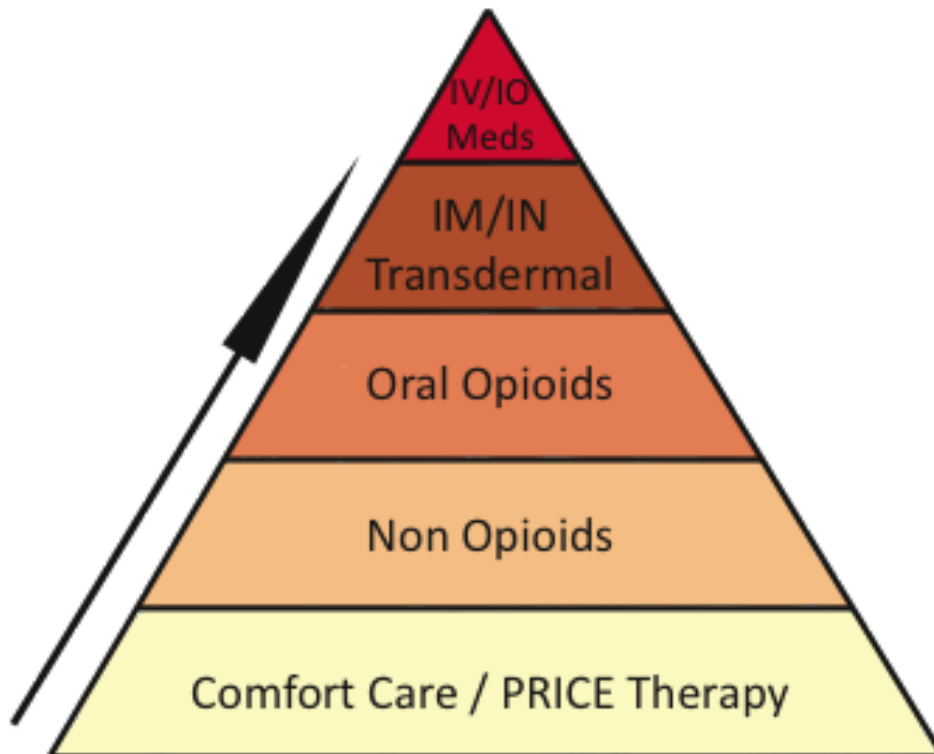


Summary of the Wilderness Medical Society Practice Guidelines for the Treatment of Acute Pain in Remote Environments

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Pain control in the wilderness can be more challenging than in urban settings because of limited resources, but with a few basic concepts and medications, patients can be made to feel more comfortable even in remote settings. For those interested in a more comprehensive review, as well as a table of dosages, the reader should reference our [full guidelines](#).

After extensive review and discussion, the Guidelines Committee created a visual pyramid to assist providers in escalating care of patients needing analgesia.



PRICE: Protection, Rest, Ice, Compression, Elevation

IM: Intramuscular IN: Intranasal IV: Intravenous IO: Intraosseous

The emphasis of these guidelines is for all levels of providers to remember the basic building blocks of this pyramid and escalate care as needed. Although it is possible a provider will rapidly escalate upwards on this pyramid, the foundation should always be included. Comfort care relates specifically to ensuring there is an empathetic provider who establishes a one-on-one caring relationship with the

victim early in the evaluation. PRICE therapy (**P**rotection, **R**est, **I**ce, **C**ompression, **E**levation) is a core component of alleviating pain and should always be considered.

Non-opioids encompass a number of drug classes. For adults, the best and most likely available combination is ibuprofen 800 milligrams and acetaminophen 1 gram, which can provide as much analgesia as some narcotics. These medications are available over the counter in the United States and have few serious side effects. They should be considered first in the absence of any contraindications.

Oral opioids such as oxycodone, hydrocodone, or hydromorphone are frequently carried by patients or providers and constitute the next level of the analgesia pyramid. However, care must be taken to give appropriate doses of combined medications. For example, oxycodone is commonly marketed in combination with acetaminophen. Failure to appropriately dose these combination medications can lead to toxicity. In this situation, giving each medication separately is preferred over using combination medications, OR a mixture of both combination medications and their separate components.

At the top tiers of the pain pyramid, there are a number of analgesic options for appropriately trained ALS providers. ALS providers should only use these analgesics with proper training and, if the provider does not have an independent license, only with appropriate protocols in place. Careful attention to titration of these medications to avoid complications such as respiratory depression or respiratory arrest is paramount. These medications may be given orally, intranasally, intravenously, or intraosseously, and include drugs such as fentanyl, sufentanil, morphine, and ketamine.

In summary, providers should reference the WMS Pain Pyramid with each and every encounter of a patient in pain, and apply appropriate methods of analgesia in an escalating fashion as their expertise allows.

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