

# *Welcome Everyone*

Tonight's Educational Forum will begin shortly



***Thank you everyone for coming to tonight's virtual session on Tobacco use after Paralysis, we are thankful to hear from tonight's guest speaker who has 11 years experience in the wound care field. This is a continuation of Oregon Spinal Cord Injury Connection's ongoing sessions of Educational Forums. Tonight's session will be recorded for our community members that couldn't attend. Please do not share any personal information that you aren't comfortable with being recorded. We'd like everyone to know this is a safe space to share and ask questions, so please respect others opinions and experiences. Please stay muted during all the presentations and you can put questions in the chat or save them till the end. Thank you.***

# Tobacco Use and Paralysis

Presented by: Hannah & Casey, CHW's

With Guest Speaker: Robert Berry, CHT



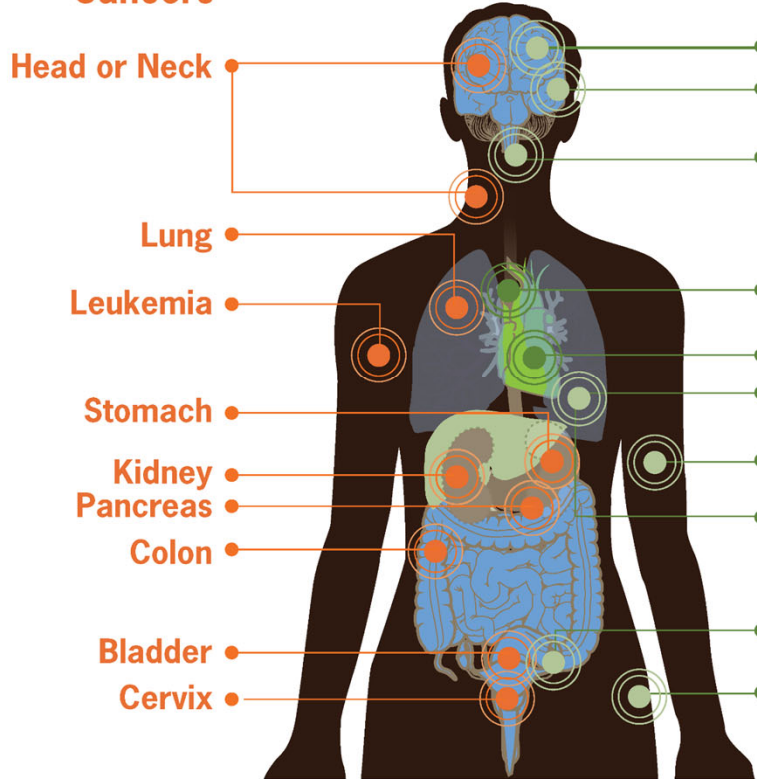
Current cigarette smoking is significantly higher among adults with a disability (27.8%) compared to adults without a disability (13.4%). The percentage of adults with disabilities using E-cigarettes is also higher (8%) compared to adults without disabilities (3.9%).



# Risks from Smoking

Smoking can damage every part of the body

## Cancers



## Chronic Diseases

- Stroke
- Blindness
- Gum infection
- Aortic rupture
- Heart disease
- Pneumonia
- Hardening of the arteries
- Chronic lung disease & asthma
- Reduced fertility
- Hip fracture

We've all heard of many of the detrimental effects of tobacco use on the body.

These effects can be even worse for those living with paralysis.

Well...

We're not here today to talk about lungs and nicotine stains. Oh no.

We're here to talk about something we all have to think about....

Pressure sores and the overall effects of tobacco use and wound healing!

As well as the effects on neuropathic pain.

**When you smoke, wounds take longer to heal.  
That's because ingredients in tobacco can damage your blood vessels, decrease the amount of blood flowing to wounds, and decrease oxygen in your blood.**

**GIVE WOUNDS A CHANCE TO HEAL.**



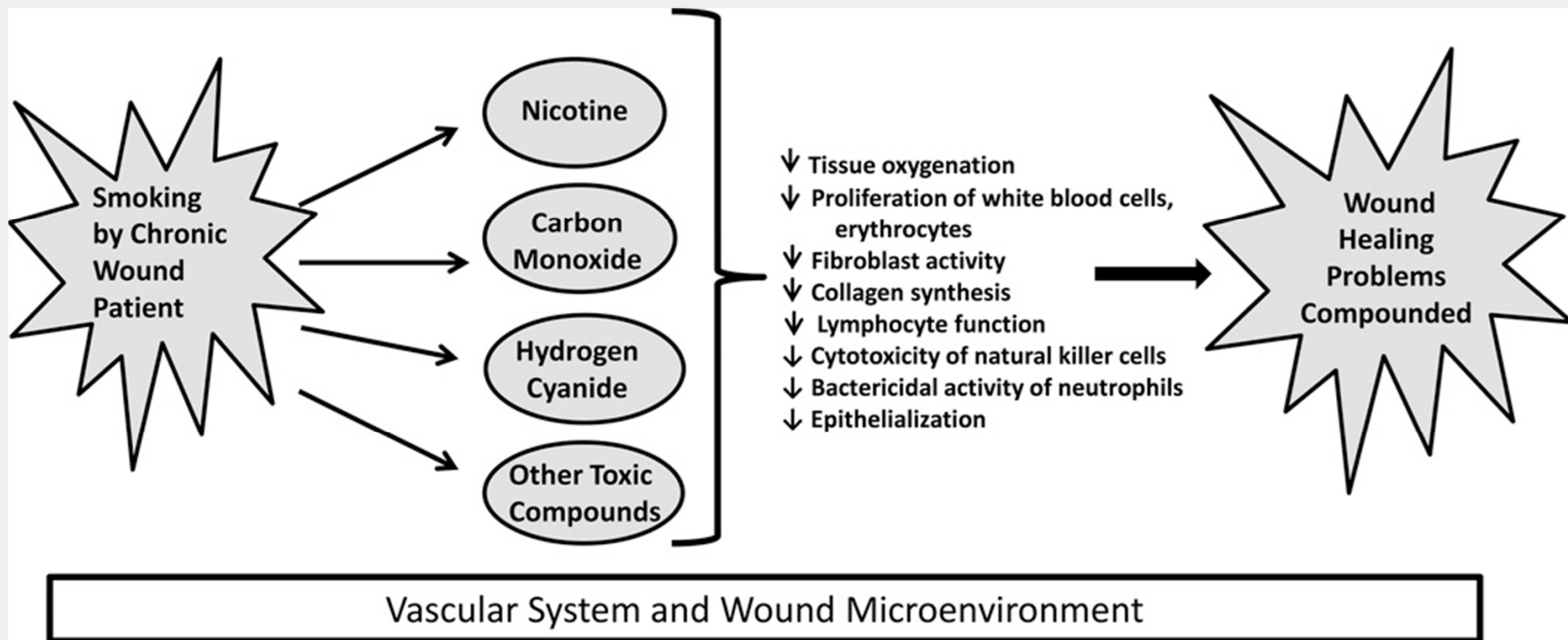


## SMOKING AND WOUND HEALING

HOW DOES SMOKING AFFECT  
WOUND HEALING?



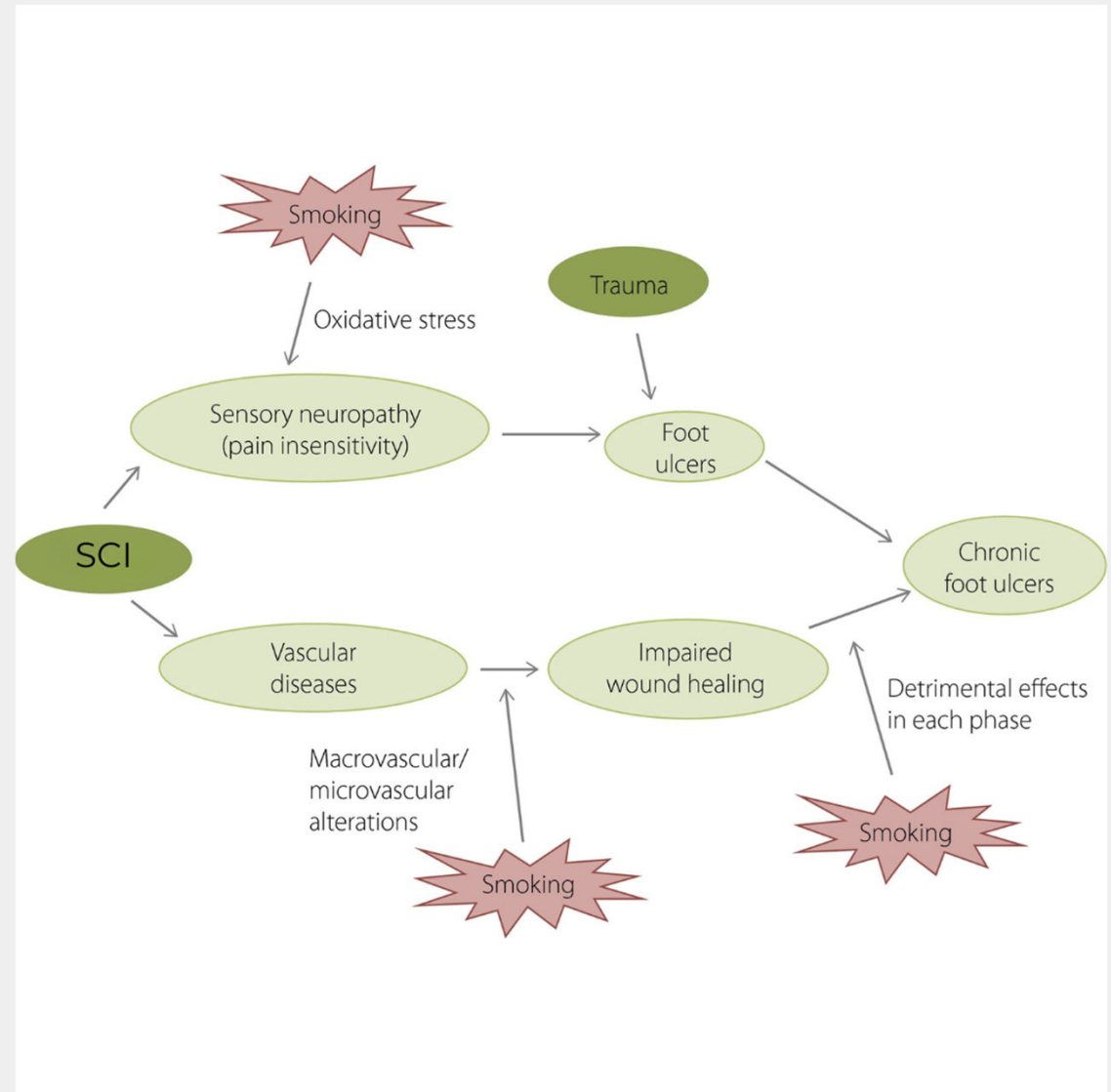
**Cigarettes contain nicotine. Nicotine causes your arteries to narrow. It can also cause your arteries to go into spasm. When this happens, the oxygen and nutrients carried in your blood cannot get to your wound. A wound that does not get enough oxygen and nutrients may result in a wound that is not able to heal on its own.**



**Detrimental effects of smoking on healing of chronic wounds. Diagram illustrating how smoking in a patient with a chronic wound leads to inhalation of toxic components that have negative effects on tissue oxygenation and cellular activity in the vascular system and microenvironment of a chronic wound**



**Individuals with SCI exhibit vascular dysfunction below the lesion that is characterized by a reduction in conduit artery diameter and blood flow, increased shear rate and leg vascular resistance, and adrenoceptor hyper responsiveness. Smoking tobacco also affects these same functions leading to compounding detrimental outcomes for individuals that smoke with a SCI**



## How Else Does Smoking Affect the Body?

- Smoking leads to many types of cancers.
- Smoking increases your heartbeat and blood pressure. It strains your heart and blood vessels.
- Smoking can lead to heart attacks, strokes, or limb amputations.
- Smoking makes a tar-like substance coat your lungs that may cause lung cancer.
- Smoking leads to emphysema and chronic bronchitis, two conditions that cause the lungs and heart to fail.
- Smoking harms almost every organ of the body.
- Smoking leads to over 480,000 deaths – or one in five deaths – in the U.S. every year.
- Smoking leads to more than 41,000 deaths from secondhand smoke exposure.
- On average, smokers die 10 years earlier than nonsmokers.

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**NEUROPATHY**  
TREATMENT CLINICS OF TEXAS




**Does smoking tobacco affect neuropathic pain?**



**OREGON  
SPINAL CORD INJURY  
CONNECTION**

**YES!**



Acrolein exposure  
from cigarette  
smoke intensifies  
pain after spinal  
cord injury



Research has shown that a neurotoxin called acrolein contained in cigarette smoke intensified neuropathic pain after spinal cord injuries. Acrolein is known to worsen pain by activating and causing a proliferation of pain receptors called TRPA1, or transient receptor potential ankyrin-1, found in nerve fibers

During a research study by National Institutes of Health and the Indiana State Department of Health it was reported that people with spinal cord injury-induced chronic neuropathic pain have experienced heightened pain sensitivity when smoking tobacco cigarettes, and less pain following the termination of smoking.

## Hmmmmmm, what's Acrolein anyway?

Acrolein is a highly volatile yellow liquid, mostly used for the production of **acrylic acid** and acrylate esters. Non-occupational exposure occurs via cigarette smoking, house fires, car exhaust, heating of animal or vegetable oils, and treatment with **cyclophosphamide**. Acrolein is highly corrosive to the skin, the eyes and the respiratory tract, more so than **formaldehyde**. 1% solutions cause chemical burns.



# Smoking and Neuropathic Pain

Smoking can be a significant cause of suffering for those living with neuropathic pain, as it can worsen the symptoms associated with this condition.

Nicotine, in particular, has been linked to increasing the strength and duration of nerve pain symptoms.

## BENEFITS OF QUITTING SMOKING

- Smoking is expensive.
- Smoking is a hassle. Most states have strict regulations on where you can smoke.
- Cigarette smoke harms everyone who inhales it, not just the smoker. Secondhand smoke is dangerous.
- Both you and the people in your life will breathe easier when you quit.
- Your sense of taste improves when you quit.
- You'll be able to make it through a long movie or an airplane flight without craving a cigarette.
- Soon after quitting, your smoker's cough will disappear, and you will have more energy.
- Within one year, your risk for heart disease is less than half that of a smoker.
- After quitting for five years or longer, your chance of having a stroke decreases.
- After quitting for 10 years, your risk of lung cancer goes down to as little as one-half that of smokers.
- After quitting for 15 years, your risk of death will be almost the same as people who have never smoked.



**Lose Tobacco.  
Gain Health.  
Save Money.  
Inspire Others.**

**SMOKEFREE  
oregon**



If you do continue to smoke, make sure to use a wheelchair smoke smock!



## If you are interested in quitting, here are some resources

Quitting tobacco isn't easy. In fact, the tobacco industry makes sure of it. They actively target people living with disabilities to sell their addictive products as a form of stress relief. They want to make them tobacco customers for life. That's a big reason why people living with disabilities and those who care for them smoke and use tobacco at higher rates.



The tobacco industry targets people living with disabilities. But you're stronger than they think. When you quit smoking, vaping or other tobacco, you gain:

- Ability to breathe better
- Increased blood flow and circulation
- Reduced risk pressure sores
- Reduced risk of heart attack, stroke and cancer
- Potential savings of more than \$3,000 a year
- Less second-hand smoke

Call the Oregon Tobacco Quit Line today:  
**1-800-QUIT-NOW (1-800-784-8669)**

- En Español: 1-855-DEJALO-YA (1-855-335356-92)
- Native Quit Line: 1-800-QUIT-NOW (1-800-784-8669), then press "7"
- If you are deaf or hard of hearing, call 1-877-777-6534 or use a relay service to connect with 1-800-QUIT-NOW



SMOKEFREE  
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# Resources for Quitting Tobacco

The Quit Line is open 24 hours a day, seven days a week. The Oregon Tobacco Quit Line is a free and confidential program that helps people quit tobacco.

- **English: 1-800-QUIT-NOW (1-800-784-8669) or [www.quitnow.net/oregon](http://www.quitnow.net/oregon)**
- **Spanish: 1-855-DÉJELO-YA (1-855-335-35692) or [www.quitnow.net/oregonsp](http://www.quitnow.net/oregonsp)**
- **TTY: 1-877-777-6534**
- Talk or chat online with an expert Quit Coach who knows what you are going through and will help you make a Quit Plan that will work for you.
- The Quit Line will send you materials chosen just for you or you can access the Quit Line library online
- Ask for support. Tell your family and friends about your Quit Plan or join the Quit Line message boards online and connect with others quitting tobacco.
- Receive two weeks of nicotine patches and/or gum to help you get started with your quit (if eligible).
- If you ever need more help, call the Quit Line again for FREE!



## SMOKING CESSATION

It is never too late to quit smoking, as it will improve your health and help your wound to heal.

- Ask your healthcare provider about programs to help you stop smoking.
- Make a plan to quit.
- Ask your friends and family for help.
- Use the resources available.



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## RESOURCES

### smokefree.gov

A website dedicated to helping you quit smoking with tailored resources for women, veterans, teens, Spanish speakers and people over age 60.

### FDA 101: Smoking Cessation Products

How FDA-approved medicines can help you quit smoking.

### YouCanQuit2

A quit-smoking support website for military personnel and their families, sponsored by the Department of Defense.

<https://www.cdc.gov/tobacco/campaign/tips/quit-smoking/>

A list of many resources available to help you quit smoking.



***"Thank you very much, everyone, for participating in this educational forum. We hope it was useful to you and we are encouraged and grateful for your interest and time. We need to ask something of you... it would be extremely helpful to all of us who are involved in the ed forums to receive your candid and honest feedback on this particular event. Please do feel free to share openly, as any and all input will truly help us.***

***I am going to turn off the zoom recording now and then ask the feedback questions and note the responses. Thank you for staying online for a few minutes longer if you can."***

