# Prescription Opioid and Benzodiazepine Medications and Occupational Safety and Health

Information for Employers and Healthcare Providers

Prescription opioid medications intended for pain management and prescription benzodiazepines for conditions such as anxiety or insomnia, when used alone or together, often have side effects that can affect workers' health and safety. In addition, some occupational factors, such as work-related motor vehicle crashes, falls, other injuries and job stress, have the potential to increase the chances that a worker is given a prescription for an opioid or benzodiazepine [Kowalski-McGraw et al. 2017].

The Centers for Disease Control and Prevention (CDC) has developed resources for improving communication between clinicians and patients about the risks and benefits of opioid therapy for pain, improving the safety and effectiveness of pain treatment, and reducing the risks associated with long-term opioid therapy, including opioid use disorder (a problematic pattern of opioid use that causes significant impairment or distress), overdose, and death. In some cases, prescriptions could be an initial or single one. In other cases, an opioid and/or benzodiazepine prescription could be the starting point for increasing and/or long-term use.

This fact sheet summarizes findings from the scientific literature [Kowalski-McGraw et al. 2017] and provides information from relevant CDC and National Institute for Occupational Safety and Health (NIOSH) publications for employers and healthcare providers about the prescription use of opioids and benzodiazepines.

# What are some side effects of prescription opioid or benzodiazepine use?

- **Sedation**: feelings of sleepiness and dizziness can happen when starting or continuing to take these medications. Sedation may lead to diminished alertness, responsiveness, impaired decision-making, or injury.
- Movement and coordination: the use of prescription opioids and benzodiazepines is associated with both physical and cognitive impairment. Physical and cognitive impairment is a slowing-down of the coordination of thoughts and physical movements, which can be associated with an increased risk for errors and injuries.





- **Memory**: certain benzodiazepines may lead to short and long-term memory problems. Memory issues can also occur with long-term prescription opioid use.
- Strength and posture: prescription opioids and benzodiazepines may impair a person's ability to control their posture and may lead to falls. The prescription use of opioids and benzodiazepines among older adults is associated with an increased risk of falls and hip fractures from falls.

# What are some occupational factors associated with the use of prescription opioids or benzodiazepines?

- Ergonomic hazards (such as heavy manual labor) leading to injuries, or repetitive use of the hands leading to other chronic painful conditions, might be treated with both of these medications.
- Risky workplace conditions that lead to injury, such as slip, trip, or fall hazards, or heavy physical workloads can be associated with prescription opioid use.
- Factors such as job insecurity, high-demand/low-control jobs, and workplace bullying are associated with anxiety disorder and depression [Kowalski-McGraw et al. 2017], which may be treated with prescription benzodiazepine medication.

# How can the use of prescription opioids or benzodiazepines affect people at work?

- The use of prescription opioid and/or benzodiazepine drugs may negatively affect the performance of safety-sensitive tasks, such as driving or operating machinery.
- The use of opioids, even when taken as prescribed, is linked to risky driving behaviors and a higher risk of motor vehicle crashes.
- The use of prescription opioids or benzodiazepines may increase the risk of falls among workers, a common cause of workplace injuries.
- The use of prescription opioid or benzodiazepine drugs can decrease performance in tasks that require brain-eye-hand coordination. Work-related fatigue (for example, from shiftwork or long work hours) could worsen this performance loss.

## What might healthcare professionals keep in mind?

- Consult currently available resources regarding recommendations pertaining to prescribing opioid pain medication or benzodiazepines, including the following [CDC 2016a,b, 2019]:
  - o CDC Guideline for Prescribing Opioids for Chronic Pain
  - o CDC handout: Guideline for Prescribing Opioids for Chronic Pain: Promoting Patient Care and Safety

#### o CDC webpage: Improve Opioid Prescribing

- Nonpharmacologic therapy and non-opioid pharmacologic therapy are preferred for chronic pain outside of active cancer, palliative, and end-oflife care.
- If opioid pain therapy is necessary, the lowest possible effective dosage should be prescribed to reduce the risk of opioid use disorder and overdose. Prescribers should refer to CDC guidelines.
  - o Exercise caution when prescribing opioids and monitor all patients closely.
  - o Establish goals for pain and function.
  - o Discuss risks and benefits.
- Use immediate-release opioids when starting.
  - o Use the lowest effective dosage.
  - o Prescribe a limited quantity for a short duration when managing acute pain: Three days' supply or less will often be sufficient; more than 7 days' supply will rarely be needed.
- Evaluate benefits and harms frequently.
- Use strategies to mitigate risk, e.g., education.
- Review prescription drug monitoring program data.
- Avoid concurrent opioid or benzodiazepine prescribing whenever possible.
- Ensure that the patient is not receiving the same prescriptions from multiple providers.
- Adhere to HIPAA guidelines for employee privacy.
- Consult other prescribing recommendations [see Hegmann et al. 2014].
- Offer or arrange treatment for opioid use disorder.

### What might employers keep in mind?

- Continue efforts to optimize worker safety, health, and well-being, and consider opportunities to reduce risks for work-related motor vehicle crashes, falls, other injuries and job stress.
- Refer to the following NIOSH publications about the importance of preventing and reducing work-related hazards [NIOSH 1997, 1999, 2000, 2015]:
  - o Elements of Ergonomics Programs
  - o Stress at Work
  - Worker Deaths by Falls: A Summary of Surveillance Findings and Case Reports
  - o Preventing Work-Related Motor Vehicle Crashes

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#### Resources

More information about the use of opioids and other prescription drugs can be found at Kowalski-McGraw M, Green-McKenzie J, Pandalai S, Schulte P [2017]. Characterizing the interrelationships of prescription opioid and benzodiazepine medications with worker health and workplace hazards. J Occup Med 59(11):1114–1126. http://dx.doi.org/10.1097/JOM.000000000001154

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