



Prescribing Guidelines for Pennsylvania

Safe Prescribing for Workers' Compensation



Acute and chronic pain are major health issues both nationally and here in Pennsylvania, resulting in significant health care expenditures and lost productivity. Both acute and chronic non-cancer pain is best treated using multi-modal pain treatment methods. It is important to properly treat acute pain, as proper treatment improves outcomes following injury or surgery, and may lower the risk for development of chronic pain.

Opioids have been over-used for the treatment of both acute and chronic pain. The increased use of opioids throughout the United States has contributed significantly to the current deadly epidemic. In 2016, there were 64,000 opioid overdose deaths nationally*, and 4,642 in Pennsylvania. This equates to approximately 13 individuals a day across the commonwealth and represents a 37 percent increase over 2015 deaths. While opioids remain an important



treatment option for both acute and chronic pain, opioids confer significant risk of harm, including misuse, abuse and addiction, as well as respiratory depression and death. Opioid-induced adverse effects may occur even in the absence of misuse. Risk of development of misuse and addiction appear to be related to opioid dose and duration of therapy.

In 2017, there were over 170,000 worker's compensation claims made in Pennsylvania. The Worker's Compensation Research Institute found that in Pennsylvania, the percentage of injured workers who become long-term users of opioids is among the highest in the nation+. In addition, workers who received longer-term prescribing of opioids for work-related lower back injuries had a substantially longer duration of temporary disability. The average lost time claim for injured workers taking opioids is 900% higher than those who did not. While it may be appropriate to treat pain with opioids, such as acute pain arising from a traumatic injury or acute postoperative pain, opioid administration should be done in conjunction with other treatment options, at the lowest dose, and for the shortest duration possible.

The following guidelines outline best practices when prescribing opioids for the treatment of both acute and chronic pain following work-related injuries. The decision to prescribe opioids for work-related injuries places providers in a unique situation where issues such as duty status and safe pain relief in an occupational setting become factors for consideration in developing a roadmap to the worker's recovery. The prescribing provider plays a key role in protecting injured workers from unsafe treatments.

By following these guidelines, providers play a critical role in advancing safe and effective treatment for injured workers in returning to work as soon and as safely as possible. These guidelines are targeted toward any provider who may encounter and treat a patient with a work-related injury. The objectives for these guidelines include:

- Promoting the delivery of safe, quality health care to injured workers;
- Ensuring patient pain relief and functional improvement;
- Being used in conjunction with other treatment guidelines, not in lieu of other recommended treatment;
- Preventing and reducing the number of complications caused by prescription medication, including addiction; and
- Recommending opioid prescribing practices that promote functional restoration.

These guidelines are intended to supplement and not replace clinical judgement, and do not apply to management of cancer related pain, sickle cell disease, hospice care, or terminal comfort measures associated with occupational illness or injury. It is recommended that providers review other evidence-based guidelines, including Pennsylvania's guidelines on various medical subspecialties and patient populations, pharmacy guidelines, and dental guidelines, which may provide insight into treatment options for these populations.

PRACTICE RECOMMENDATIONS

Treatment of Acute, Subacute, and Post-Operative Pain:

1. In most instances, acute workplace injuries are benign, self-limiting conditions and any associated pain is easily managed with non-opioid preparations such as acetaminophen or non-steroidal anti-inflammatory drugs (NSAIDs), assuming there are no precautions or contraindications. Consideration should be given to scheduled administration of acetaminophen up to 3,000 mg / day in combination with the use of an as-needed NSAID. While acetaminophen and an NSAID can be used in combination, there is increased risk of harm if more than one NSAID is used concurrently.
2. When symptoms require more than more than acetaminophen and/or NSAIDs, adjunctive use of muscle relaxants such as cyclobenzaprine, baclofen and tizanidine for



strains and sprains may augment analgesic therapy. When employees are currently working and need to avoid daytime sedation, a muscle relaxant may be prescribed to be taken at bedtime. A limited supply of muscle relaxants of one week should be prescribed to ensure return visitation to the provider to reassess and readjust therapy. There is no benefit to using muscle relaxants for more than two weeks. Providers should be aware that benzodiazepines are **contra-indicated** when opioids are prescribed, especially if benzo-diazepines are prescribed to facilitate sleep. Likewise, sedating skeletal muscle relaxants such as carisoprodol should be avoided.

3. Other non-opioid medication treatment options include gabapentin, pregabalin, and duloxetine. Non-opioid analgesic medications may provide pain relief even in the acute pain setting.
4. Physical and other supportive pain treatment modalities, such as short-term rest, ice, elevation, reassurance, music, physical therapy, exercise, chiropractic treatment, cognitive-behavioral therapy, and mindful meditation may provide significant symptom control.
5. Opioids may be necessary to treat moderate to severe acute pain. Opioids should be used in the lowest effective dose for the shortest duration possible, as both dose and duration of therapy are associated with increased risk of harm. The initial prescription of opioids should not exceed a 7-day supply. Patients should be screened to identify those patients at increased risk of harm, such as patients with substance use disorder, especially opioid use disorder, concurrent use of benzodiazepines, and patients at increased risk for respiratory compromise (such as patients with significant pulmonary disease, or those with or at increased risk for sleep disordered breathing). Opioids should be prescribed only after providers complete a query of the Prescription Drug Monitoring Program (PDMP) and complete a patient assessment (described in detail below).
6. Patients should be instructed on proper secure storage of prescribed opioids, as well as the importance of and process for proper disposal of unused opioids.
7. When a patient presents to the Emergency Department with a workplace illness or injury, opioids should be prescribed only if opioids are clearly indicated. If a prescription for opioids is provided in this setting, it should never be for a long acting formulation and should never exceed three days in duration. Patients should be referred to an occupational medicine or worker's compensation provider to be seen within 72 hours of discharge from the Emergency Department. Quick follow-up will ensure work status and goals are addressed as a part of the injury.

Treatment of Chronic Pain:

1. Opioids have a limited role in the treatment of chronic non-cancer pain and should be administered only in carefully selected patients within the construct of multi-modal pain therapy. Indeed, recent reports suggest that outcomes are worsened by the use of opioids to treat chronic pain associated with work-related injury. Non-pharmacological measures should be considered prior to the use of opioids. Non-pharmacologic approaches to consider include but are not limited to: neurostimulators (TENS units), physical therapy, massage, acupuncture, chiropractic manipulation, cognitive-behavioral therapy and mindfulness-based therapy, and therapeutic exercise. Additional non-opioid treatment options are outlined in Pennsylvania's Chronic Non-Cancer Pain Guidelines.
2. Non-opioid pain treatment options to consider before prescribing opioids include acetaminophen, NSAIDs, corticosteroids, serotonin and norepinephrine reuptake inhibitors, tricyclic antidepressants, anticonvulsants, and muscle relaxants such as cyclobenzaprine, baclofen and tizanidine.



Providers should be aware that benzodiazepines are **contraindicated** when opioids are prescribed, especially if benzodiazepines are prescribed to facilitate sleep.

3. Opioids prescribed for short-term use should be tapered and discontinued based on a well-documented treatment plan. Chronic opioid therapy should be intentional, based on a careful evaluation of the patient which leads to a determination that the potential benefit of such treatment outweighs the significant risk of harm, and only after careful discussion of these risks and potential benefits with the patient. Chronic opioid therapy should be provided by a clinician, who has the clinical expertise to provide chronic opioid therapy. Consideration should be given to referral to a specialist as indicated by the patient's clinical needs, who may assist the prescribing physician in proper administration of opioids.
4. Before initiating chronic opioid therapy, providers should conduct and document a comprehensive patient history that includes a detailed review of the injured worker's pain experience, a physical examination, a diagnosis, and a treatment plan.
 - a. A urine drug screen should be obtained and reviewed before initiating chronic opioid therapy.
 - b. Patient evaluation should include careful assessment for co-existing psychiatric and other disorders including depression, anxiety, and sleep disorders.
 - c. Patient evaluation should include careful assessment for past and current substance use disorder, as well as risk assessment for development of aberrant drug-related behavior. Providers should consider use of validated screening tools.
 - d. Special consideration should be given when treating a patient whose position is classified as safety-sensitive.
 - e. Pennsylvania state law requires providers to obtain and review a report from the Prescription Drug Monitoring Program (PDMP) before prescribing any controlled substance.
5. Patients should be counseled about realistic treatment expectations. In the setting of chronic pain, the treatment goal is most often reduction in pain intensity, as elimination of pain is extremely rare. Injured workers may set goals focusing on improvements in physical and mental functioning, that may be associated with limited changes in pain intensity. Opioids should be continued only if clinically-meaningful improvements are observed.
6. For both acute and chronic pain, when an opioid is prescribed, the provider should counsel the patient on the risk of cognitive impairment that can adversely impact the patient's ability to drive or safely perform activities. The risk of cognitive impairment increases when opioids are taken with other centrally acting sedatives, including alcohol and benzodiazepines
7. Chronic opioid therapy has limited evidence of safety and long-term efficacy. Clinicians should clearly document the prescribed daily opioid dose, and calculate and document the oral morphine equivalent daily dose (commonly referred to as MME or MEDD). Risk of serious adverse events, including death, increase with higher doses of MEDD. MEDD above 90 mg/day have not been demonstrated to confer improvements in pain control, while doses above 90 mg/day MEDD are associated with significantly increased risk of harm.
8. Extreme caution should be used when considering chronic opioid administration in patients with substance use disorder. Chronic opioids are generally not indicated for patients with opioid use disorder.



- a. Patients with symptoms of substance use disorder, including opioid use disorder, should have a facilitated referral for addiction specialty evaluation and treatment. These patients should not be discharged from the practice absent proper referral. A provider can refer the patient to their insurance carrier or local county drug and alcohol program if the patient is uninsured or underinsured. Contact information for making a referral to the local county drug and alcohol program can be found [here](#), or to the Department of Drug and Alcohol program's "Get Help Line" at 1-800-661-4357 (HELP) or WWW.DDAP.PA.GOV.
9. Attention should be given to the effect opioid therapy will have on a patient's work status, and progress toward their return to work. It is important for providers to be aware when prescribing opioids may result in the need for additional restrictions to a patient's work status.
 10. Risk of harm associated with chronic opioid therapy increases significantly with increased prescribed daily dose. There are no data to support improved efficacy with daily doses greater than 90 mg/ day MEDD, while use of higher doses clearly increases risk of harm.
 - a. Opioid dose increases to address reports of increased pain intensity rarely leads to improved pain control.
 - b. Increased opioid doses is associated with increased risk for aberrant drug-related behavior.
 - c. High doses of opioids have been associated with the syndrome of opioid-induced hyperalgesia. In this syndrome, patients may paradoxically experience more pain than if they were not taking opioids at all.
 - d. Patient requiring or requesting high MEDD opioids may benefit from specialist evaluation to guide clinical decision making.
 11. Opioids should not be administered concurrently with benzodiazepines except in rare cases where the risk of harm is outweighed by the benefits of administering both medications. Concurrent use is associated with a significant increased risk of serious adverse events, including death. When used in combination, justification for this use should be clearly documented.
 12. Naloxone should be prescribed to patients who are at increased risk for compromise of ventilation with chronic opioid therapy. This includes patients receiving daily opioid doses above 50 mg / day MEDD, patients also taking benzodiazepines (which is contraindicated) or other centrally-acting sedating medications, patients at risk for or who have been diagnosed with sleep disordered breathing, and those patients with moderate or severe concurrent respiratory disease. In addition, consideration should be given to prescribing naloxone to patients with coexisting psychiatric conditions as well as those patients with a history of any substance use disorder, including tobacco use disorder.
 13. Opioids should be continued only if clinically-meaningful improvements are observed, and the patient is not experiencing unacceptable adverse effects. In most patients, opioids should not be abruptly discontinued, but rather should be slowly tapered. Tapering plans should be individualized and should minimize symptoms of withdrawal. Providers should refer to the CDC's Pocket Guide for Tapering Opioids for Chronic Pain. Rapid discontinuation of opioids should be reserved only for those patients engaged in addiction, diversion, or when continuation of opioids poses risk of harm. Patients may need to be referred to pain or addiction specialty care to facilitate discontinuation of opioid therapy.



RESOURCES

American College of Occupational and Environmental Medicine. Guidelines for the Chronic Use of Opioids- 2011.

Centers for Disease Control and Prevention. Pocket Guide: Tapering Opioids for Chronic Pain.

Centers for Disease Control and Prevention. Guideline Resources: Videos. [Information on Prescriber and Patient Conversations](#)

*Centers for Disease Control and Prevention. Drug Overdose Deaths in the United States, 1999–2016. <https://www.cdc.gov/nchs/products/databriefs/db294.htm>

Manchikanti, L., Kaye, A.M., Knezevic, N.N., et al. Responsible, Safe, and Effective Prescription of Opioids for Chronic Non-Cancer Pain: American Society of Interventional Pain Physicians (ASIPP) Guidelines. *Pain Physician* 2017; 20: S3-S92

Pennsylvania Medical Society, Opioid Crisis CME: <https://www.pamedsoc.org/learn-and-lead/online-cme/medications-pain-management-opioids>

#Shah, A, Hayes, C.J., and Martin, B.C. Characteristics of Initial Prescription Episodes and Likelihood of Long-Term Opioid Use — United States, 2006–2015. *MMWR*, March 17, 2017, Vol. 66, No. 10.

*Workers Compensation Research Institute. 2018. Longer-Term Opioid Prescribing Increases Time Away from Work for Injured Workers: <https://www.wcrinet.org/news/longer-term-opioid-prescribing-increases-time-away-from-work-for-injured-wo>

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