



## POSITION STATEMENT

# Use of Over-the-Counter Medications in the Occupational Health Setting

### INTRODUCTION

Over-the-Counter (OTC) medications, also known as non-prescription medications, are deemed safe for use by the general public only in the presence of adequate packaging and appropriate instructions on the package label. They are used to treat complaints or illnesses for which users recognize their own symptoms and level of relief. They can be distributed in the manufacturer's original unopened container without medical or pharmaceutical intervention required. OTC medications generally pose minimum risk and have a higher safety level than prescription medications.

Several laws govern the use of medications by licensed health professionals, including:

- State nursing practice acts
- State pharmacy laws, and
- State medical practice acts.

When administering OTC medications in the occupational health setting, the Occupational Health Nurse (OHN) must be knowledgeable about:

- The current state laws and how they relate to their nursing practice and setting.

The administrative rules related to the components of nursing practice including implementing a pharmaceutical regimen.

- The organizational policies and procedures which should call for written, signed, and periodically updated standing orders.
- The pertinent position statements or practice alerts specific to the administration of OTC medications.

The OHN is held accountable for her or his actions and must be knowledgeable about the mechanisms of action and effects of any medication administered, anticipate

any unusual reactions, and be able to respond appropriately (Rogers, Randolph, & Mastroianni, 2018).

### RATIONALE

The provision of medications in the workplace is a recognized component of an occupational health service. The use of employer-provided medications allows prompt treatment of minor injury or illness, providing relief of symptoms and potentially preventing exacerbation of injury or illness. This may result in significant savings to the employee and the employer relative to healthcare expenditure and productivity costs.

The use of standardized procedures, practice guidelines, or standing orders are important to ensure safe, quality care delivery to workers. This is particularly important when OTC medications are made available in the workplace because they:

- Provide a legal safeguard for nursing practice by defining the minimum requirements for safe care.
- Reduce the risk of malfeasance when approved and signed by both the OHN and the physician.
- Represent a standard of care for measuring the quality of care provided.
- Provide quality assurance when the protocol is followed in a consistent manner, ensuring consistency of care across settings and providers.
- Specify who can do what through clear and explicit nursing actions that match the scope of practice (accountability).
- Ensure continuity of care, especially when contract nurses and part-time nurses are employed in worksites.
- Provide opportunity for professional development and continuing education as protocols, practice

guidelines, or standing orders are periodically evaluated for appropriateness and accuracy and updated to ensure safe, quality healthcare delivery.

Options exist for OTC medication use in the occupational health setting. Based on state laws and related administrative rules, staffing patterns, workplace policies, and workforce acceptance, OHNs can determine which option(s) best fit their situation. Often a combination of alternatives can be used to meet the health needs of workers. The following options are listed in order of no involvement of the nurse to the highest level of nurse involvement and responsibility:

- Eliminate the use of OTC medications. Some worksites make this decision to help reduce costs if workers use OTC medications for non-occupational problems.
- Consider offering a vending machine to provide all workers access to OTC medications. Workers decide what medication they want and purchase it, thus accepting responsibility for their action. Establish a contract with a vendor for the vending machine. Decide which unit dose medications should be included, the amount to be stocked, frequency of restocking with attention to expiration dates, etc.
- Develop an employee self-administered medication system. Such a system can be an appropriate way to provide OTC medication when the nurse is not available, free up nursing time, and promote self-care. The worker, not the OHN, selects the medication. However, the OHN determines what medications will be available in what quantity. The medications need to be unit dose with self-explanatory directions on the label. An informational sheet should be posted identifying what medications are available and for what purpose. The informational sheet should be signed by the physician and the OHN. The OHN should teach workers about safe self-medication management including reading labels before selecting OTC medications, medication use, ingredients, warnings, directions, cautions, side effects, and expiration date importance. The availability and usage of OTC medications in first aid kits is not recommended and should be addressed in the organization's policy.
- Develop nursing guidelines with standing orders or protocols to direct the use of OTC medications in the workplace. Determine if standing orders can be used in the state by reviewing the nurse practice act and related administrative rules, as well as any applicable practice alerts. A variety of formats - narrative, algorithm, or decision tree - can be used for the nursing guidelines or protocols with standing orders. Select a format and use it consistently. Components of guidelines or protocols should include health condition/problem, problem determination, clinical objectives, assessment criteria with nursing and

pharmaceutical interventions, medical referral criteria, and follow-up activities, including worker education. The nursing guidelines or protocols with standing orders should be written, dated, approved, and signed by a licensed physician, nursing staff, and other licensed healthcare practitioners as required by state law. They should be reviewed at least annually, revised accordingly, and then dated and signed after each review.

When determining which option is best, the OHN must consider the applicable state laws, particularly in states that have implemented the Nurse Licensure Compact. Through the mutual recognition of state licenses, the nurse is held accountable for meeting all state practice laws in the state in which the individual is located at the time care is rendered (National Council of State Boards of Nursing, 2018). For example, some states may require standing orders while other states allow Registered Nurses to recommend OTC medication(s) for identified health-related needs as part of nursing practice. OHNs need to know the education, training, and licensure requirements of all staff working in the health facility and ensure that all staff function within their educational preparation and scope of practice. In addition to knowledge of current laws affecting administration of OTC medications, OHNs must also keep abreast of any applicable proposed legislative changes.

The Food and Drug Administration (FDA) recommends consumers work with health care professionals to choose and use OTC medications wisely. They generally have an acceptable safety margin and exhibit the following characteristics (USFDA, 2023; Litchfield, 2010):

- Benefits outweigh risks.
- The potential for abuse or misuse is low.
- The consumer can purchase OTC medications for self-diagnosed conditions without a prescription.
- Generally, consumers can use OTC medications safely and effectively when following directions on the label and as directed by health care professionals.

When accepting the responsibility for the use of OTC medication in the occupational health setting, it is imperative to consider the effects of medication such as desired effects, side effects, toxic effects, allergic reactions, unusual and unexpected effects, interaction with other medications or foods, and changes in a user's condition. The OHN and employer must:

- Evaluate medications used in the occupational health setting relative to safety. Some OTC medications contain sugar, caffeine, pseudoephedrine, diphenhydramine, alcohol, and other compounds that can induce drowsiness, impair performance, and possibly cause serious work-related injuries. Heed medication warnings that caution against operating heavy machinery or driving a vehicle and consider the effects of the

medication relative to an employee's job function and ability to perform the job safely.

- Be aware that all medications and substances (OTC medications, prescriptions, herbal or nutritional supplements, etc.) brought by employees may impact safe job performance and may have potential interactions. The OHN can participate in the development of a company policy to address this issue if needed.
- Consider the effect of OTC medications on older workers. Older workers often have pre-existing chronic diseases such as heart disease, hypertension, diabetes, and arthritis. With some chronic diseases, the body may metabolize medications less effectively. It is not unusual for older adults to take five or more medications, sometimes several times per day (Ohio Department of Aging, n.d.). The more medications taken, the greater the risk for interactions with other prescription medicines, OTC medications, food, and alcohol. As individuals age, physiological changes affect the way medications interact with the body. Normal aging can alter the way medications are absorbed, metabolized, distributed, and excreted from the body. For instance, 50% of adverse drug reactions in older adults are related to OTC use (Chui, Stone, & Holden, 2017).
- Be familiar with medications and their effects. Before administering any medication, the OHN must be familiar with the medication's actions, side effects, interactions with food or other medication, and any precautions to be taken. The nurse must determine if the worker has any allergies and ask workers about the use of any other medications. Workers should be educated about potential medication interactions. The nurse should have a current, accessible reference on commonly occurring OTC, herbal supplements, and prescription medication interactions (e.g., the Physicians' Desk Reference or clinical electronic tool). Workers should also be educated about the importance of reading and understanding the labels on medications.
- Anticipate and be prepared for adverse reactions to medications; this may include evaluating the worker for any unfavorable effect, stocking and administering appropriate reversal agents according to standing orders and manufacturer's recommendations.
- Check the medication expiration dates according to designated practice policy and routinely log compliance. Out of date/expired medications must be removed from inventory and disposed of appropriately according to practice policy.

## RECOMMENDATIONS

OHNs need to be familiar with and follow worksite policies and procedures pertinent to OTC medication use in the occupational health setting. When assuming responsibility for implementing a treatment and pharmaceutical regimen, the OHN is held accountable for recognizing the effects of the medication including immediate desired effects, side effects, toxic effects, allergic reactions, unusual/unexpected effects, interaction with other medications, and changes in the worker's condition that contraindicate continued medication administration. The OHN should anticipate such effects and be prepared to take swift action to protect the worker's life and well-being; this is particularly true when caring for the current workforce who may be particularly vulnerable and experience unintended medication effects (i.e., aging workers, workers who may have chronic illnesses, or workers who may be impacted by polypharmacy, including use of herbal products, and/or opiates).

OTC medication management protocols, practice guidelines, or standing orders, in conjunction with OHN guidelines, are recommended to guide nurses in providing safe, quality care to workers.

For a copy of your state nursing practice act, contact your state Board of Nursing. Contact information is available online from the National Council of State Boards of Nursing at [www.ncsbn.org](http://www.ncsbn.org). For a copy of your state pharmacy laws or medical practice act, contact your state Board of Pharmacy or Board of Medical Examiners.

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