIs), Calcium channel blockers, Protease inhibitors, Grapefruit juice, Ciprofloxacin, Cimetidine, Propofol	Rifampicin Rifabutin Carbamazepine Phenytoin Phenobarbital

Potential Drug interactions ³

- Concomitant use of certain medications may increase or decrease the concentration of some cannabinoids and alter their effects.
- CYP3A4 inhibitors **increase** THC concentrations
- CYP3A4 inducers **decrease** THC concentrations
- Rifampin a strong CYP3A4 inducer has been reported to reduce THC levels by 20% to 40%
- St John's Wort is also a CYP3A4 inducer and reduces THC and CBD levels

Drug Interactions (cont.) ⁴

- Cannabis use appears to decrease atazanavir trough concentrations, with 50% of users in one study having trough concentrations below the therapeutic range (No impact on CD4 or Viral Load).
- Ritonavir is a modest inducer of CYP2C9, but a strong inhibitor of CYP3A4. The overall effect could be a potential modest increase in THC.
- Both are Protease Inhibitors*

Positives

- Lower total health costs
- Improved HCV virologic outcome
- Does not appear to accelerate progression of liver disease
- Reduced risk of hepatic steatosis
- Reduced hepatic fibrosis
- Did not alter histology or treatment outcomes

Lower total health costs ⁵

- Cannabis might be directly toxic to hepatitis virus in vivo, as is recently shown in vitro.
- Cannabis users might make HCV patients feel less nauseous and more motivated to take their other antiviral medications and another medical regimen.
- Cannabis might be associated with decreased hepatic cirrhosis and complications of cirrhosis, thereby resulting in the lower cost and better discharge disposition outcomes among cannabis users.

Improved HCV virologic outcome ⁶

- Cannabis use may offer symptomatic and virological benefit to some patient undergoing HCV treatment by helping them maintain adherence to the challenging medical regimen.

Does not accelerate progression of liver disease ⁷

- In this prospective analysis we found no evidence for an association between cannabis smoking and significant liver fibrosis progression in HIV/HCV coinfection.

Reduced risk of hepatic steatosis ⁸

- Given the persistence of metabolic risk factors after HCV eradication, cannabis-based therapies need to be evaluated both as preventive and therapeutic tools in patients living with or at risk of liver steatosis, possibly in combination with existing conventional approaches.

Reduced Hepatic Fibrosis ⁹

- A 2019 review of nine studies involving nearly 6 million subjects concluded, “Cannabis use [does] not increase the prevalence or progression of hepatic fibrosis in HCV and HCV-HIV-coinfected patients. On the contrary, we noted a reduction in the prevalence of non-alcoholic fatty liver disease in cannabis users.”

Use did not alter histology or treatment outcomes ¹⁰

- Although hard HCV antiviral treatment outcomes were not influenced by cannabis use, it remains plausible that cannabis alleviates on-treatment side effects and increases appetite, thereby reducing patient suffering while on interferon-based treatment.

Negatives

- Worsen fibrosis and steatosis
- Immunosuppression resulting in suppression of anti-viral immunity
- Increased risk of viral infections
- Worse hospital outcomes
- Worsen side effects of medications

Worsen fibrosis and steatosis ¹¹

- A deleterious role of daily use of recreational drugs, in particularly cannabis, has been shown to demonstrate clearly a rapid progression of fibrosis and steatosis, leading to a major severity in patients with chronic hepatitis C

Suppression of anti-viral immunity ¹²

- Cannabis use can suppress the immune system, which may interfere with the effectiveness of interferon-based therapies.
- Increased endocannabinoid levels during HCV infection might suppress inflammatory cytokines production, thereby weakening the immune response towards HCV infection.

Increase risk of viral infection ¹³

- Cannabis use may be associated with adverse effects on immune function and, thereby, increase the risk of acquiring or transmitting infections such as HIV and HCV.

Worsen hospital outcomes ¹⁴

- Cannabis Use Disorder is significantly associated with 122% increased likelihood for hepatic encephalopathy that may worsen overall hospitalization outcomes in CHC patients.

Worsen side effects ¹⁵

- Cannabis use may increase the risk of side effects associated with interferon therapy, such as depression, anxiety, and fatigue.

Final words

- Overall, the current evidence on the effects of cannabis on the liver is mixed and more research is needed to fully understand the relationship between cannabis use and liver function.
 - Likely safe to use during HCV treatment with newer antiretrovirals (Protease Inhibitors?) – limited time of exposure.
 - Caution with interferon based regimens.
 - Excessive **alcohol** consumption is a well-established cause of liver damage and should be avoided.
 - **Smoking** cannabis can cause respiratory problems, such as bronchitis and pneumonia, which can be especially harmful for individuals with chronic hepatitis C.

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Any questions?



For More Information

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THANK YOU!!