

# Pain

Northwest Health Connections

March 2013

## Objectives

In this training, the objectives are to define pain, to identify different types of pain, to be able to assess pain signs and symptoms, particularly in persons with cognitive impairment or limited capacity to verbalize pain, and to be aware of pain management options. Recognizing indicators of pain in the people that you serve will be important in helping them find relief from their pain.

## What is Pain?

The International Association for the Study of Pain refers to pain as an unpleasant sensory or emotional experience with actual or potential tissue damage. Pain is a survival mechanism that serves to protect us. It sends us a message that something in the body is wrong and needs attention. And it is universal. It is probably safe to say that there has never been a person who did not experience pain at one time or another. We experience pain as a result of illness, injury, trauma, surgery, and even from medical treatments. Pain would not be such a big problem if it didn't hurt. Managing pain (or better yet, eradicating it) is a major challenge for healthcare workers and patients worldwide. The Joint Commission for Accreditation of Healthcare Organizations has designated pain as



the “fifth vital sign” and has incorporated it into its practice standards, primarily because the most common reason for unrelieved pain in U.S. hospitals is staff failure to assess and relieve pain.

## How do we experience pain?

The location, type and intensity of pain are interpreted in the brain. Signals from the source of pain travel along nerves (called nociceptors) to the spinal cord and then to the brain, which receives these signals and lets you know where the pain is coming from. The brain then sends pain-suppressing chemicals to the source of pain, and can cause involuntary responses such as elevated blood pressure, faster heartbeat, rapid breathing, and tightening of muscles near the affected body part.

## PAIN FACTS

Pain is a natural occurrence. It is one of the most common complaints of people seeking medical attention. About 75 million U.S. residents endure chronic or recurrent pain. Migraine headaches plague about 25 million people. One in six individuals suffers from arthritis. The global pain industry peddles more than \$50 billion in drugs per year. 72% of people fear dying in pain. 4.5 million people die each year with

uncontrolled pain. Pain leads to fatigue, sleep loss, weight loss and

depression. And pain is the most common underlying cause of suicide.

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The key to solving someone's pain problem is to identify the cause. Often, the cause may not be obvious. The source of the pain may not be near the place where the person feels the pain. This is called referred pain, and the doctor must be a good detective to discover where it is coming from.

### Disclaimer :

The information presented in this home study is intended to provide education and ideas to promote the health and well being of people with intellectual and developmental disabilities; it is in no way meant to replace a doctor's orders or your agency's policies.

## TYPES OF PAIN

### CHRONIC/ACUTE

**Acute pain** begins suddenly, is usually sharp in quality, and is most often due to trauma or surgery. It usually is of short duration and managed with standard forms of treatment (narcotic analgesics). Narcotic analgesic (analgesic means “without pain”) medication is strong, so treating acute pain is not as challenging as treating chronic pain, because acute pain disappears when the underlying cause of the pain has been treated or has healed. Therefore, acute pain is “easier” to treat than is chronic pain. However, in



some cases it can lead to chronic pain.

**Chronic pain** continues despite the fact that the injury has healed, and pain signals can remain active for weeks, months or years. Resolving this type of pain can be difficult and frustrating to patients

and physicians alike. Common chronic pain complaints include back pain, headaches, arthritis pain, pain from nerve damage, and pain from Cancer. Such pain can be physically and psychologically debilitating and can cause limited mobility, sleep problems, fatigue, anxiety and depression. Chronic pain can begin in the absence of any identifiable injury or trauma; its onset may be gradual. Figuring out why the pain came about in the first place or what causes it to continue can often be quite difficult.

### VISCERAL/SOMATIC/NEUROPATHIC

**Visceral pain** originates when internal organs in the chest, abdominal or pelvic areas are injured or damaged. Visceral pain is deep, diffuse and not always well localized, and can be quite severe as in the case of kidney stones, gall bladder attacks, appendicitis or a heart attack. Sweating, pale skin, nausea and vomiting may also accompany this type of pain. In many cases visceral pain can indicate a medical emergency.

**Somatic pain** occurs when pain receptors on the body surface or in the musculoskeletal tissues are activated. Sports injuries, work injuries, overuse injuries cause somatic pain, which is often dull or aching in nature. Typically, this pain is aggra-

vated by activity and relieved by rest.

**Neuropathic pain** is caused by injury to the spinal cord or peripheral nerves and is described as burning, stinging, shooting, tingling or a “pins-and-needles” sensation. It also can be quite severe, as when a herniated lumbar disc is pressing on the sciatic nerve, causing pain down the back of the leg, or with the facial pain of Trigeminal Neuralgia. Diabetic neuropathy is an example of neuropathic pain.



### PSYCHOLOGICAL/SOCIAL/SPIRITUAL

**Psychological pain** can occur as a result of physical pain or trauma, or disfigurement. Feelings of hopelessness or despair can result from longstanding chronic pain, and a person can suffer anxiety because of a painful condition (either fearing that the pain will not go away, or that it may return), which can cause muscles to tighten and aggravate the pain. Pain is not only physical. Pain is both a physical and psychological/emotional experience which affects a person’s ability to work as well as his/her relationships with family and friends.

**Social pain** should not be underestimated. Some of the most painful experiences a human being can have relate to the loss of important social bonds. “Hurt feelings” or “broken hearts” can be worse than physical pain. And someone who experiences social pain may be more sensitive to physical pain and vice-versa. Conversely, a person who has strong social support may be better able to tolerate physical pain than someone who lacks it. Emotional and physical pain are often intertwined.

**Spiritual pain** (or anguish) is a universal phenomenon when people face severe illness or death. There may be a sense of guilt (this is a punishment; I’m being a burden to others), denial (this isn’t really happening), isolation (no one really cares), unfairness (why me?), or anger when facing the unknown. It is helpful to allow the person to express his fears and concerns. Companionship, emotional support, prayer and meditation can be very helpful to a person experiencing spiritual pain. Hospice care has been very effective in helping individuals who are dealing with terminal illness, not just from the standpoint of physical pain, but also with regard to psychological, social and spiritual pain.



### Assessing pain: Self reporting

Self-reporting is considered the “gold standard” for pain assessment and consists of asking the client to identify and describe his/her pain by indicating location, intensity and quality. This works well when the person is able to communicate effectively. However, people with intellectual disabilities may not be able to express in a meaningful way what they are experiencing. Using a faces pain scale, in which drawings of faces in various levels of contortion indicate pain intensity, may be helpful for them.

### Assessing pain: Observation

#### This is perhaps the most important section of this training.

Persons with intellectual disabilities often have difficulty describing their pain or discomfort, and can also have a co-existing mental illness which compounds the problem. It is therefore even more important with this population, as well as with infants and children, senior citizens, and seriously ill individuals, to rely on observation. A person with an intellectual or developmental disability may, if asked about pain, respond, “Oh, I’m all right,” when he is walking with an obvious limp, or tell staff there is nothing wrong but display persistent vomiting. It is critical to pay attention to signs indicating pain: inability to sleep, refusing food, grimacing, frowning, sighing, groaning, crying, screaming, limping, pacing, fidgeting, guarded movement, and, perhaps most notably, acting out (for example, temper tantrums). It may be inaccurate to conclude that just because a person is not complaining, he has a high pain threshold, or is not experiencing pain. Imagine how frustrating it must be for these people when they are uncomfortable. Throwing objects, arguing with others, becoming combative, or even displaying self-injurious behavior may be signs that the person is in pain. Behavior that is unusual for an individual, or behavior that increases in frequency, may be a way to express that he/she is in pain and requires pain medication or may even need to be assessed by a physician. So when someone with an intellectual disability is behaving unusually, keep in mind that pain may be the reason. The better you get to know your clients, the more effective you will be in assessing them for pain. Never underestimate the importance of your role as a caregiver!

If you accompany a client to the physician, try to learn as much information about the pain as possible: where the pain is located, the intensity of the pain (mild to severe, 0-10, etc.), the quality of the pain (sharp/dull/stabbing/burning/aching/throbbing, etc.), what aggravates the pain (“It hurts when I breathe in . . .”), what relieves the pain (rest, massage), when/how the pain started, if it is constant or intermittent (comes and goes), whether it has gotten progressively worse, and what other symptoms the client has (nausea, vomiting, sweating, change in level of consciousness, etc.). This is important information to have for the doctor. You should also have a medical history and current list of medications.

### Management of pain:

Effective pain management is only possible when accurate assessment information is obtained by staff/caregivers and is conveyed to the individual’s medical care provider. The medical care provider, usually the physician, will perform a physical exam and order lab tests (blood counts, organ function, etc.), imaging studies (x-rays, MRI, CT scan), or diagnostic tests (lumbar puncture, biopsies) in order to determine the cause of the person’s pain and then prescribe a treatment. In addition to treating the cause of pain (for example, placing a cast over a fractured wrist so that it heals properly), it is necessary to control the pain. This is most often done through medication, although there are other methods.

Analgesic medications (a- or an- = without, algia = pain) provide temporary relief of pain. The World Health Organization has categorized medications according to the severity of a person’s pain. For mild (first tier) pain, usually Acetaminophen (Tylenol) and non-steroidal anti-inflammatories (NSAIDs) such as Aspirin, Ibuprofen (Motrin) and Naproxen (Aleve, Naprosyn) are prescribed. (Note: In this training, the generic names of the drugs will be listed first, and the brand names will follow in parentheses.) These do not contain corticosteroids and do not contain narcotics. They are over-the-counter medications. Second tier (moderate) pain is treated with synthetic narcotics like Tramadol (Ultram), Codeine (Codeine),

Hydrocodone (Vicodin) and Oxycodone. For severe pain, stronger narcotic medications are prescribed, such as Morphine (Roxanol), Hydromorphone (Dilaudid), Methadone, Fentanyl (Duragesic), and Percocet (Oxycodone + Acetaminophen). Note that Acetaminophen can be toxic to the liver and NSAIDs can be irritating to the lining of the stomach (take with food) and can cause bleeding (caution if taking Coumadin). All narcotics have the potential to cause drowsiness, confusion, constipation, and dizziness. Please monitor your clients for side effects. One medication that is particularly effective for kidney stone pain (which can be excruciating) is Ketorolac (Toradol), a non-steroidal anti-inflammatory drug. Whenever a client develops a rash or hives after beginning a new medication, discontinue the medication and notify the physician.

Several other types of medications can be used to manage pain, although that is not their primary purpose. Antidepressants such as Elavil, Zoloft, and Prozac have been helpful in treating Diabetic Neuropathy, Phantom Limb Pain, Migraine Headaches, Fibromyalgia and pain following a stroke. They have several side effects such as dry mouth, constipation, weight gain, drowsiness and trouble sleeping.

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Anticonvulsants, also known as anti-seizure medications, have also been reported as effective in treating neurological pain. They are prescribed for Trigeminal Neuralgia, Post-Herpetic Neuralgia (Shingles), Diabetic Neuropathy, Multiple Sclerosis, Neuromas and Migraine Headaches. Examples of anticonvulsants are Carbamazepine (Tegretol), Gabapentin (Neurontin), Oxcarbazepine (Trileptal), Pregabalin (Lyrica), and Topiramate (Topamax). These medications should not be discontinued suddenly, or withdrawal symptoms can occur, such as nausea, vomiting, pain, anxiety and insomnia.

Muscle relaxers can also be used on a short-term basis for

treating pain (they can be habit forming as they act on the central nervous system). Carisoprodol (Soma), Cyclobenzaprine (Flexeril), and Diazepam (Valium) are examples. They can produce dizziness, drowsiness, seizures, fainting, dry mouth, constipation and difficulty walking.

Topical agents are applied to the skin over the painful area. These are absorbed through the skin and can provide local relief. Aspercreme, Bengay cream, and Lidocaine cream or patches are the most commonly known. They should never be used in conjunction with a heating pad, as the skin can be burned.

### **Some other methods to relieve pain:**

**Physical Therapy** is often prescribed for people who experience musculoskeletal pain or who are recovering from a stroke. Stretching and strengthening exercises help improve flexibility and strength, increase circulation to joints, and improve range of motion, thus reducing pain. Heat, ultrasound, and electronic muscle stimulation may be used as well. Unlike many medications used for pain relief, physical therapy does not have adverse effects.

**Corticosteroid injections** into painful joints can be used to reduce inflammation and thereby provide pain relief. People with degenerative arthritis may receive these from time to time. Steroids are very effective anti-inflammatory medications, however, they weaken the supporting structures of the joint, which causes more instability and thus in the long term can aggravate the condition.

**Chiropractic care** involves adjusting misaligned bones, particularly in the spine and pelvis. Chiropractors do not prescribe medications and do not perform invasive procedures such as surgery. The theory is that proper skeletal

alignment allows all systems of the body to function optimally and reduces pain.

**Prolotherapy**, or Stimulated Ligament Repair, is a method of injecting weakened ligaments with a dextrose solution which causes temporary inflammation. After the inflammation subsides, the ligaments begin to grow thicker, tighter and stronger, thus helping to stabilize the joint and reduce pain. It is not as publicized as other methods, but can be very effective in restoring stability and strength to any joint in the body, thus relieving pain.

**Myotherapy** is a technique which uses a hands-on approach to release trigger points in muscles, thereby relieving pain and restoring function. Trigger points are tiny segments of muscle fibers that become injured when the muscle is overloaded or overused, and refers pain to other areas of the body. A trained myotherapist can determine what muscles may be injured based on where the patient states that the pain is, treat the area, and release the trigger points by applying pressure to them. Stretching exercises are then used to maintain flexibility.

**Surgically implanted devices**, such as electronic stimulators that block pain signals from reaching the brain, and drug delivery systems that dispense morphine directly to the central nervous system, can also be effective in pain relief. The advantage is that the patient can control the devices with a hand pump whenever he/she is experiencing pain. Usually these methods are not attempted unless more conservative methods of pain management have been employed first.

**Joint Replacement Surgery**, otherwise known as Arthroplasty, can be used as a last resort. Joints most commonly involved are the hip and the knee. In this type of surgery, metal or plastic is placed over the parts of the bones that come together to form a joint where the cartilage has worn out and the bones have been rubbing on one another. Since the metal or plastic is not part of the body, once the joint has healed from the operation, the patient no longer feels pain. Joint replacement surgery is major surgery, and it usually takes about a year to recover completely.

After a person's complaint of pain has been addressed by the doctor and some type of treatment has been implemented, it is important to pay close attention to how effective that treatment is. Obviously if the person states that he or she feels better, then it is working. But if the individual has dementia, or suffers from an intellectual or developmental disability, he or she may not be able to express whether the pain is relieved. Re-assessing this person will again require attention to non-verbal cues. Is the person less combative? Acting out less often? Still grimacing or frowning? There is a commonly held myth that persons with Intellectual and

Developmental Disabilities (IDD) are less sensitive to pain than the general population is, but in reality it is more likely that pain in persons with IDD is under-reported because these individuals lack the verbal and cognitive skills that are necessary to describe their pain, or that they may be afraid of diagnostic tests and procedures that the doctor may order if they tell him about their pain. So it is important to be an advocate for a person with IDD, and if you suspect that a client may be in pain based on how he or she is acting, report it; also, reassure him/her that the doctor is trying to get rid of the pain, and that the tests will help him to do just that.

## PAIN TEST

You must submit your completed test, with at least a score of 80%, to receive 1 hour of training credit for this course.

To submit via fax, please fax the test and evaluation to 814-728-8887.

To submit via email, please send an email to [training@northwesthc.org](mailto:training@northwesthc.org). Please put "Pain Test" in the subject line, and the numbers 1—5, along with your answers, in the body of the email.

To submit via mail, send the test and evaluation pages to NWHC, 247 Hospital Drive, Warren PA 16365.

1. Pain is an unpleasant sensory experience, not an emotional experience. True False
2. A complaint of "pins and needles" sensation in your lower legs and feet is an example of neuropathic pain.  
True False
3. Acute pain is very difficult to manage with standard forms of treatment. True False
4. Antidepressant medications can be used for pain management. True False
5. Painful conditions are always visible to others. True False

Name: \_\_\_\_\_ Title: \_\_\_\_\_

Agency: \_\_\_\_\_ Date: \_\_\_\_\_

Please provide contact information (email address, fax number, or mailing address) where you would like your certificate to be sent:

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**NORTHWEST HEALTH CONNECTIONS**  
 A DIVISION OF MILESTONE CENTERS, INC.  
**EVALUATION OF TRAINING**

Training Title: Pain

Please check the box that best describes your role:

Date: \_\_\_\_\_

- Direct Support Professional       Provider Administrator/Supervisor  
 Program Specialist       Provider Clinical Staff  
 Consumer/Self-Advocate       Family Member  
 Support Coordinator       Support Coordinator Supervisor  
 PCH Staff/Administrator       FLP/LSP       County MH/MR/IDD  
 Other (please list): \_\_\_\_\_

Please circle your PRIMARY reason for completing this home-study training:

- It's mandatory       interested in subject matter       need training hours       convenience

Please circle the best response to each question.

**5 = Strongly Agree**      4 = Agree      3 = Undecided      2 = Disagree      **1 = Strongly Disagree**

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. As a result of this training, I have increased my knowledge. | 5 | 4 | 3 | 2 | 1 |
| 2. I learned something I can use in my own situation.           | 5 | 4 | 3 | 2 | 1 |
| 3. This training provided needed information.                   | 5 | 4 | 3 | 2 | 1 |
| 4. The training material was helpful and effective.             | 5 | 4 | 3 | 2 | 1 |
| 5. Overall, I am satisfied with this training.                  | 5 | 4 | 3 | 2 | 1 |
| 6. I am glad I completed this training.                         | 5 | 4 | 3 | 2 | 1 |

Suggestions for improvement: \_\_\_\_\_

Additional information I feel should have been included in this training: \_\_\_\_\_

I would like to see these topics/conditions developed into home-study trainings: \_\_\_\_\_