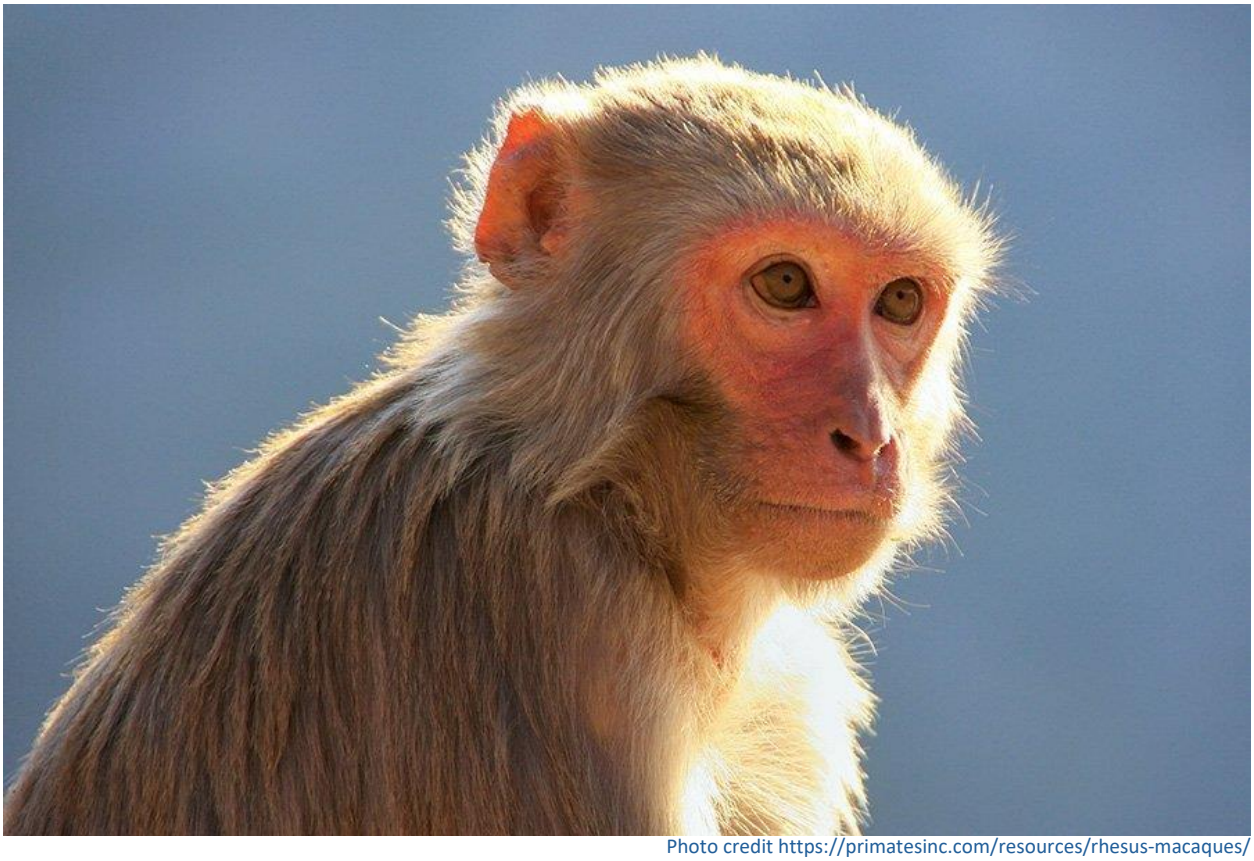
Herpes B Exposure Information Packet



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UCDAVIS | SAFETY SERVICES

After Hours Post-Exposure Prophylaxis for Biological Exposures

PnP #130-13

Effective Date: February 2024

A. Purpose

To describe the process where workers with biological exposures can receive necessary emergency treatment outside of the UC Davis Occupational Health Clinic's business hours.

B. Policy

The University complies with all pertinent Federal, State, and local statutes, standards, and regulations regarding the provision of personnel health programs for individuals who have contact with or are exposed to live vertebrate animals or biological products used in research or teaching. Occupational Health endeavors to assist in augmenting the knowledge base of local emergency rooms and urgent care centers that may be unfamiliar with the complexities of managing these biological exposures, including the emergency administration of Post-Exposure Prophylaxis (PEP) medications.

Examples of such exposures include but are not limited to:

- Bloodborne Pathogens (HIV, SIV) from a needlestick or splash
- Lentiviral vectors with oncogenes or toxins, usually from needlestick
- Exposure to Brucella from aerosol, splash, or needlestick
- Herpes B virus* from a needle stick or splash from work with unfixed primate tissues
  (*Additional instructions for Herpes B exposures below)

The following procedure is for employees/student employees who receive a paycheck from the University. If the exposed person is a student they are to contact Student Health and Counseling services for treatment.

C. Procedure

- Exposed employees recieve treatment at UC Davis Occupational Health Clinic during business hours (8:00 am-5:00 pm Monday, Tuesday, Thursday and Friday, 9:00 am-5:00 pm Wednesday, closed from 12-1 pm daily for lunch). Preferably, employees call ahead so staff can triage the appointment.

In the event of an after-hours biological exposure, the following process shall be followed:

- Cease work and begin immediate first aid.
    - Skin wounds - immediately wash skin with a solution containing detergent soap (i.e. chlorhexidine or povidone-iodine) for 15 minutes. Gently clean, be careful not to further abrade the skin. Rinse well with water.
    - Mucosa Membranes - go to the eyewash station and flush with sterile saline or water for 15 minutes. Do not use soap.
    - Mouth - flush and spit repeatedly with water only. Do not swallow.

- After adequate first aid is performed at the worksite, proceed to:
    1. **Davis Urgent Care** 4515 Fermi Place, Suite 105, Davis, CA 95616. Hours of operation 9:00 am – 9:00 pm 365 days per year including holidays (last patient seen at 8:00 pm). **This is the preferred option.**
    2. **Sutter Davis Hospital Emergency Room** 200 Sutter Place, Davis, CA, 95616
    3. **The nearest Urgent Care or Emergency Room if outside of the Davis area**

- On-call Occupational Health staff are available after-hours for consultation with ER & Urgent Care medical staff at (530)302-5529. The Occupational Health medical staff will provide education about the exposure and treatment risks, benefits, and alternatives.

• **If the exposure is to Herpes B virus**, which requires timely treatment, the exposed employee will take a pre-made informational packet that will have pertinent information on how to treat Non-human primate exposures.

- The goal is that the affected employee/student employee will receive PEP within two (2) hours of the exposure.

a. Exposed employees will hand-carry the Non-Human Primate Exposure information packet to the Urgent Care or Emergency Room. Occupational Health Services supplies the informational packets to the campus departments.

- Each packet includes but is not limited to:
  - instructions for treatment of exposure
  - patient medication information sheets
  - a blank Record of Medication(s) Given
  - a blank UCD Employee Injury Information fax sheet to be filled out by the Provider at the DUC or ER and faxed to Occupational Health Services at (530) 752-5277
  - An infectious disease card

b. The pre-made informational packet shall be given to the medical provider at Davis Urgent Care or Sutter Davis ER that is providing treatment to the exposed worker.

- See "Non-Human Primate (Macaque Rhesus) Exposure: Initial and follow-up treatment for exposure to Herpes Simian B Virus" for specific treatment recommendations.

- The employees at these institutions will have educational information on exposed pathogens as well.

- If the patient is seen outside of Occupational Health, the facility will fax records, UCD Employee Injury Information, and Record of Medication Given for Potentially Infectious Post-Exposure Prophylaxis (see below) to Occupational Health (530) 752-5277 for continuity of care before the next business day.

- The supervisor will be notified and a Worker's Compensation claim will be initiated.

- The exposed worker will contact the UC Davis Occupational Health

Clinic (530) 752-6051 the next business day to schedule an appointment. Additional treatment may include wound care, blood work, and medication adjustment.

D. References

- Non-Human Primate (Macaque Rhesus) Exposure: Initial and follow-up treatment for exposure to Herpes Simian B Virus
- Patient Information Sheet Decreasing SIV Risk with Post-Exposure Prophylaxis
- Doxycycline Patient Information Sheet
- Isentress Patient Information Sheet
- Rifampin Patient Information Sheet
- Truvada Patient Information Sheet
- Valacyclovir Patient Information Sheet
- Record of Medication Given for Potentially Infectious Post-Exposure Prophylaxis
- UCD Employee Injury Information
- Herpes B Infectious Agent Card

Contact

Occupational Health Services
melbrown@ucdavis.edu
530-752-6052 For more information, please visit safetyservices.ucdavis.edu/units/occupational-health.

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Non-Human Primate (Macaque Rhesus) Exposure: Initial and follow-up treatment for exposure to Herpes Simian B Virus

Attachment to PnP #130-13

Effective Date: February 2024

A. Background

University of California at Davis has laboratories on campus working with two non-human primate (NHP) species: **Old World macaque (Rhesus) species**, and New World marmoset species. *Note, New World marmosets are **not** carriers for Herpes B virus, and bites/injuries from these animals are not included in this protocol. For New World marmoset injuries, follow standard first aid care and animal exposure policies as indicated.*

Herpes Simian B virus (Macacine herpesvirus 1 (formerly Cercopithecine herpesvirus 1, CHV-1), *Herpesvirus simiae*, B virus) is a zoonotic agent that can cause fatal encephalomyelopathy in humans. The virus is naturally occurring and endemic among **macaque (Rhesus) monkeys and other Old-World primates** in the wild and in research populations. Persons at risk for **Herpes B virus** exposure include veterinarians, animal health technicians, laboratory workers, and researchers. Most exposures are managed at the Occupational Health Clinic. It is the University policy that work with the macaque species only occurs during daytime business hours. However, unforeseen circumstances may require that initial evaluation and treatment be performed when Occupational Health Services is not open, thus the need for training of our healthcare partners. Oral, ocular, and genital secretions and CSF and CNS tissues of macaque monkeys are potentially infectious. Documented routes of B virus infection include bites and scratches, exposure to tissue culture material, exposure to tissue obtained during autopsy, needle sticks, cage scratches, and mucosal splash. Deep puncture wounds, inadequately cleaned wounds, and wounds on the face, neck, thorax, or eyes may pose a greater risk. The only documented case of human-to-human transmission has been when the

virus was transferred from an infected wound to another person's open wound via topical hydrocortisone cream.

All macaque primate exposures should be evaluated immediately and initial management for Herpes B exposure should start as soon as possible. For all extensive and/or profusely bleeding injuries, patients should be stabilized and 911 called for assistance. It is important that all medical providers including emergency paramedics, Davis Urgent Care, and Sutter Davis Hospital Emergency Room staff understand that the wound may be contaminated with **Herpes B virus,** that anyone examining or cleansing the wound must use universal precautions, and that first-aid should be instituted immediately.

The adequacy and timeliness of wound decontamination procedures are the most important factors determining the risk of infection after exposure to **Herpes B virus.** Thorough cleansing, that lasts for a full 15 minutes, within five minutes of injury or exposure greatly lessens the risk of progressing to Herpes B virus infection.

All personnel working with or having access to macaques, their body fluids, unfixed tissues, or equipment potentially contaminated with Herpes B virus, must receive training on their laboratory's Standard Operating Procedure, as well as have completed Herpes B virus training.

B. Initial Management and Treatment of Exposure to Herpes B Virus:

Universal precautions are indicated for the assessment and care of all wounds.

Assess for and treat any life-threatening wounds and control bleeding as necessary, activate EMS as appropriate.

1. **First aid:** First aid should be performed at the worksite for macaque bites, scratches, splashes, exposures to unfixed tissues, body fluids, and injuries from needle sticks or other equipment potentially contaminated with **Herpes B virus**:
    a. Cleansing must begin immediately, best within five (5) minutes of the exposure, and may need to be repeated on arrival at UC or the ER. **This is the most important step in the management and treatment of exposure.**

i. Skin wounds - immediately wash skin with a solution containing detergent soap (i.e. chlorhexidine or povidone iodine) for 15 minutes. Gently clean, be careful not to further abrade the skin. Rinse well with water.
ii. Mucosal Membranes - go to the eyewash station and flush with sterile saline or water for 15 minutes. Do not use soap.
iii. Mouth - flush and spit repeatedly with water only. Do not swallow.

C. Treatment at Occupational Health or Outside Facilities

- After adequate first aid is performed at the worksite, **proceed to UC Davis Occupational Health Clinic during business hours** (8:00 am-5:00 pm Monday, Tuesday, Thursday and Friday, 9:00 am-5:00 pm Wednesday, closed from 12-1 pm daily for lunch). Preferably, call ahead so staff can triage the appointment.
- **If exposure occurs when Occupational Health Services is closed proceed to:**
    1. **Davis Urgent Care** 4515 Fermi Place, Suite 105, Davis, CA 95616. Hours of operation 9:00 am – 9:00 pm 365 days per year including holidays (last patient seen at 8:00 pm)**(This is the preferred option)**
    2. **Sutter Davis Hospital Emergency Room** 200 Sutter Place, Davis, CA 95616. Open 24 hours
    3. **The nearest Urgent Care or Emergency Room if outside of the Davis area**

    a. Exposed employees will hand-carry the Non-Human Primate Exposure information packet to the Urgent Care or Emergency Room. Occupational Health Services supplies the informational packets to the campus departments.
        - Each packet includes but is not limited to:
            - instructions for treatment of exposure
            - patient medication information sheets
            - a blank Record of Medication Given
            - a blank UCD Employee Injury Information fax sheet to be filled out by the Provider at the DUC or ER and faxed to Occupational Health Services at (530) 752-5277
            - An infectious disease card

b. The clinician will assess the adequacy of first aid/decontamination and whether further cleansing is necessary.

c. Do not culture or swab the exposure site. Doing so may force virus on the surface of the wound further into the wound, and may further contaminate the wound with infected material located nearby.

d. It is important that emergency paramedics, Davis Urgent Care, and Sutter Davis Hospital Emergency Room staff understand that the wound may be contaminated with Herpes B virus, that anyone examining or cleansing the wound must use Universal Precautions, and that first-aid should be instituted immediately.

e. Reiterate that injury is due to exposure to Herpes B virus from a non-human primate exposure, NOT Hepatitis B (or other herpes virus)

Only after expert consultation and in unusual circumstances would it be advised to culture the wound, and only ever after initial wound cleansing has been performed. ***Specimens for PCR or culture are usually only obtained if clinical symptoms are present, or if antibody-positive serology suggests infection.*** *Contact the National B Virus Research Center (link below) if needed with questions.*

The blood serum collection for B-Virus will be handled by Occupational Health Services when the employee follows up after the Urgent Care/ER visit

f. Wound care (antibiotics, dressings, etc.) as indicated by the severity of the wound.

g. Tetanus prophylaxis as appropriate.

h. Review clinical symptoms of Herpes B virus infection with the patient.

i. Employee must follow up with Occupational Health in 1-3 days for further treatment/monitoring

j. If Occupational Health will be closed, contact the Director of Occupational Health, or the on-call medical provider, to develop a follow-up plan.

k. Review options for Herpes B virus prophylactic antiviral medication (below).

D. Post Exposure Prophylaxis

Prophylaxis recommended

a. Skin exposure (with loss of skin integrity) or mucosal exposure (with or without injury) to a high-risk source (e.g., a macaque that is ill, immunocompromised, or known to be shedding virus or that has lesions compatible with B virus disease)
b. Inadequately cleaned skin exposure (with loss of skin integrity) or mucosal exposure
(with or without injury)
c. Laceration of the head, neck, or torso
d. Deep puncture bite
e. Needle stick associated tissue or fluid from the nervous system, lesions suspicious of B virus, eyelids, or mucosa
f. Puncture or laceration after exposure to objects (a) contaminated either with fluid from monkey oral or genital lesions or with nervous system tissues, or (b) known to contain B virus

Prophylaxis considered

a. Mucosal splash that has been adequately cleaned
b. Laceration that has been adequately cleaned
c. Needle stick involving blood from an ill or immunocompromised macaque
d. Puncture or laceration occurring after exposure to (a) objects contaminated with body fluid (other than that from lesion), or (b) potentially infected cell culture

Prophylaxis not recommended

a. Skin exposure in which the skin remains intact
b. Exposure associated with new world (non-macaque) species of nonhuman primates

Antiviral agents recommended for post-exposure prophylaxis

1. Valacyclovir, oral, 1 g given three times daily for 14 days in adults and non-pregnant women.

OR

2. Acyclovir, oral, 800 milligrams given five times daily for 14 days. (For pregnant women, acyclovir is the preferred agent.)

Agents should be initiated within **2 hours** of exposure.

For cases in which a wound culture comes back positive for Herpes B virus: initiate prophylaxis, regardless of time from exposure, even if it has been more than 5 days.

E. Reporting

1. ***All Non-human primate exposures should be reported to the employee's supervisor*** and Occupational Health Services.

The on-call medical staff can be reached at 530-302-5529.

2. Occupational Health will ***report all Non-Human Primate Exposures to EH&S.***

Be prepared to report the time and date of injury, nature of the injury, victim's name and job title, department name, supervisor name, location of the incident, name of the contact person at the site, and where (if any) the victim was taken. Occupational Health Services staff can be contacted during business hours at 530-752-6051, and after-hours at 530-302-5529. You may email occupationalhealth@ucdavis.edu to report as well.

F. Follow-Up Care

1. For employees who receive initial treatment at a facility other than UC Davis Occupational Health, the patient should contact UC Davis Occupational Health Clinic on the next business day to schedule a follow-up to assess tolerance of prophylactic medication and assess for symptoms of Herpes B Virus.
2. Follow-up testing/serology:

a. **Initial sample** - at the time of the Exposure (or at the first appointment with Occupational Health if seen at an outside facility)
b. **2nd Sample** - 14-21 days after Exposure (or at the onset of clinical symptoms)
c. **3rd Sample** - 30 days after completing post-exposure prophylaxis

d. Final check at 6 months post-exposure as recommended by Occupational Health

G. References

Guidelines are based upon Recommendations of the B Virus Working Group and are summarized in the article:

Recommendations for Prevention of and Therapy for Exposure to B Virus. Jeffrey I. Cohen, David S. Davenport, John A. Stewart, Scott Deitchman, Julia K. Hilliard, Louise B Chapman, and the B virus working group. Clinical Infectious Diseases 2002:35 (15 November) 1191-1203.

For expert consultation, contact the National B Virus Research Center in Atlanta Georgia at 404-413-6550.

Contact

Occupational Health Services
melbrown@ucdavis.edu
530-752-6052 For more information, please visit safetyservices.ucdavis.edu/units/occupational-health.

Patient Information Sheet: Decreasing SIV Risk with Post-Exposure Prophylaxis

Because of the potential acquisition of SIV infection from needle sticks, UC Davis Occupational Health recommends treating SIV exposure with what is called *post-exposure prophylaxis (PEP)* for those workers thought to be exposed to SIV in the workplace.

What is Post Exposure Prophylaxis (PEP)?

PEP is just what the name suggests; prophylaxis (preventive) medications given after an SIV or suspected SIV exposure in hopes of decreasing the likelihood of SIV infection from the exposure. The PEP medication combinations used depends on the degree of exposure and the SIV status of the source of the exposure. But before any medications are prescribed, it has to be determined if PEP is indicated and appropriate.

PEP is recommended for all individuals with an exposure that has the potential for SIV transmission, and ideally within 72 hours. Typically regimens are prescribed for a four week period.

Concerns Associated with PEP

While the benefits of PEP have been documented, there are some concerns as well. It's these concerns that cause practitioners to consider the need for PEP thoroughly before prescribing it. PEP is not without risk and should only be given in those people that absolutely need it.

What Medication Combination is Used?

Three Drug PEP Recommended

Truvada (combination of emtricitabine + tenofovir disoproxil fumarate)
Isentress (raltegravir)

1. Truvada (emtricitabine and tenofovir disoproxil fumarate)

Classification: Nucleoside Reverse Transcriptase Inhibitor (NRTI)
Form: contains 2 medicines, EMTRIVA@(emtricitabine) and VIREAD@(tenofovir disoproxil fumarate, or tenofovir OF)
Dosage: 200 mg/ 300 mg by mouth once daily for 28 days

2. Isentress (raltegravir)

Classification: Human Immunodeficiency Virus Integrase Strand Transfer Inhibitor
Dosage: 400 mg by mouth twice daily for 28 days

Please reference the Patient Information sheets for information on Truvada and Isentress. Always take medications as directed and consult with your pharmacist and healthcare provider if you have concerns about side effects from your medications. Don't let side effects persuade you to stop taking your medication on your own.

The Last Word on PEP-- PEP is a viable option for occupational exposures to SIV. While it is not without its downfalls, it is probably effective in reducing the risk of SIV infection from a needle stick.

DOXYCYCLINE

Doxycycline is used to prevent infections with Brucella following exposure.

Before using this medication, the following should be considered:

Allergies – Tell your health care professional if you are allergic to this medication or to any other tetracycline drug.
Birth Control – If you are taking birth control pills, notify your health care provider. Use of antibiotics may make your birth control pills less effective. If you are taking birth control pills, it is suggested that you use an additional method of birth control (such as foam and condoms) until your next period.
Pregnancy – If you are pregnant, if you are trying to get pregnant, or if you are breastfeeding: This drug may cause the unborn infant's teeth to become discolored and may slow the growth of the infant's teeth and bones if taken during pregnancy.
Breastfeeding – Use by nursing mothers is not recommended since doxycycline passes into breast milk and may cause unwanted effects in the baby.
Other diseases - Be sure to tell your health care provider if you have liver or kidney disease or if you have the disease Systemic Lupus Erythematosus.
Other medicines – It is important for your health care provider to know all medications you are taking, including penicillin, herbal supplements, vitamin and mineral supplements, and food supplements.

Proper use of this medication:

- If doxycycline upsets your stomach, it may be taken with meals or a snack.

- To help clear up your infection completely, keep taking this medicine for the full time of treatment until all pills are gone, even if you begin to feel better after a few days. DO NOT MISS ANY DOSES.

- If you miss a dose of this medicine, space the missed dose and the next dose 2 to 4 hours apart, then go back to your regular schedule. **Do not double doses**.

Precautions while using this medicine

- If symptoms of infection or drug side effect occur, check with Occupational Health.

- Do not take antacids, calcium supplements, magnesium-containing laxatives such as Epsom salt, or sodium bicarb (baking soda) within one or two hours of the time you take the doxycycline. To do so may keep the medicine from being absorbed making it ineffective.

PATIENT INFORMATION

ISENTRESS® (eye **sen** tris)
(raltegravir)
film-coated tablets

ISENTRESS® HD (eye **sen** tris HD)
(raltegravir)
film-coated tablets

ISENTRESS® (eye **sen** tris)
(raltegravir)
chewable tablets

ISENTRESS® (eye **sen** tris)
(raltegravir)
for oral suspension

What are ISENTRESS and ISENTRESS HD?

ISENTRESS is a prescription medicine used with other HIV-1 medicines to treat Human Immunodeficiency Virus-1 (HIV-1) infection in adults, and in children weighing at least 4.4 pounds (2 kg). HIV is the virus that causes AIDS (Acquired Immune Deficiency Syndrome).

ISENTRESS HD is a prescription medicine used with other HIV-1 medicines to treat HIV-1 infection in adults, and in children weighing at least 88 pounds (40 kg).

ISENTRESS should not be used in children who weigh less than 4.4 pounds (2 kg).

Before you take ISENTRESS or ISENTRESS HD, tell your doctor about all of your medical conditions, including if you:

- have liver problems
- have a history of a muscle disorder called rhabdomyolysis or myopathy
- have increased levels of creatine kinase in your blood
- have phenylketonuria (PKU). **ISENTRESS chewable tablets** contain phenylalanine as part of the artificial sweetener, aspartame. The artificial sweetener may be harmful to people with PKU.
- receive kidney dialysis treatment
- are pregnant or plan to become pregnant. It is not known if ISENTRESS or ISENTRESS HD can harm your unborn baby.
  Pregnancy Registry: There is a pregnancy registry for women who take ISENTRESS or ISENTRESS HD during pregnancy. The purpose of this registry is to collect information about the health of you and your baby. Talk to your doctor about how you can take part in this registry.
- are breastfeeding or plan to breastfeed. Do not breastfeed if you take ISENTRESS or ISENTRESS HD.
  - You should not breastfeed if you have HIV-1 because of the risk of passing HIV-1 to your baby.
  - It is not known if ISENTRESS or ISENTRESS HD can pass into your breast milk.
  - Talk with your doctor about the best way to feed your baby.

Tell your doctor about all the medicines you take, including prescription and over-the-counter medicines, vitamins, and herbal supplements. Some medicines interact with ISENTRESS and ISENTRESS HD.

- **Keep a list of your medicines to show your doctor and pharmacist.**
- You can ask your doctor or pharmacist for a list of medicines that interact with ISENTRESS and ISENTRESS HD.
- **Do not start taking a new medicine without telling your doctor**. Your doctor can tell you if it is safe to take ISENTRESS or ISENTRESS HD with other medicines.

How should I take ISENTRESS or ISENTRESS HD?

- Take ISENTRESS or ISENTRESS HD exactly as prescribed by your doctor.
- **Do not** change your dose of ISENTRESS or ISENTRESS HD or stop your treatment without talking with your doctor first.
- Stay under the care of your doctor during treatment with ISENTRESS or ISENTRESS HD.
- ISENTRESS film-coated tablets and ISENTRESS HD film-coated tablets **must be swallowed whole**.
- ISENTRESS chewable tablets **may be chewed or swallowed whole**.
  For children who have trouble chewing the 25 mg chewable tablet, the tablet may be crushed and given as follows:
  - Place the tablet(s) in a small, clean cup. For each tablet, add about 1 teaspoonful (5 mL) of liquid (for example, water, juice, or breast milk).

- Within 2 minutes, the tablet(s) will fall apart in the liquid.
- Using a spoon, crush any remaining pieces of the tablet(s). Give the child the entire mixture to swallow right away.
- If any of the dose is left in the cup, add another teaspoonful (5 mL) of liquid, swirl and give to the child right away.

- **Do not switch between the film-coated tablet, the chewable tablet, or the oral suspension without talking with your doctor first.**
- **Do not** switch between the ISENTRESS 400 mg film-coated tablet and the ISENTRESS HD 600 mg film-coated tablet if your prescribed dose is 1200 mg.
- **Do not** run out of ISENTRESS or ISENTRESS HD. The virus in your blood may increase and the virus may become harder to treat. Get a refill of your ISENTRESS or ISENTRESS HD from your doctor or pharmacy before you run out.
- Take ISENTRESS or ISENTRESS HD on a regular dosing schedule as instructed by your doctor. Do not miss doses.
- If you take too much ISENTRESS or ISENTRESS HD, call your doctor or go to the nearest hospital emergency room right away.

If ISENTRESS for oral suspension is prescribed for your child, be sure to read the following information:

- Before giving the first dose of ISENTRESS for oral suspension, **read the Instructions for Use booklet that comes with ISENTRESS for oral suspension** for information about the correct way to mix and give a dose of ISENTRESS for oral suspension to your child. **Keep the booklet and follow it each time you prepare the medicine**. Bring this booklet to your child's appointments.
- Make sure your doctor shows you how to mix and give the right dose of ISENTRESS for oral suspension to your child. If you have questions about how to mix or give ISENTRESS for oral suspension, talk with your doctor or pharmacist.
- **Give the dose of ISENTRESS for oral suspension within 30 minutes of mixing.**
- **If your child does not take all of the prescribed dose or spits some of it out, call your doctor to find out what to do.**
- Your child's dose will change over time. Make sure you follow your doctor's instructions. Your doctor will tell you if and when to stop giving ISENTRESS to your child.

What are the possible side effects of ISENTRESS or ISENTRESS HD?

ISENTRESS and ISENTRESS HD can cause serious side effects including:

- **Severe skin reactions and allergic reactions.** Some people who take ISENTRESS or ISENTRESS HD develop severe skin reactions and allergic reactions that can be serious, and may be life-threatening or lead to death.
  - If you develop a rash, call your doctor right away.
  - If you develop a rash with any of the following symptoms, stop using ISENTRESS or ISENTRESS HD and call your doctor or get medical help right away:
    - fever
    - generally ill feeling
    - extreme tiredness
    - muscle or joint aches
    - blisters or sores in mouth
    - blisters or peeling of the skin
    - redness or swelling of the eyes
    - swelling of the mouth, lips, or face
    - problems breathing

Sometimes allergic reactions can affect body organs, such as your liver. Call your doctor right away if you have any of the following signs or symptoms of liver problems:

- yellowing of your skin or whites of your eyes
- dark or tea colored urine
- pale colored stools (bowel movements)
- nausea or vomiting
- loss of appetite
- pain, aching, or tenderness on the right side of your stomach area

- **Changes in your immune system (Immune Reconstitution Syndrome)** can happen when you start taking HIV-1 medicines. Your immune system may get stronger and begin to fight infections that have been hidden in your body for a long time. Tell your doctor right away if you start having new symptoms after starting your HIV-1 medicine.

The most common side effects of ISENTRESS and ISENTRESS HD include:

- trouble sleeping
- headache
- dizziness
- nausea
- tiredness

Less common side effects of ISENTRESS and ISENTRESS HD include:

- depression
- hepatitis
- genital herpes
- herpes zoster including shingles
- kidney failure
- kidney stones
- indigestion or stomach area pain
- vomiting
- suicidal thoughts and actions
- weakness

Tell your doctor right away if you get unexplained muscle pain, tenderness, or weakness during treatment with ISENTRESS or ISENTRESS HD. These may be signs of a rare serious muscle problem that can lead to kidney problems.

These are not all the possible side effects of ISENTRESS and ISENTRESS HD.

Call your doctor for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088.

How should I store ISENTRESS and ISENTRESS HD?

ISENTRESS and ISENTRESS HD film-coated tablets:

- Store ISENTRESS and ISENTRESS HD film-coated tablets at room temperature between 68°F to 77°F (20°C to 25°C).
- Store ISENTRESS and ISENTRESS HD film-coated tablets in the original package with the bottle tightly closed.
- Keep the drying agent (desiccant) in the ISENTRESS and ISENTRESS HD bottle to protect from moisture.

ISENTRESS chewable tablets:

- Store ISENTRESS chewable tablets at room temperature between 68°F to 77°F (20°C to 25°C).
- Store ISENTRESS chewable tablets in the original package with the bottle tightly closed.
- Keep the drying agent (desiccant) in the bottle to protect from moisture.

ISENTRESS for oral suspension:

- Store ISENTRESS for oral suspension at room temperature between 68°F to 77°F (20°C to 25°C).
- Store in the original container. Do not open the foil packet until ready for use.

Keep ISENTRESS and all medicines out of the reach of children.

General information about the safe and effective use of ISENTRESS and ISENTRESS HD

Medicines are sometimes prescribed for purposes other than those listed in a Patient Information Leaflet. Do not use ISENTRESS or ISENTRESS HD for a condition for which it was not prescribed. Do not give ISENTRESS or ISENTRESS HD to other people, even if they have the same symptoms that you have. It

may harm them. You can ask your doctor or pharmacist for information about ISENTRESS or ISENTRESS HD that is written for health professionals.

What are the ingredients in ISENTRESS and ISENTRESS HD?

ISENTRESS 400 mg film-coated tablets:

Active ingredient: raltegravir

Inactive ingredients: calcium phosphate dibasic anhydrous, hypromellose 2208, lactose monohydrate, magnesium stearate, microcrystalline cellulose, poloxamer 407 (contains 0.01% butylated hydroxytoluene as antioxidant), sodium stearyl fumarate.

The film coating contains: black iron oxide, polyethylene glycol 3350, polyvinyl alcohol, red iron oxide, talc and titanium dioxide.

ISENTRESS HD 600 mg film-coated tablets:

Active ingredient: raltegravir

Inactive ingredients: croscarmellose sodium, hypromellose 2910, magnesium stearate, microcrystalline cellulose.

The film coating contains: ferrosoferric oxide, hypromellose 2910, iron oxide yellow, lactose monohydrate, triacetin and titanium dioxide.

The tablet may also contain trace amount of carnauba wax.

ISENTRESS chewable tablets:

Active ingredient: raltegravir

Inactive ingredients: ammonium hydroxide, crospovidone, ethylcellulose 20 cP, fructose, hydroxypropyl cellulose, hypromellose 2910/6cP, magnesium stearate, mannitol, medium chain triglycerides, monoammonium glycyrrhizinate, natural and artificial flavors (orange, banana, and masking that contains aspartame), oleic acid, PEG 400, saccharin sodium, sodium citrate dihydrate, sodium stearyl fumarate, sorbitol, sucralose and yellow iron oxide. The 100 mg chewable tablet also contains red iron oxide.

ISENTRESS for oral suspension:

Active ingredient: raltegravir

Inactive ingredients: ammonium hydroxide, banana with other natural flavors, carboxymethylcellulose sodium, crospovidone, ethylcellulose 20 cP, fructose, hydroxypropyl cellulose, hypromellose 2910/6cP, macrogol/PEG 400, magnesium stearate, maltodextrin, mannitol, medium chain triglycerides, microcrystalline cellulose, monoammonium glycyrrhizinate, oleic acid, sorbitol, sucralose and sucrose.

Distributed by: Merck Sharp & Dohme Corp., a subsidiary of **Merck & Co., Inc.** Whitehouse Station, NJ 08889, USA
For patent information: www.merck.com/product/patent/home.html

usppi-mk0518-mf-2007r029
For more information go to www.ISENTRESS.com or call 1-800-622-4477.
This Patient Information has been approved by the U.S. Food and Drug Administration. **Revised July 2020**

Patient Information Sheet: Rifampin

Why is this medication prescribed?

Rifampin is effective against species of the Brucella genus. It facilitates the action of additional antibiotics and enhances intracellular effectiveness.

How should this medicine be used?

Rifampin comes as a capsule to take by mouth twice a day. You will be taking it for 3 weeks. Rifampin works best on an empty stomach; take it 1 hour before or at least 2 hours after a meal. If you have difficulty swallowing the capsule, you may empty its contents into applesauce or jelly. Follow the directions on your prescription label carefully, and ask your doctor or pharmacist to explain any part you do not understand. Take rifampin exactly as directed. Do not take more or less of it or take it more often than prescribed by your doctor.

What special precautions should I follow?

Before taking rifampin,

- tell your doctor if you are allergic to rifampin or any other drugs.
- tell your doctor what prescription and nonprescription medications you are taking, especially anticoagulants ('blood thinners') such as warfarin (Coumadin), cyclosporine (Neoral, Sandimmune), estrogen, hydrocortisone (Hydrocortone), medications for heart disease or diabetes, methadone, prednisone (Deltasone), theophylline (Theo-Dur), verapamil (Calan, Isoptin), and vitamins. Rifampin alters the effectiveness of oral contraceptives; use another method of birth control while taking this medication. Ask your doctor or pharmacist for advice.
- tell your doctor if you have or have ever had liver disease.
- tell your doctor if you are pregnant, plan to become pregnant, or are breast-feeding. If you become pregnant while taking rifampin, call your doctor.
- you should know that this drug may make you drowsy. Do not drive a car or operate machinery until you know how this drug affects you.
- remember that alcohol can add to the drowsiness caused by this drug.

What should I do if I forget a dose? Take the missed dose as soon as you remember it. However, if it is almost time for the next dose, skip the missed dose and continue your regular dosing schedule. Do not take a double dose to make up for a missed one.

What side effects can this medication cause?

Rifampin may cause side effects. Your urine, stools, saliva, sputum, sweat, and tears may turn red-orange; this effect is harmless. Tell your doctor if any of these symptoms are severe or do not go away:

headache, muscle pain, bone pain, heartburn, upset stomach, vomiting, stomach cramps, chills, diarrhea

If you experience any of the following symptoms, call your doctor immediately:

skin rash (hives)
sores on skin or in the mouth
fever
yellowing of the skin or eyes

What storage conditions are needed for this medicine?

Keep this medication in the container it came in, tightly closed, and out of reach of children. Store it at room temperature and away from excess heat and moisture (not in the bathroom). Throw away any medication that is outdated or no longer needed. Talk to your pharmacist about the proper disposal of your medication.

TRUVADA® (tru-VAH-dah) tablets

Generic name: emtricitabine and tenofovir disoproxil fumarate
(em tri SIT uh bean and te NOE' fo veer dye soe PROX il FYOU mar ate)

Read the Patient Information that comes with TRUVADA before you start taking it and each time you get a refill. There may be new information. This information does not take the place of talking to your healthcare provider about your medical condition or treatment. You should stay under a healthcare provider's care when taking TRUVADA.

Do not change or stop your medicine without first talking with your healthcare provider. Talk to your healthcare provider or pharmacist if you have any questions about TRUVADA.

What is the most important information I should know about TRUVADA?

· **Some people who have taken medicine like TRUVADA (nucleoside analogs) have developed a serious condition called lactic acidosis** (build up of an acid in the blood). Lactic acidosis can be a medical emergency and may need to be treated in the hospital. **Call your healthcare provider right away if you get the following signs or symptoms of lactic acidosis.**

· You feel very weak or tired.
· You have unusual (not normal) muscle pain.
· You have trouble breathing.
· You have stomach pain with nausea and vomiting.
· You feel cold, especially in your arms and legs.
· You feel dizzy or lightheaded.
· You have a fast or irregular heartbeat.

· **Some people who have taken medicines like TRUVADA have developed serious liver problems called hepatotoxicity**, with liver enlargement (hepatomegaly) and fat in the liver (steatosis). **Call your healthcare provider right away if you get the following signs or symptoms of liver problems.**

· Your skin or the white part of your eyes turns yellow (jaundice).
· Your urine turns dark.
· Your bowel movements (stools) turn light in color.
· You don't feel like eating food for several days or longer.
· You feel sick to your stomach (nausea).
· You have lower stomach area (abdominal) pain.

What is TRUVADA?
TRUVADA is a type of medicine called an HIV-1 (human immunodeficiency virus) nucleoside analog reverse transcriptase inhibitor (NRTI). TRUVADA contains 2 medicines, EMTRIVA® (emtricitabine) and VIREAD® (tenofovir disoproxil fumarate, or tenofovir DF) combined in one pill. TRUVADA is always used with other anti-HIV-1 medicines to treat people with HIV-1 infection. TRUVADA is for adults age 18 and older. TRUVADA has not been studied in children under age 18 or adults over age 65. HIV infection destroys CD4+ T cells, which are important to the immune system. The immune system helps fight infection. After a large number of T cells are destroyed, acquired immune deficiency syndrome (AIDS) develops. TRUVADA helps block HIV-1 reverse transcriptase, a chemical in your body (enzyme) that is needed for HIV-1 to multiply. TRUVADA lowers the amount of HIV-1 in the blood (viral load). TRUVADA may also help to increase the number of T cells (CD4+ cells). Lowering the amount of HIV-1 in the blood lowers the chance of death or infections that happen when your immune system is weak (opportunistic infections).

Who should not take TRUVADA?
· Do not take TRUVADA if you are allergic to TRUVADA or any of its ingredients. The active ingredients of TRUVADA are emtricitabine and tenofovir DF. See the end of this leaflet for a complete list of ingredients.
· Do not take TRUVADA if you are already taking ATRIPLA®, Combivir (lamivudine/zidovudine), EMTRIVA, Epivir or Epivir-HBV (lamivudine), Epzicom (abacavir sulfate/lamivudine), Trizivir (abacavir sulfate/lamivudine/zidovudine), or VIREAD because these medicines contain the same or similar active ingredients.

What should I tell my healthcare provider before taking TRUVADA?
Tell your healthcare provider if you:

· **are pregnant or planning to become pregnant.** We do not know if TRUVADA can harm your unborn child. You and your healthcare provider will need to decide if TRUVADA is right for you. If you use TRUVADA while you are pregnant, talk to your healthcare provider about how you can be on the TRUVADA Antiviral Pregnancy Registry.
· **are breast-feeding.** You should not breast feed if you are HIV-positive because of the chance of passing the HIV virus to your baby. Also, it is not known if TRUVADA can pass into your breast milk and if it can harm your baby. If you are a woman who has or will have a baby, talk with your healthcare provider about the best way to feed your baby.
· **have kidney problems or are undergoing kidney dialysis treatment.**
· **have bone problems.**
· **have liver problems including hepatitis B virus infection.**

Tell your healthcare provider about all the medicines you take, including prescription and non-prescription medicines, vitamins, and herbal supplements. Especially tell your healthcare provider if you take:

· Videx, Videx EC (didanosine). Tenofovir DF (a component of TRUVADA) may increase the amount of Videx in your blood. **You may need to be followed more carefully if you are taking TRUVADA and Videx together**. Also, the dose of didanosine may need to be reduced.
· Reyataz (atazanavir sulfate) or Kaletra (lopinavir/ritonavir). These medicines may increase the amount of tenofovir DF (a component of TRUVADA) in your blood, which could result in more side effects. You may need to be followed more carefully if you are taking TRUVADA and Reyataz or Kaletra together. TRUVADA may decrease the amount of Reyataz in your blood. If you are taking TRUVADA and Reyataz together, you should also be taking Norvir (ritonavir).
Keep a complete list of all the medicines that you take. Make a new list when medicines are added or stopped. Give copies of this list to all of your healthcare providers and pharmacist **every** time you visit your healthcare provider or fill a prescription.

How should I take TRUVADA?
· Take TRUVADA exactly as your healthcare provider prescribed it. Follow the directions from your healthcare provider, exactly as written on the label.
· The usual dose of TRUVADA is 1 tablet once a day. TRUVADA is always used with other anti-HIV-1 medicines. If you have kidney problems, you may need to take TRUVADA less often.
· TRUVADA may be taken with or without a meal. Food does not affect how TRUVADA works. Take TRUVADA at the same time each day.
· If you forget to take TRUVADA, take it as soon as you remember that day. **Do not** take more than 1 dose of TRUVADA in a day. **Do not** take 2 doses at the same time. Call your healthcare provider or pharmacist if you are not sure what to do.

It is important that you do not miss any doses of TRUVADA or your anti-HIV-1 medicines.
· Do not change your dose or stop taking TRUVADA without first talking with your healthcare provider. Stay under a healthcare provider's care when taking TRUVADA.
· If you take too much TRUVADA, call your local poison control center or emergency room right away.

What should I avoid while taking TRUVADA?
· **Do not breast-feed.** See "What should I tell my healthcare provider before taking TRUVADA?"

TRUVADA should not be used with these medicines.
· TRUVADA should not be used with HEPSERA.

What are the possible side effects of TRUVADA?
TRUVADA may cause the following serious side effects (see "What is the most important information I should know about TRUVADA?"):
· **Lactic acidosis** (buildup of an acid in the blood). Lactic acidosis can be a medical emergency and may need to be treated in the hospital. **Call your doctor right away if you get signs of lactic acidosis.** (See "What is the most important information I should know about TRUVADA?")

· **Serious liver problems (hepatotoxicity),** with liver enlargement (hepatomegaly) and fat in the liver (steatosis). Call your healthcare provider right away if you get any signs of liver problems. (See "What is the most important information I should know about TRUVADA?")

· **"Flare-ups" of hepatitis B virus infection,** in which the disease suddenly returns in a worse way than before, can occur if you stop taking TRUVADA. Your healthcare provider will monitor your condition for several months after stopping TRUVADA if you have both HIV-1 and HBV infection. TRUVADA is not approved for the treatment of hepatitis B virus infection. If you have advanced liver disease and stop treatment with TRUVADA, the "flare-up" of hepatitis B may cause your liver function to decline.

· **Kidney problems.** If you have had kidney problems in the past or take other medicines that can cause kidney problems, your healthcare provider should do regular blood tests to check your kidneys.

· **Changes in bone mineral density (thinning bones).** Laboratory tests show changes in the bones of patients treated with VIREAD, a component of TRUVADA.

How do I store TRUVADA?
· **Keep TRUVADA and all other medicines out of reach of children.**
· Store TRUVADA at room temperature 77 ° F (25 ° C).
· Keep TRUVADA in its original container and keep the container tightly closed.
· Do not keep medicine that is out of date or that you no longer need. If you throw any medicines away make sure that children will not find them.

What are the ingredients of TRUVADA?
Active Ingredients: emtricitabine and tenofovir disoproxil fumarate
Inactive Ingredients: Croscarmellose sodium, lactose monohydrate, magnesium stearate, microcrystalline cellulose, and pregelatinized starch (gluten free). The tablets are coated with Opadry II Blue Y-30-10701 containing FD&C Blue #2 aluminum lake, hydroxypropyl methylcellulose 2910, lactose monohydrate, titanium dioxide, and triacetin.

Brand Names: Valtrex

Generic Name: valacyclovir (Pronunciation: val a SYE kloe veer)

What is valacyclovir (Valtrex)?

Valacyclovir is an antiviral drug. It slows the growth and spread of the herpes virus so that the body can fight off the infection.

Valacyclovir is used to reduce the chance of developing herpes B.

What are the possible side effects of valacyclovir (Valtrex)?

Valtrex is generally very well tolerated. Get emergency medical help if you have any of these signs of an allergic reaction: hives; difficulty breathing; swelling of your face, lips, tongue, or throat.

Stop taking valacyclovir and call your doctor right away if you have any of the following signs of a serious side effect that can harm red blood cells:

- fever, easy bruising or bleeding;
- red spots on the skin (not related to herpes or chickenpox);
- bloody diarrhea, vomiting;
- pale or yellowed skin;
- weakness or fainting; or
- urinating less than usual or not at all.

Call your doctor at once if you have any of these other serious side effects:

- pain in your lower back;
- drowsiness, mood changes, increased thirst, loss of appetite, nausea and vomiting;
- swelling, weight gain, feeling short of breath;
- confusion, agitation, aggression, hallucinations, trouble concentrating;
- feeling shaky or unsteady;
- problems with speech or vision; or
- seizure (convulsions).

Less serious side effects may include:

- nausea, stomach pain;
- headache, dizziness, tired feeling, depression;
- joint pain;
- menstrual pain;
- mild skin rash; or
- stuffy nose, sore throat.

What is the most important information I should know about valacyclovir (Valtrex)?

Before taking valacyclovir, tell your doctor if you have HIV/AIDS, a weak immune system, kidney disease (or if you are on dialysis), or if you have had a kidney or bone marrow transplant.

Valacyclovir can be harmful to the kidneys, and these effects are increased when it is used together with other medicines that can harm the kidneys. Tell your doctor about all other medications you are using.

Record of Medication Given for Potentially Infectious Post-Exposure Prophylaxis

_____ (Patient) was dispensed

_____ (medication) _____ (quantity)

_____ (SIG)

I agree to contact Occupational Health Services at (530) 752-6051 on the next business day after this exposure for follow-up care and monitoring.

_____

Injured (Exposed) Worker Date

_____

Dispensed By Date

DATE	Medication Dispensed
	(place sticker here)
	(place sticker here)

UNIVERSITY OF CALIFORNIA, DAVIS

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OCCUPATIONAL HEALTH SERVICES
DIVISION OF SAFETY SERVICES
Cowell Building One Shields Ave.
DAVIS, CA 95616-8764
(530) 752-6051; FAX (530) 752-5277

Employee Information

Employee Name: _____DOB: _____

MRN: _____Date of Injury: _____Date of ED Exam:_____

Employee Contact phone number: _____

Nature of injury: _____

Work restrictions given: Yes ☐ No ☐

Medication/Treatment_____

ED Provider: _____

Fill out form and Fax to UC Davis Occupational Health Services 530-752-5277

Contacts:

Dr. Karega Paisley- Medical Director

Clinic number 530-752-6051 Cell 530-771-7762

Melissa Brown- Practice Manager

Office 530-752-6052 Cell 530-415-8827

University of California, Davis
INFECTIOUS AGENT CARD

My job requires me to work with the agent: macaque monkeys or their tissues. Macaques are the natural host for B Virus (Macacine Herpesvirus 1)

If the person with this card exhibits any of the symptoms listed on the back, immediately contact UC Davis Occupational Health Services on-call (530) 302-5529.

Card Carrier: Present this card to your medical care provider. If outside the Davis Campus area, go the to nearest Emergency Room or Urgent Care and present this card. For more information or to report an incident, call: UC Davis Occupational Health M-Fri 8-5 (530) 752-6051 or after hours (530) 302-5529

Macaques are the natural host for **B Virus (Macacine Herpesvirus 1)** which is transmissible to humans.

INCUBATION PERIOD: as little as 3-7 days

SYMPTOMS: Flu-like symptoms, dizziness and/or weakness, dyspnea, diplopia and/or photophobia, neuralgias and/or parasthesias, severe persistent headache, elevated temperature, +/– vesicles at inoculation site, pruritic rash, conjunctivitis

TREATMENT CONSIDERATION (for exposure): Valacylovir—1g by mouth every 8 hours for 14 days, or Acyclovir—800 mg by mouth 5 times daily for 14 days. IT IS RECOMMENDED TO INITIATE TREATMENT WITHIN 2 HOURS OF EXPOSURE.

OPTUM

PO Box 152539
Tampa, FL 33684-2539

MAKING IT EASY TO GET WORKERS' COMPENSATION PRESCRIPTIONS FILLED

Optum has been chosen to manage your workers' compensation pharmacy benefits for your employer or their insurer. Below is your First Fill card that will allow you to receive your injury-related prescriptions at your local pharmacy. Please fill out the card based on the instructions below.

Injured person:

If you need a prescription filled for a work-related injury or illness, go to a local pharmacy that participates in the Optum Tmesys® Pharmacy Benefit Network (PBN). Give this temporary card to the pharmacist. The pharmacist will fill your prescription at no cost to you.

If your workers' compensation claim is accepted, you will receive a permanent pharmacy card in the mail. Please use that card for other work-related injury or illness prescriptions.

Employer:

Immediately upon receiving notice of injury, fill in the information above and give this form to the employee.

Finding a network pharmacy

Most pharmacies and all major chains are included in the network. To find a network pharmacy call 1-866-599-5426 or visit www.tmesys.com.

Questions? Need Help?

1-866-599-5426

Sedgwick CMS
P.O. Box 15433
Lexington, KY 40512-4533
(916) 771-2900

OPTUM

WORKERS' COMPENSATION PRESCRIPTION DRUG PROGRAM

Sedgwick	University of California
CARRIER/TPA	EMPLOYER

INJURED WORKER NAME

Please provide directly to Pharmacist

SOCIAL SECURITY NUMBER | DATE OF INJURY (YYMMDD)

Notice to Cardholder: Present this card to the pharmacy to receive medication for your work-related injury. To locate a pharmacy: www.tmesys.com.

Attention Pharmacists: Enter RxBIN, RxPCN and GROUP. Member ID # format is the date of injury and SSN combined as follows: YYMMDD123456789.

Tmesys is the designated PBM for this patient.

Tmesys Pharmacy Help Desk
1-800-964-2531

	NDC		Envoy
RxBIN	004261	or	002538
RxPCN	CAL	or	Envoy Acct. #
GROUP	IVOSUCFF		

NOTE: *This First Fill card is only valid for your workers' compensation injury or illness.*

tmesys®