

National Latino Behavioral Health Association NLBHA

## Substance Use Disorders in the Latino Population 4-Part Learning Series *Module 3: Opioids Use Disorder Screening and Treatment* Presented By Haner Hernandez, PhD, CPS, CADCII, LADCI





Addiction Technology Transfer Center Network Funded by Substance Abuse and Mental Health Services Administration



#### Acknowledgment

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https://attcnetwork.org/centers/national-hispanic-and-latino-attc/home

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At the time of this publication, Miriam E. Delphin-Rittmon, Ph.D, served as Assistant Secretary for Mental Health and Substance Use in the U.S. Department of Health and Human Services and the Administrator of the Substance Abuse and Mental Health Services Administration.

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Presented 2023





The ATTC Network uses affirming language to promote the promises of recovery by advancing evidence-based and culturally informed practices.









## HOUSEKEEPING

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- Evaluation
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Fredrick Sandoval, MPA Executive Director NLBHA

# NLBHA's Mission

The Mission and Goal of The National Latino Behavioral Health Association is to influence national behavioral health policy, eliminate disparities in funding and access to services and improve the quality of services and treatment outcomes for Latino populations.











# NLBHA's Objectives

NLBHA's Objective is to provide national leadership on mental health and substance abuse concerns of the Latino community. NLBHA's Policy Priorities are:

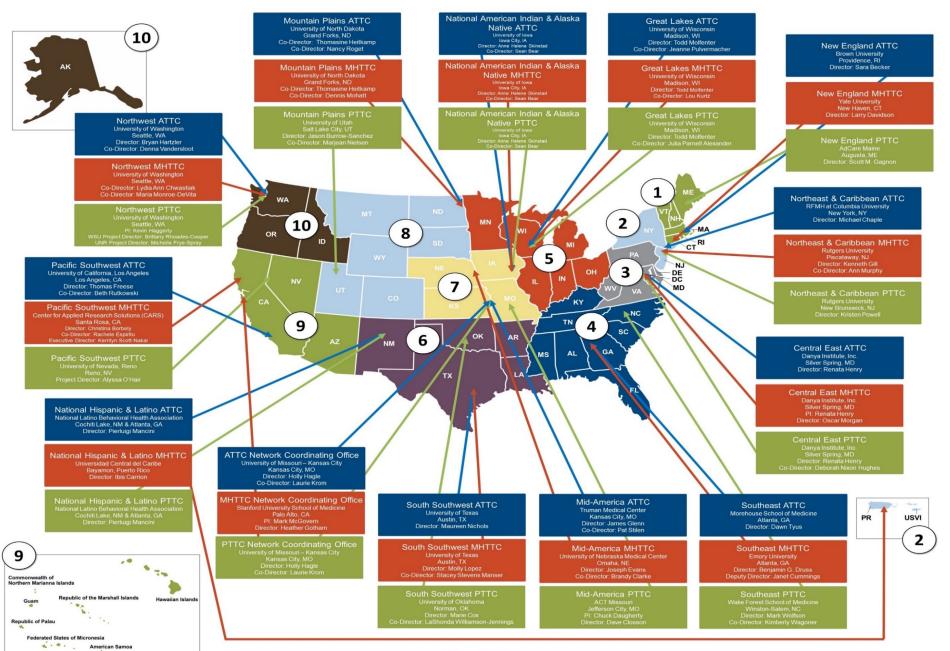
- 1. Targeted Capacity Expansion of Mental Health Services for Latinos
- 2.Latino Behavioral Health Evidenced-Based Practices
- 3.Legislation to increase the number of Counselors/Therapists/Other Behavioral Health Practitioners
- 4. Funding for Co-Occurring Disorders of Alcohol and Substance Abuse
- 5. Opioid Crisis in the Latino Community
- 6. Suicide Prevention











\* Map not to scale.



## National Hispanic and Latino ATTC Mission

The mission of the National Hispanic and Latino Addiction Technology Transfer Center is to provide high-quality training and technical assistance to improve the capacity of the workforce serving Hispanic and Latino communities in behavioral health, treatment, and recovery. We disseminate and support the implementation of evidencebased and promising practices to enhance service delivery, promote the growth of a diverse, culturally competent workforce, and bridge access to quality behavioral health services. We are committed to increasing health equity and access to effective culturally and linguistically grounded approaches.











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## **Today's Presenter**





Haner Hernandez, PhD, CPS, CADCII, LADCI Director of the Latino Addiction Counselor Education (LACE) Program of Massachusetts









## **Course Outline**

Module 1. Alcohol and SUD Screening and Treatment

A Module 2. Tobacco and SUD Screening and Treatment

### Module 3. Opioids and SUD Screening and Treatment

Module 4. Stimulants and SUD Screening and Treatment







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## **Module 3 Overview**

- Introduction to Opioid Use
- Opioid Use in the Latino Population
- Screening and Treatment of Opioid Use Disorder in Latino Populations











# Introduction- Substance Use Disorders (SUD) among the Latino population living in the United States

The Diagnostic and Statistical Manual of Mental Disorders 5 (DSM-5) defines SUD as a constellation of behaviors involved in compulsive drug seeking including impaired control of substance use, impaired social interactions with others because of substance use, risky drug use (e.g., substance use in hazardous settings), and pharmacological changes (e.g., experiencing withdrawal symptoms).



This Photo by Unknown Author is licensed under CC BY-NC-ND

Addiction is the most severe, chronic stage of the SUD diagnosis, which is characterized by substantial loss of self-control, manifesting in compulsive drugseeking behavior despite the desire to discontinue.













## **Question to consider**

What type of opioids account for more than half of overdose deaths in the United States?

The addiction crisis is deadlier than ever before. Overdoses are the #1 cause of accidental death in our country. According to the CDC, there were <u>over 100,000 fatal overdoses</u> in the U.S. during the first year of the COVID-19 pandemic, from April 2020 to April 2021. That's the highest number of overdose deaths ever recorded in a single year. Synthetic opioids like fentanyl account for more than half of overdose deaths but there was also a 46% increase in overdose deaths from other stimulants, like methamphetamines, and a 38% increase in deaths from cocaine overdoses.







Image from Technology Network

## **Opioid Use Disorder**











## **Genetics of opioid use disorder**

- Studies of genetic epidemiology indicate that genes contribute about 50% of the vulnerability to SUD, including OUD. Yet identifying specific genetic variants for increased OUD risk has been difficult, which is likely to reflect in part the fact that OUD, like other psychiatric disorders, is a polygenic disease.
- Genes influence brain development and the function of brain circuits and neurotransmitter systems that mediate the reactivity to the environment including drug responses.











## Social determinants of opioid use disorder

- Epigenetics (changes caused by modification of gene expression rather than alteration of the genetic code itself).
- Studies have also started to assess the effects of social stressors on the development of the human brain, and these studies are relevant for understanding why social stressors increase the risk for SUD and other psychiatric disorders' vulnerability to opioid use and OUD.
- On average, these premature deaths involve 10 years of life years lost.







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## **Opioid crisis**

- The epidemic of drug overdoses in the United States has been inexorably tracking along an exponential growth curve since at least 1979, well before the surge in opioid prescribing in the mid-1990s. The current opioid crisis in the US emerged during a period of over a decade following a sharp increase in opioid prescriptions in the mid to late 1990s.
- On October 27, 2017, the opioid crisis was declared a nationwide Public Health Emergency. In 2017, over 72,000 persons with drug overdoses died in the United States; **47,600 (67.8%) involved opioids**, with increases across all age groups and racial/ethnic groups; a 2-fold increase in a decade.







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## **Events associated with the opioid crisis**

- During the late 1990s, significant changes were introduced in laws and regulations related to the prescription of opioids for chronic pain by regulatory agencies.
- The new more relaxed regulations in the pain management standards implemented by the Joint Commission on the Accreditation of Health Care Organizations (JCAHO) in 2000, provided justification for providers to treat chronic pain with opioids.
- The emerging concept in the 1990s of evaluating and *treating* pain as the 5<sup>th</sup> vital sign, and aggressive marketing by the pharmaceutical industry, reinforced the unfounded perception of the effectiveness and safety of treatment of non-cancer pain with potent opioids.





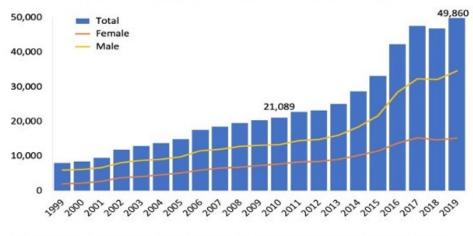
Rosenblum et al., 2008







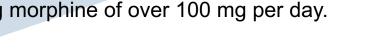
#### Figure 3. National Drug Overdose Deaths Involving Any Opioid, Number Among All Ages, by Gender, 1999-2019



\*Among deaths with drug overdose as the underlying cause, the any opioid subcategory was determined by the following ICD-10 multiple cause-of-death codes: natural and semi-synthetic opioids (T40.2), methadone (T40.3), other synthetic opioids (other than methadone) (T40.4), or heroin (T40.1). Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2019 on CDC WONDER Online Database, released 12/2020.

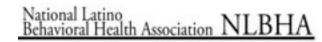
The majority of deaths (60%) occurred in patients given prescriptions based on prescribing guidelines (in the 1990s) by medical boards, with 20% of deaths in low-dose opioid therapy of 100 mg of morphine equivalent dose or less per day and 40% in those receiving morphine of over 100 mg per day.





CDC WONDER, 2020 Manchikanti et al 2012





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## Fentanyl

More recently, **the synthetic opioid fentanyl** has become an important agent as cause of OOD. Pharmaceutical fentanyl is a potent synthetic opioid, approved for treating severe pain. It is 50 to 100 times more potent than morphine. Like other prescribed opioids, can be diverted for misuse.

> CDC WONDER, 2020 Manchikanti et al 2012











## Naloxone

Overdoses from fentanyl by itself or combined with heroin appear to be harder to reverse with naloxone than overdoses due to prescription opioids or pure heroin, contributing to the lethality of fentanyl or drugs laced with it.

Suzuki, 2017











## **Opioid data**

In 2016, over 12% of all deaths in the population 15- to 24-year-old, were opioid-related deaths, a 4-fold increase since 2001. Among adolescents and young adults, prescription opioid misuse had become a leading cause of death.

In 2017, The National Safety Council using data information from the National Center for Health Statistics – Mortality Data determined the lifetime odds of dying from an accidental opioid overdose for a person born in 2018 were higher (1 in 98) than the chances of dying from a motor vehicle accident (1 in 106)

CDC WONDER













Image from shutterstock

# The opioid epidemic according to ethnicity



Historically, overall rates of illicit drug use in the Latino population have been lower than those of Whites and Blacks. A closer examination of substance misuse prevalence within segments of the Hispanic/Latino population yields findings that differ *regarding a variety of indicators, including country of origin, immigration status, gender, and age.* 

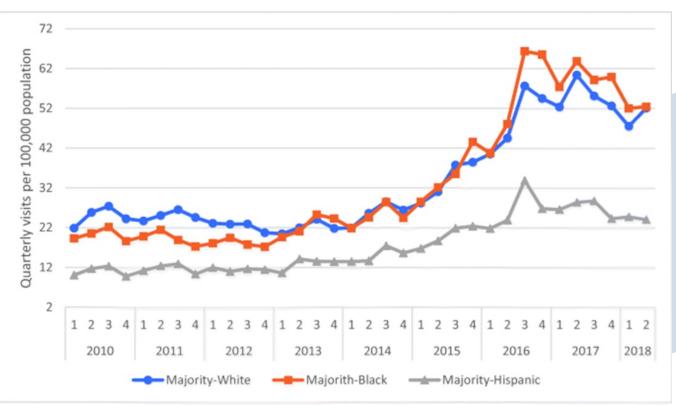




Chen, 2020







Note: The figure represents the quarterly ED visits in Florida in majority-non-Hispanic-white, majority-non-Hispanic-black, and majority-Hispanic communities per 100,000 population in the corresponding communities.





Lippold, 2019 Chen, 2020







# The opioid epidemic according to ethnicity

- In <u>large fringe metro areas</u>, whites experienced the largest absolute increases in rates of overdose deaths involving any opioid (from 17.8 to 26.7, an absolute increase of 8.9) and those involving synthetic opioids (from 6.1 to 17.5, an absolute increase of 11.4).
- Blacks experienced the largest percentage change in drug overdose death rates involving any opioid (100%, from 7.2 to 14.4) and for overdose deaths involving synthetic opioids (332%, from 2.5 to 10.8).

Chen, 2020

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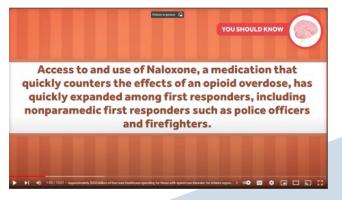








## **Source of prescription opioids**



The Opioid Crisis in 2020 - YouTube

- Among those with prescription opioid misuse, 25.4% obtained them from the healthcare system
- 55.7% (95% CI 53.7–57.6) from friends or relatives
- 18.9% (95% CI 17.4–20.5) through other means, including drug dealers











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## **COVID-19 and opioids**

### Rate of deaths during the pandemic

The novel coronavirus disease (COVID-19) pandemic, is associated with an acceleration of overdose deaths. Over 81,000 drug overdose deaths occurred in the United States in the 12 months ending in May 2020, the highest number of overdose deaths ever recorded in a 12-month period, according to recent provisional data from the Centers for Disease Control and Prevention

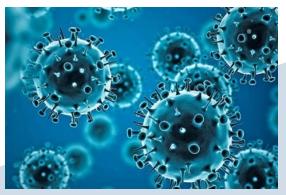


Image from WHO

### Increases in overdoses

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Synthetic opioids (primarily illicitly manufactured fentanyl) appear to be the primary driver of the increase in overdose deaths, increasing 38.4 percent from the 12-month period leading up to June 2019 compared with the 12-month period leading up to May 2020.









Image from freestock

## Screening and Treatment of Opioid Use Disorder in Latino Populations











## **OUD screening and treatment tools**

MEDICATION-ASSISTED TREATMENT (MAT)

URINE DRUG SCREEN (UDS)

DAST-10 (DRUG ABUSE SCREENING INVENTORY)

CLINICAL OPIOID WITHDRAWAL SCALE (COWS)











## **Screening for OUD**

- The ASUS (Adult Substance Use Survey) is a 64-item self-report survey designed to assess an individual's perceived alcohol and other drug use.
- The CAGE is a very brief screen technique. Cut-Annoyed-Guilty- Eye
- The DAST-10 (Drug Abuse Screening Test-10) is the shortened and more commonly used version of a 20-item (DAST-20) or the original 28-item version.
- The DUSI-R (Drug Use Screening Inventory-Revised)
- The TWEAK is a five-item screen developed for detecting high-risk drinking during pregnancy.
- Clinical Opioid Withdrawal Scale (COWS) score.











(COWS)

**Clinical Opiate Withdrawal Scale** 

#### Figure 1: Clinical Opiate Withdrawal Scale (COWS)

Sign or Symptom	Score
Heart Rate	< 80 = 0 81-100 = 1 101-120 = 2 > 120 = 4
Sweating	None = 0 Subjective report = 1 Flushed or moist face = 2 Beads of sweat on face = 3 Sweat streaming of face = 4
Restlessness	Able to sit still = 0 Subjective reports of restlessness = 1 Frequent shifting or extraneous movements = 3 Unable to sit still for lenger than a few seconds = 5
Pupil size	Normal or small = 0 Pupils possibly larger than appropriate = 1 Pupils moderately dilated = 2 Pupils so dilated that only rim or iris visible = 5
Bone or joint aches	None = 0 Mild diffuse discomfort = 1 Subjective reports = 2 Patient actively rubbing joints or muscles = 4
Rhinorrhea or lacrimation	None = 0 Congestion or moist eyes = 1 Rhinorrhea or lacrimation = 2 Nose constantly running or tears streaming = 4
Yawning	None = 0 Yawning 1-2 times = 1 Yawning > 3 times = 2 Yawning several times per minute = 4
Anxiety or irritability	None = 0 Subjective report = 1 Patient appears anxious = 2 So irritable that cannot participate in assessment = 4
Gooseflesh	Smooth skin = 0 Piloerection can be feit = 3 Prominent piloerection = 5

Image from Taming the SRU

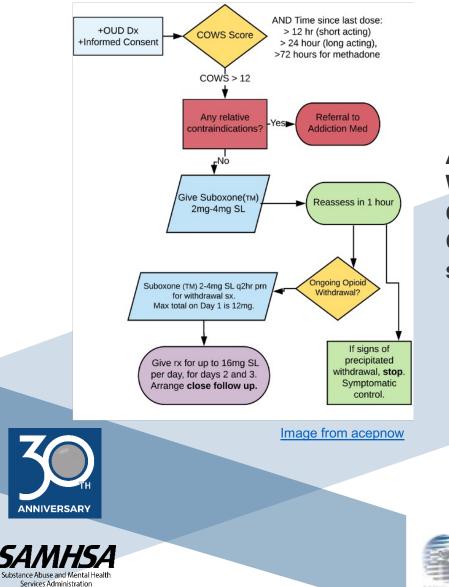












Assessing and Treating Opioid Withdrawal & Opioid Use Disorder OUD = opioid use disorder; COWS = clinical opioid withdrawal scale.







## **Medication-assisted treatment (MAT)**

**MAT** remains the gold standard of biomedical care for opioid use disorders. At present, there are well-characterized medications for the treatment of opioids, alcohol, and nicotine/tobacco use disorders. In other SUD such as stimulants and sedatives, there is no available MAT approved by the FDA, at present (2021).

The prevalence of **mental health issues**, including anxiety, insomnia, PTSD, ADHD, and depression are higher in the SUD population; and treatment of such conditions becomes important in the pursuit of better outcomes in the treatment of SUD.











**Methadone maintenance** was the first widely used opioid replacement therapy to treat heroin dependence, and it remains the best-researched treatment for this problem. Despite the widespread use of methadone in maintenance treatment for opioid dependence in many countries, it is a controversial treatment whose effectiveness has been disputed. Methadone is an effective maintenance therapy intervention for the treatment of OUDs as it retains patients in treatment and decreases opioid use better than treatments that do not utilize opioid replacement therapy.











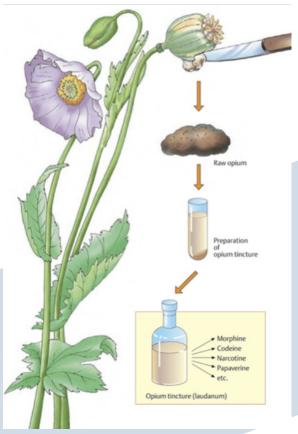


Image from pnpegg











The best-known commercial brand of **Buprenorphine** is Suboxone (buprenorphine and naloxone) Sublingual Film and Sublingual tablets. Teaching the use of SL Buprenorphine is important to assure the absorption of the right dose. The drug is inactivated in the stomach.

Suboxone is used daily.

Subutex is the Buprenorphine without Naloxone, used mainly during MAT in pregnancy and in cases of hypersensitivity to naloxone.











## **The Drug Abuse Treatment Act (DATA 2000):** Allowed opioid detoxification and primary addiction treatment in the office-based setting with Schedules III, IV, or V agents approved for OUD treatment. The first time (since a U.S. Supreme Court ruling in 1918) that physicians [and other prescribers] have been allowed to manage opioid addiction in the office-based setting.











**Naltrexone** is a medication approved by the Food and Drug Administration (FDA) to treat both **alcohol use disorder (AUD) and OUD.** Naltrexone is a morphine derivative that acts as a **competitive antagonist at opioid receptors \mu, \delta and \hat{k}.** 

Naltrexone can either displace opioid agonists from binding at these receptors or prevent opioid binding. Blockade of opioid receptors by naltrexone is a competitive phenomenon and results in the elimination of the euphoric effect of opioids.











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Image from practicenotes

Naloxone (Narcan®) is an "opioid antagonist" used to counter the effects of (any) opioid overdose. In opioid overdoses, this depressive effect is responsible for the symptoms seen in overdose (shallow breathing, confusion, lessened alertness, and loss of consciousness).

Naloxone has no potential for abuse. Naloxone may be injected in the muscle, vein, or under the skin or sprayed into the nose.



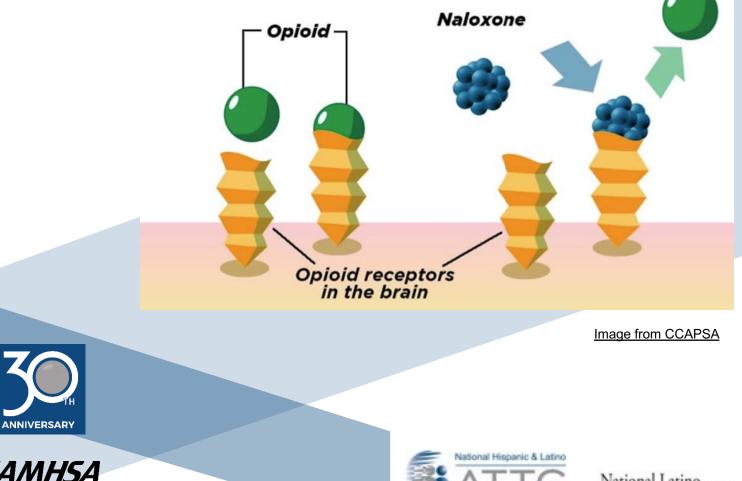








#### **Naloxone and opioids**



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Drug	Mechanism of Action	Use (AUD)	Average Cost (30 pills)	for	Initiate Prior to Cessation	Hepatic Cl.	FDA- Approved (AUD)
Nattraxona	Competitive antagonist at opioid receptor sites	Reduce Craving	\$101.84	<ul><li>1 pill daily</li><li>IM monthly</li></ul>	$\checkmark$	×	$\checkmark$
Disulfiram	Acetaldehyde dehydrogenase enzyme inhibitor	Deter Use	\$109.47	1 pill daily	*Must abstain for 12hrs prior	×	$\checkmark$
Acamprosate	Increase in GABA activity & decrease in Glutamate activity & NMDA receptors	Reduce Craving	\$260.12	2 pills TID	×	×	$\checkmark$
Gabapentin	GABA analogue; binds to & inhibits the $\underline{\alpha_2 \delta}$ subunit site of Voltage- dependent Ca+ channels	Reduce Craving	\$68.67	2 pills TID	√	×	×

Image from cureus











#### **Third Module Summary**

#### Here is what we learned

#### 1.) Knowledge reminder

Genes influence brain development and the function of brain circuits and neurotransmitter systems that mediate the reactivity to the environment including drug responses.

#### 2.) Knowledge reminder

Medication Assisted Treatment (MAT) remains the gold standard of biomedical care for opioid use disorders. At present, there are well-characterized medications for the treatment of opioids, alcohol, and nicotine/tobacco use disorders.

#### 3.) Knowledge reminder

Naltrexone can either displace opioid agonists from binding at these receptors or prevent opioid binding. Blockade of opioid receptors by naltrexone is a competitive phenomenon and results in the elimination of the euphoric effect of opioids.











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#### Coming up next: Substance Use Disorders in the Latino Population 4-Part Learning Series Module 4: Stimulant Use Disorder Screening and Treatment











For more information about the National Hispanic and Latino ATTC and to request training and technical assistance you can reach us at:



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### Thank you. ¡Gracias!







