

Hello, and thank you for watching this inservice video about the Neuma Innovations PICC and Central Line Protection Clamp. During this presentation, I will review the challenges of caring for IVDU-intravenous drug using patients - with central lines.

I'll demonstrate the function of the Neuma clamp, and suggest recommendations for effectively integrating the device into your institution's existing protocols.

You are aware of the devastating opioid epidemic sweeping our country.

This year in the United States alone, about 6 million people over the age of 13 will inject illicit drugs.

Roughly 30,000 of those people will be hospitalized for the treatment of endocarditis or osteomyelitis.

Tens of thousands additional patients who self-inject drugs will be admitted for other conditions that require intravenous access.

The majority of those patients will receive a central line for most or all of their treatment.

Central line tampering is a major concern. Medical surveys - which are available for review on our website - have shown that up to 40% of patients who inject IV drugs will tamper with their central lines while in the hospital.

They self-inject illicit medications - mostly narcotics - and doing so frequently leads to additional infections, damage to their central lines, embolism, thrombosis, and potentially fatal overdose.

In addition, these patients are a significant expense to a hospital when they remain for many weeks to complete their treatment.

And patients who introduce an infection by tampering with their central lines put hospitals at risk for a Central Line Associated Blood Stream Infection Report or CLABSI Report.

You most likely deal with the dangers and difficulties of managing central venous catheters that are placed into substance use disorder patients.

To address this problem, Neuma Innovations has developed the Central Line Protection Clamp.

This is the Neuma Clamp. It is an FDA registered, patented, single use device.

The Clamp has been through rigorous safety evaluation and testing that meet FDA requirements. The product arrives in a box containing one hundred clamps. Each Clamp comes individually packaged.

The purpose of the Clamp is twofold: First, it deters IVDU patients from misusing their central lines to self-inject drugs.

Second, the clamp detects if patients have tampered with their line.

The Clamp closes the line, making it impossible for patients to inject through the hub when the device is in place.

By deterring injection into the line, the device protects the patients from complications and overdose.

It also protects you and your health care facility from the risk of a CLABSI report or other litigation.

However, some patients, desperate for a high, will remove the Clamp themselves and self-inject narcotics into their lines. In that situation, the patient must break open the clamp and it cannot be shut again.

This definitively detects that the patient may have put the line at risk.

If tampering is detected, the physicians and the care team are armed with tangible proof - information they can use to make a treatment plan for the patients in accordance with the policies of their institution.

Every institution will have a different approach, but each decision starts with knowledge of the patient's abuse of the central line.

The device has a top and bottom arm. The top arm includes the blue knob that mates with the locking mechanism when the clamp is closed.

The bottom arm incorporates the cradle that holds up to three catheter lumens and the hook that locks into the knob in the top arm.

You can place all the external lumens into a single device or isolate and clamp the lumens separately.

Before closing the device, make certain that all the lumens are securely located between the side walls of the cradle.

To close the Clamp, pinch the two arms together until they snap shut.

Once closed, the Clamp is locked and the lines are protected. Even a strong hand with a syringe cannot force fluid through the clamped line.

To open the Clamp, rotate the blue knob clockwise.

When the knob is turned, the plastic hook - now captured inside the knob - is twisted off the bottom arm.

This destroys the locking mechanism, and the patient cannot re-lock the device.

The destruction of the single-use locking mechanism clearly demonstrates that the patient has opened the Clamp and strongly suggests tampering with the catheter has occurred.

The Clamp can be used with all central line catheters, including PICC lines, midline catheters and peripheral IVs that have an external lumen.

You can place a Neuma Clamp on each individual lumen or up to three lumens together into one cradle. Use the Neuma Clamp in the hospital or after discharge.

Patients with reliable and stable home environments can be treated at home or outpatient clinics. Many institutions are developing protocols for early discharge for appropriate patients in appropriate settings.

The goals of the Clamp are to protect your patient, to preserve the catheter and to decrease cost and risk for your institution.

The device works best when used in conjunction with a compassionate and comprehensive approach to the Substance Use Disorder patient who injects IV drugs.

We recommend the inclusion of a Treatment Agreement.

The contract sets out the terms of the treatment, warns the patient of the risks of tampering with the line, and informs the patient of the consequences of tampering.

A treatment contract template can be downloaded from our website.

We also recommend that your institution develop the capability to provide Medication-Assisted Therapy. MAT humanely alleviates the suffering of narcotic withdrawal.

It also dramatically decreases craving and increases the likelihood of compliance with therapy by these sometimes troubled and challenged patients.

We have found that - when shown the Neuma Clamp for the first time - healthcare professionals are quick to ask perceptive questions.

These are the 5 most frequently asked questions:

Why not make the device tamper-proof?

A tamper-proof device would be uncomfortable and expensive.

It would also restrict access to the line in an emergency situation. More importantly, a tamper-proof device would not prevent patients from injecting through alternative sites.

On the other hand, Tamper-evident sends an important message to the patient that tampering with the line is dangerous, could jeopardize treatment and could lead to death.

The initial placement of the tamper-evident device provides an opportunity for the physician to speak to the patient about the risks and consequences of abusing the line.

If the patient removes the clamp themselves and uses the line to get high, isn't it already too late?

Your team can consider a wide variety of options, up to and including removing the central line and altering the method of delivery.

In some cases the presence of the central line may be more dangerous to the patient than the disease being treated.

In all cases, knowledge about the patient misusing their line is essential new information.

What's to stop the patient from injecting into the far side of the line using a needle?

We have confirmed that if the patient does insert a needle directly into the catheter, leaking from the puncture site will be immediately apparent. A clear indication of tampering and misuse.

Why not use a key to unlock the device?

Before embarking on the design of the Neuma Clamp, we interviewed dozens of infusion therapy nurses. We learned that a solution that required a key, a separate locking insert, or an additional tool would be considered too cumbersome, and in the event of needing immediate access to the line, potentially dangerous.

Will the clamp damage the line?

The Neuma Clamp has been tested on the lines of major manufacturers. First, a Neuma Clamp was continuously locked on the lines in the same location for 6 months.

Second, Neuma Clamps were locked, removed and replaced with a new Clamp in the same location hundreds of times per line.

In both tests, the lines were not damaged or compromised.

The Neuma Clamp is a simple, effective tool that protects your patients, deters central line misuse, and detects tampering if it should occur.

This enables you to enhance the quality and safety for your patients and your institution.

In addition, based on CDC guidelines, your hospital can avoid a CLABSI report when you have the broken clamp to use as hard evidence.

Further resources - including answers to other frequently asked questions, important medical references, and a variety of downloadable documents such as our treatment agreement template - are available at the Neuma Website, [neuma innovations dot com](http://neumainnovations.com).

And please visit the Neuma Innovations Facebook page for ongoing discussions and updates.

Thank you.