This education program includes information about:

- The TIRF REMS requirements
- Serious risks of:
  - life-threatening and/or fatal respiratory depression
  - increased risk of overdose, especially in children, due to accidental ingestion or exposure
- Counseling your patient
The purpose of this educational material is to inform prescribers about the Risk Evaluation and Mitigation Strategy (REMS) for transmucosal immediate-release fentanyl (TIRF) medicines. This education presents important safety issues and messages about the TIRF REMS needed to manage and counsel patients about the safe use of TIRF products.

What is the TIRF REMS (Risk Evaluation and Mitigation Strategy)?

The TIRF REMS is a safety program to manage the risk of overdose and accidental exposure by ensuring that patients prescribed a TIRF medicine are opioid tolerant and ensuring that prescribers, pharmacists, and patients are educated about proper storage and disposal of TIRF medicines. The TIRF REMS registry helps to assess safe use and trends in accidental exposure, misuse, abuse, addiction, and overdose by enrolling all patients who receive a TIRF medicine for outpatient use.

The TIRF REMS is required by the U. S. Food and Drug Administration (FDA) to help ensure that the benefits of treatment with transmucosal fentanyl-containing products outweigh the known risks of these products.

Products Covered Under This Program:

- Actiq® (fentanyl citrate) oral transmucosal lozenge
- Fentora® (fentanyl buccal tablet)
- Lazanda® (fentanyl) nasal spray
- Onsolis® (fentanyl buccal soluble film)
- Subsys® (fentanyl sublingual spray)
- Approved generic equivalents of these products

How Does the TIRF REMS Work?

The TIRF REMS requires prescribers, pharmacies, patients, and wholesaler-distributors to enroll in the program to utilize TIRF medications. Prescribers must verify and document that patients are opioid-tolerant before each prescription.

Steps for Prescriber Enrollment in the TIRF REMS

1. Complete the Training Program:
   - review the Prescriber Education
2. Successfully complete the Knowledge Assessment; and
3. Complete and submit a signed Prescriber Enrollment Form
The enrollment process may be completed online at www.TIRFREMSaccess.com
Or
Materials and forms can be downloaded from the website on the Prescriber tab, then completed and faxed to the program at 1-866-822-1487.

Prescribers must re-enroll in the TIRF REMS every two years. You will receive a reminder to renew your enrollment 30 days before your current enrollment expires.

Prescribing TIRF Medicines for Inpatient Use
Prescribers who prescribe TIRF medications for inpatient use only (e.g., hospitals, in-hospital hospices, and long-term care facilities) **do not need to enroll** in the TIRF REMS.

Patient enrollment in the TIRF REMS is not required for inpatient administration of TIRF medicines.

Prescribing TIRF Medicines for Outpatient Use
**What actions must I take as an outpatient prescriber to comply with the TIRF REMS?**
1. Enroll each patient
2. Document each patient’s opioid tolerance
3. Counsel your patients on the risks
4. Report adverse events of concern

Prescribing Naloxone
Consider prescribing naloxone for the emergency treatment of opioid overdose.

If concomitant use with benzodiazepines, other CNS depressants, or muscle relaxants is warranted, consider prescribing naloxone for the emergency treatment of opioid overdose.

Educate patients and caregivers on how to recognize respiratory depression and emphasize the importance of calling 911 or getting emergency medical help right away in the event of a known or suspected overdose. (See the patient counseling section below.)

Discuss the availability of naloxone for the emergency treatment of opioid overdose with the patient and caregiver both when initiating and renewing treatment with TIRF products.

Inform patients about the various ways to obtain naloxone.
1 - Enroll each patient

Enroll each patient into the TIRF REMS prior to their first prescription for a TIRF medicine. Inform the patient that they will be included in a registry to monitor for serious side effects, including fatal and non-fatal overdose.

- Use the Patient Enrollment Form

2 – Document each patient’s opioid tolerance

Document patient’s opioid tolerance before every prescription.

- Use the Patient Enrollment Form to document the patient’s opioid tolerance for their first prescription.

- Use the Patient Status and Opioid Tolerance Form for documenting opioid tolerance prior to each prescription thereafter.

- Documentation of the patient’s opioid tolerance must be on file with the TIRF REMS prior to each prescription being authorized for dispensing at the pharmacy. In addition, the program requires that the TIRF medicine prescriptions be written by the same prescriber listed on the Patient Status and Opioid Tolerance Form.

- The Patient Status and Tolerance Opioid Form can be submitted online from the Prescriber Dashboard on the TIRF REMS website, or by downloading and faxing to the TIRF REMS.

3 – Counsel your patient on the risks

Counsel each patient

- Before initiating treatment with a TIRF medicine, review the product-specific Medication Guide with patients and/or caregivers. Counsel them on the TIRF medicine’s risks and conditions of safe use. Use the Patient Counseling Guide to assist in the discussion and provide the materials to the patient.

Tell the patient:

- You must be opioid tolerant to be able to take a TIRF medicine for your breakthrough cancer pain. Opioid tolerant means that you have been using around-the-clock daily opioid pain medicine for your persistent cancer pain for at least 1 week immediately preceding the start of the TIRF medicine.

- If you stop taking your around-the-clock opioid pain medicine for your persistent cancer pain, you must stop taking your TIRF medicine for the breakthrough cancer pain because you may no longer be opioid tolerant.
Note: Patients have had difficulty understanding this concept. Emphasize this requirement to your patients and explain that the risk of life-threatening and/or fatal breathing problems with their TIRF medicine increases if they are not taking around-the-clock opioid pain medicines.

- Inform patients of the risk of life-threatening and/or fatal respiratory depression, including information that the risk is greatest when starting the TIRF medicine, when the dosage is increased, or when changing TIRF medicines, and that it can occur even at recommended dosages.

- Tell patients exactly how to take the TIRF medicine. Instruct them to take the TIRF medicine strictly as prescribed, with special regard to dosage, dose titration, and administration.

Proper storage and disposal

- Accidental ingestion or exposure, especially in children, may result in life-threatening breathing problems or death.

- Explain that the TIRF medicine must be stored in a secure place safely out of sight and out of reach of all others, especially children. Encourage the use of a lockbox or locked medication bag.

Accidental use by a child, or anyone for whom a TIRF medicine was not prescribed, is a medical emergency and can cause death. Use the child safety kit if one is provided with your TIRF medicine.

TIRF medicines contain fentanyl, which can be a target for people who abuse prescription medications or street drugs. Protect your TIRF medicine from theft.

Properly dispose of partially used or unneeded TIRF medicine remaining from a prescription. Refer to each product’s Medication Guide for instructions for disposal.

Naloxone

- Naloxone rapidly reverses the effects of opioid overdose and is the standard treatment for overdose.

- An opioid overdose usually involves unconsciousness and shallow breathing. Other signs and symptoms of an overdose include:
  
  o Unresponsiveness
  
  o Limpness
  
  o Blue lips, gums or fingertips
  
  o Slow or irregular heartbeat or pulse
  
  o Small pupils
• Advise your patient to be aware of these signs and symptoms in themselves or if someone around them may be overdosing.

• If there is a suspected overdose, give naloxone immediately. Call 911 or get emergency help right away after administering the first dose of naloxone. Wait 2-3 minutes after the first dose is given to see if the overdose patient wakes up. If they do not wake up, give another dose and continue to give another dose every 2-3 minutes until the person wakes up. Stay with the overdose patient until the ambulance arrives. Give another dose if the overdose patient becomes sleepy again.

**Misuse, abuse, addiction and overdose**

• Prescribe a limited amount of medication to the patient that will last until the next visit.

• Continually monitor patients for appropriateness of dosing.

• Continually assess whether benefits of treatment outweigh the risks.

• Warn patients that it is dangerous to self-administer benzodiazepines or other CNS depressants including alcohol while taking TIRF medicines. Potentially fatal additive effects may occur if the TIRF medicine is used with benzodiazepines or other CNS depressants, including alcohol. Caution patients who are prescribed benzodiazepines or other CNS depressants to use them only as directed by their prescriber.

• The use of a TIRF medicine, even when taken as recommended, can result in misuse, abuse, addiction, overdose and death.

• Opioids could cause a rare but potentially life-threatening condition resulting from concomitant administration of serotonergic drugs – serotonin syndrome. Seek medical attention right away if you develop the following symptoms of serotonin syndrome: mental status changes such as confusion, agitation, restlessness, and anxiety; high fever, seizures, rapid breathing, profuse sweating, and irregular heartbeat.

• Avoid concomitant use of a TIRF medicine and a monoamine oxidase inhibitor (MAOI).

**Frequency of counseling**

Counseling is required:

➢ before treatment initiation,
➢ after two years of continuous treatment,
➢ before treatment re-initiation, and
➢ upon any lapse in treatment of six months or longer
Effective Patient Management and Follow-up

At follow-up visits:

- Assess appropriateness of dose and make any necessary dose adjustments to the TIRF medicine for the breakthrough cancer pain or the around-the-clock opioid medicine for the persistent cancer pain.

- Assess for side effects or adverse effects.

- Assess for signs of misuse, abuse, or addiction.
  - Assessment and reinforcement of patient’s compliance with his/her treatment plan.
  - Assessment of appropriateness of TIRF medicine dosage prescribed depending on tolerability and therapeutic response.
  - Assessment of concomitant medications.
Check Your Knowledge - Scenario 1: Patient Counseling

Before initiating treatment with a TIRF medicine, prescribers must review the Medication Guide with the patient. Which of the following counseling statements are FALSE?

Select any statements which are false.

A. TIRF medicines contain fentanyl in an amount that could be fatal to children of all ages, in individuals for whom they were not prescribed, and in those who are not opioid tolerant.

B. Inform patients that TIRF medicines must not be used to treat acute or postoperative pain, including headache/migraine, dental pain or acute pain in the emergency department.

C. Instruct patients that, if they stop taking their around-the-clock opioid medicine, they can continue to take their TIRF medicine.

D. Instruct patients to never share their TIRF medicine with anyone else, even if that person has the same symptoms.

E. Once a patient becomes familiar with the use of their TIRF medicine, if their BTCP is not controlled they can repeat their dose every 20 minutes until their pain is relieved.

See answer on page 17

4 – Report adverse events

Report adverse events, including misuse, abuse, addiction, overdose, and accidental exposure to TIRF medicines.

- Go to www.TIRFREMSaccess.com to complete the Patient Status and Opioid Tolerance Form or the Adverse Events of Special Interest Reporting Form online. These forms can also be obtained from the website, completed and faxed to 1-855-474-3062; or call the TIRF REMS at 1-866-822-1483.

Report patient’s discontinuation of TIRF medicines

- Report discontinuation of a patient’s use of TIRF medicines to the TIRF REMS. Go to www.TIRFREMSaccess.com to complete the Patient Discontinuation Form online. The form can also be obtained from the website, completed and faxed to 1-855-474-3062; or you can report by calling 1-866-822-1483.
KEY SAFETY INFORMATION

Risk of Life-threatening Respiratory Depression

Serious, life threatening, or fatal respiratory depression has been reported with the use of opioids even when used as recommended. Respiratory depression, if not immediately recognized and treated, may lead to respiratory arrest and death.

Indication:

TIRF medicines are indicated only for the management of breakthrough cancer pain (BTCP) in cancer patients 18 years of age or older who are already receiving and who are tolerant to, around-the-clock opioid therapy for underlying persistent cancer pain.

- The only exception is for ACTIQ, and its generic equivalents, which are approved for cancer patients 16 years of age or older.

Patients Must be Opioid Tolerant to be Prescribed a TIRF Medicine

Definition of Opioid Tolerance:

Patients are considered opioid tolerant if they are currently taking (exclusive of a TIRF medicine) one or more of the following opioid regimens daily and have been on the regimen(s) for one week or longer:

- ≥ 60 mg oral morphine/day
- ≥ 25 mcg transdermal fentanyl/hour
- ≥ 30 mg oral oxycodone/day
- ≥ 8 mg oral hydromorphone/day
- ≥ 25 mg oral oxymorphone/day
- ≥ 60 mg oral hydrocodone/day
- an equianalgesic dose of another opioid

Patients must remain opioid tolerant to continue using a TIRF medicine.

TIRF medicines should only be prescribed by healthcare professionals who are knowledgeable of and skilled in the use of Schedule II opioids for the treatment of cancer pain.
Contraindications

TIRF medicines are contraindicated in:

- Patients who are not opioid tolerant. Life-threatening respiratory depression could occur at any dose in patients who are not opioid tolerant, and deaths have occurred.

- The management of acute or postoperative pain, including:
  o headache/migraine;
  o dental pain; or
  o acute pain in the emergency department

- Patients with acute or severe bronchial asthma in an unmonitored setting or in the absence of resuscitative equipment

- Patients with known or suspected gastrointestinal obstruction, including paralytic ileus

- Patients with known hypersensitivity to fentanyl or components of the TIRF medicine

Please see the Prescribing Information for each individual TIRF medicine for a complete list of contraindications.

Check Your Knowledge - Scenario 2: Patient Selection/Opioid Tolerance

The patients described are experiencing breakthrough pain. A TIRF medicine is NOT appropriate for some of them. Which patients should not receive a TIRF medicine?

Select any that apply:

A. Adult male with multiple myeloma who has bone pain currently managed with 50 mg oral oxymorphone daily for the last 2 weeks.
B. 12-year-old sarcoma patient whose underlying persistent cancer pain managed with 25 mcg/hour transdermal fentanyl patches for the past 2 months.
C. Adult female with localized breast cancer; just completed a mastectomy and reconstructive surgery; persistent cancer pain managed with 30 mg oral morphine daily for the past 6 weeks.
D. Adult male patient with advanced prostate cancer who, over the last 2 weeks, has been prescribed 100 mg oral morphine daily for pain due to bone metastasis.
E. Adult female with advanced sarcoma who has been taking a daily dose of 12 mg oral hydromorphone for the last 3 weeks.

See answer on page 17
Accidental Ingestion or Exposure

- **TIRF medicines** contain fentanyl, which can put patients at risk for overdose and death, especially in the following circumstances:
  - Patients who are not opioid tolerant
  - Children who are accidentally exposed
  - Concomitant use with CYP3A4 inhibitors (or discontinuation of CYP3A4 inducers)
  - Concomitant use with benzodiazepines or other CNS depressants, including alcohol

- Inform patients that TIRF medicines have a rapid onset of action.

- **Instruct patients to store their TIRF medicines in a safe and secure place, out of the sight and out of reach of all others, especially children.**

- Accidental or deliberate ingestion of a TIRF medicine by a child may cause severe, possibly even fatal, respiratory depression. Advise patients to seek immediate medical attention if a child is exposed to a TIRF medicine. Immediately give the child naloxone if naloxone is available.

- Prescribers must specifically question patients or their caregivers about the presence of children in the home (on a full-time or visiting basis) and counsel them regarding the dangers to children from accidental exposure.

- Talk with your patients about safe and appropriate storage and disposal of TIRF medicines.

---

**Check Your Knowledge - Scenario 3: Accidental Ingestion or Exposure**

There is a risk of fatal overdose with inappropriate use of TIRF medicines. Which one of the following answers is most accurate?

**Select one option.**

A. TIRF medicines can be fatal if taken by children.

B. TIRF medicines can be fatal if taken by anyone for whom it is not prescribed.

C. TIRF medicines can be fatal if taken by anyone who is not opioid tolerant.

D. All of the above.

See answer on page 17
Dosage and Administration

- The risk of life-threatening or fatal respiratory depression is greatest during the initiation of therapy or following a dosage increase.

- A TIRF medicine MUST be initiated at the lowest dose available for that specific product, even if the patient is currently or has taken another TIRF medicine in the past. Titration, if needed, starts at the lowest dose available for that specific product. Carefully review the initial dosing instructions in each product’s specific Prescribing Information.

- Appropriate Conversion Rules:
  - TIRF medicines are not interchangeable, regardless of route of administration. Significant differences exist in the pharmacokinetic profiles of fentanyl products that result in clinically important differences in the extent of absorption of fentanyl that could result in a fatal overdose.
  - TIRF medicines are not equivalent on a microgram-per-microgram basis to any other fentanyl product, including another TIRF medicine. The only exception is for substitution of a generic equivalent for a branded TIRF medicine.
  - Because of these differences, conversion of a TIRF medicine to another TIRF medicine on a microgram-per-microgram basis may result in fatal overdose.
  - Therefore, converting from one TIRF medicine to a different TIRF medicine must not be done on a microgram-per-microgram basis. The new TIRF medicine must be titrated according to the labeled dosing instructions for each new TIRF medicine the patient begins.
    - The only exception is for substitutions between a branded TIRF medicine and its generic equivalents.
Check Your Knowledge - Scenario 4: Dosage and Administration

A patient is already taking a TIRF medicine but wants to change their medicine. His/her doctor decides to prescribe a different TIRF medicine (that is not a bioequivalent generic version of a branded product) in its place. How should the prescriber proceed?

Select any correct option:

A. The prescriber can safely convert to the equivalent dosage of the new TIRF medicine as it has the same effect as other TIRF medicines.
B. The prescriber must not convert from the first TIRF medicine dose to another TIRF medicine at the equivalent dose. The different TIRF medicines have different absorption and bioavailability profiles, and conversion to an equivalent dose of a second TIRF product could result in a fentanyl overdose.
C. Convert from the other TIRF medicine to the new TIRF medicine at half of the dose.
D. The prescriber should base the starting dose of the newly prescribed TIRF medicine on the dose of the opioid medicine used for their underlying persistent cancer pain.
E. The dose that the prescriber believes is appropriate based on their clinical experience.

See answer on page 17

• Drug Interactions

  o Fentanyl is metabolized mainly by the cytochrome P450 (CYP3A4) isoenzyme system; therefore, potential drug interactions may occur when TIRF medicines are administered concurrently with agents that affect CYP3A4 activity.

  • Concomitant use of TIRF medicines with CYP3A4 inhibitors (e.g., certain protease inhibitors, ketoconazole, fluconazole, diltiazem, erythromycin, verapamil) may increase plasma concentrations of fentanyl and prolong opioid adverse reactions, which may cause potentially fatal respiratory depression.

  • Patients receiving TIRF medicines who begin therapy with or increase the dose of CYP3A4 inhibitors must be carefully monitored for signs of opioid toxicity over an extended period. Dosage increases should be done conservatively.

  • Concomitant use of TIRF medicines with CYP3A4 inducers (e.g., rifampin, carbamazepine, phenytoin), can decrease the plasma concentration of fentanyl, resulting in decreased efficacy or onset of a withdrawal syndrome in patients who have developed physical dependence to fentanyl.
- If concomitant use with a CYP3A4 inducer is necessary, consider increasing the dose of the TIRF medicine until stable drug effects are achieved. Monitor for signs of opioid withdrawal. If a CYP3A4 inducer is discontinued, consider reducing the dose of the TIRF medicine and monitor for signs of respiratory depression.

Note: This list does not include a complete list of drug interactions with TIRF medications. Check each drug’s PI for a complete list.

### Maintenance/Dose Adjustments for all TIRF Medicines

- Once a dose that provides adequate analgesia and minimizes adverse reactions is found, that dose should be prescribed for each subsequent episode of breakthrough cancer pain (BTCP).

- Patients must wait at least 2 or 4 hours before treating another episode of breakthrough pain with their TIRF medicine. Please refer to the specific TIRF medicine’s Prescribing Information to determine the appropriate dosing interval.

- Limit the use of TIRF medicines to no more than 4 doses per day.

- If the prescribed dose no longer adequately manages the BTCP for several consecutive episodes, increase the dose as described in the titration section of the Prescribing Information.

- Consider re-evaluating the dose of the around-the-clock opioid medicine used for persistent cancer pain in patients experiencing more than 4 BTCP episodes per day.

---

### REPORTING ADVERSE EVENTS

**Serious adverse events and** adverse events of special interest, including misuse, abuse, addiction, overdose, death or accidental exposure associated with a TIRF medicine, can be reported online at [www.TIRFREMSaccess.com](http://www.TIRFREMSaccess.com) by use of the:

- Patient Status and Opioid Tolerance Form, or
- Events of Special Interest Reporting Form

Adverse events may also be reported by contacting the TIRF REMS at **1-866-822-1483**.
### Products Covered Under this Program:

<table>
<thead>
<tr>
<th>Product</th>
<th>Dosage and Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Initial dose</strong></td>
</tr>
<tr>
<td>Actiq® (fentanyl citrate) oral transmucosal lozenge</td>
<td>Always 200 mcg.</td>
</tr>
<tr>
<td>FENTORA® (fentanyl buccal tablet)</td>
<td>Always 100 mcg (unless the patient is being converted from ≥600 mcg ACTIQ - please see Prescribing Information)</td>
</tr>
<tr>
<td>Product</td>
<td>Initial dose</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>Lazanda® (fentanyl) nasal spray</td>
<td>Always 100 mcg</td>
</tr>
<tr>
<td>Subsys® (fentanyl sublingual spray)</td>
<td>Always 100 mcg (unless the patient is being converted from &gt;600 mcg ACTIQ – please see Prescribing Information.</td>
</tr>
</tbody>
</table>

Note: This table is also available to print for use as a quick reference guide. Please visit www.TIRFREMSaccess.com for further information and resources.

* This includes approved generic equivalents of these products.

For more information about TIRF medicines, see the Prescribing Information, including the BOXED WARNING, for each product.

Resources for More Information
If you have any questions and/or need additional information or copies of any TIRF REMS documents, please visit the program website at www.TIRFREMSaccess.com or call the TIRF REMS at 1-866-822-1483.
ANSWER KEY
Scenarios: Answers and Rationales

Scenario 1: Patient Counseling
Item A, B, and D Response. This statement is correct.

Item C Response: This statement is incorrect. Patients should be instructed that, if they stop taking their around-the-clock opioid medicine, they must discontinue taking their TIRF medicine.

Item E Response: This statement is incorrect. Individual TIRF medicines have different and product-specific number of times they may be repeated per BTCP occurrence. Patients should be counseled that: they must never use more doses of their TIRF medicine than directed per instance of BTCP occurrence due to the toxicity of fentanyl; and, when their breakthrough pain is not controlled by their TIRF medicine, they should call their prescriber for evaluation.

Scenario 2: Patient Selection/Opioid Tolerance
Item A, D, and E Response: This patient is appropriate for treatment with a TIRF medicine.

Item B Response: This patient is not appropriate for treatment with a TIRF medicine. TIRF medicines are indicated for use in treatment of BTCP in patients who are 18 years of age or older (or 16 years of age and older in the case of ACTIQ use.)

Item C Response: This patient is not appropriate for treatment with a TIRF medicine. This patient does not meet the definition of “opioid-tolerant” which in the case of oral morphine use as her opioid background regimen would require daily use for at least one previous week of 60 mg or more of morphine.

Scenario 3: Accidental Ingestion or Exposure
Item D: Correct, TIRF medicines can be fatal if taken by children, by anyone for whom it is not prescribed, or by anyone who is opioid non-tolerant.

Items A, B, C: This answer is correct however Answer D most accurate. TIRF medicines can be fatal if taken by children, by anyone for whom it is not prescribed, or by anyone who is opioid non-tolerant.

Scenario 4: Dosage and Administration
Item B and D Response: Correct. Conversions must not occur on a microgram-for-microgram basis due to the difference in the absorption and bioavailability profiles of the different TIRF products.

Item A or C or E Response: Incorrect. The prescriber must not convert from the first TIRF medicine dose to another TIRF medicine at the equivalent dose, a simple ½ reduction of the microgram dosage or estimates based on prior clinical experience. Because TIRF medicines have different absorption and bioavailability profiles, conversion to an alternate TIRF product must be done at the newly prescribed TIRF medicine’s lowest available dose. Conversions must be based on individual product provided product-specific guidance obtained from the Prescribing Information.