

# Understanding and Preparing for Seasonal Suicide

MSPI WEBINAR SERIES

DECEMBER, 2014

# Learning Objectives

By the end of this webinar, participants will be able to:

- Describe the seasonal trends in suicide
- Explain 2 potential reasons for the differences in suicide attempts during different times of year
- Explain 3 strategies for preparing for seasonal suicide trends

# Qualifier

- Overview of seasonal shifts in psychopathologies common in Indian Country
- Presenters are not licensed counselors or therapists
  - Would like to present current information and research
- Consult local licensed behavioral health providers or your Area Behavioral Health lead for more information and guidance

**We apologize for speaking  
about suicide in such a matter  
of fact manner**

SUICIDE IS A DEEPLY EMOTIONAL COMMUNITY  
CONCERN, AND WE HOPE THAT BY TALKING ABOUT  
IT WE CAN BEGIN TO COMBAT IT



# What is Seasonal Suicide?

- Regular increases and decreases in the number of completed suicides that occur during particular times of the year
  - Pool of research on impacts on suicide and disorders in Alaska, Spain, Japan, Australia, Argentina, Canada, Austria, and the Scandinavian countries
  - Seasonal affective disorder is no longer a diagnosable condition under the DSM-5
  - Public reports don't often include reporting out of attempts of episodes by month
  - Causes are currently unknown

# What We Know

- Seasonal exacerbations of psychiatric symptoms have been described for a number of pre-existing psychopathologies
  - Mood disorders (major depressive disorder, bipolar disorder)
  - Anxiety disorders (disorders including panic disorder, social anxiety disorder, specific phobias, and generalized anxiety disorder)
  - Completed suicide
- Historically, more pronounced in:
  - Areas of higher latitude (although this could be changing)
  - More rural and agricultural areas

# Mood Disorders

- Characterized by more intense symptoms in the winter months as compared to the summer months
  - Exacerbations of depressive and lower mood symptoms in the peak around the winter solstice
  - Manic symptoms peaking during the fall equinox

# Anxiety Disorders

- Evidence shows seasonal worsening of symptoms types during the winter months
  - Overwhelming worry
  - Self-consciousness about everyday social situations
  - Fear of being judged by others
  - Panic attacks
  - Feelings of terror

# Completed Suicide

- Majority of studies confirm that the number of completed suicides peak in the late spring
  - Anywhere from May to July
  - With troughs during the winter

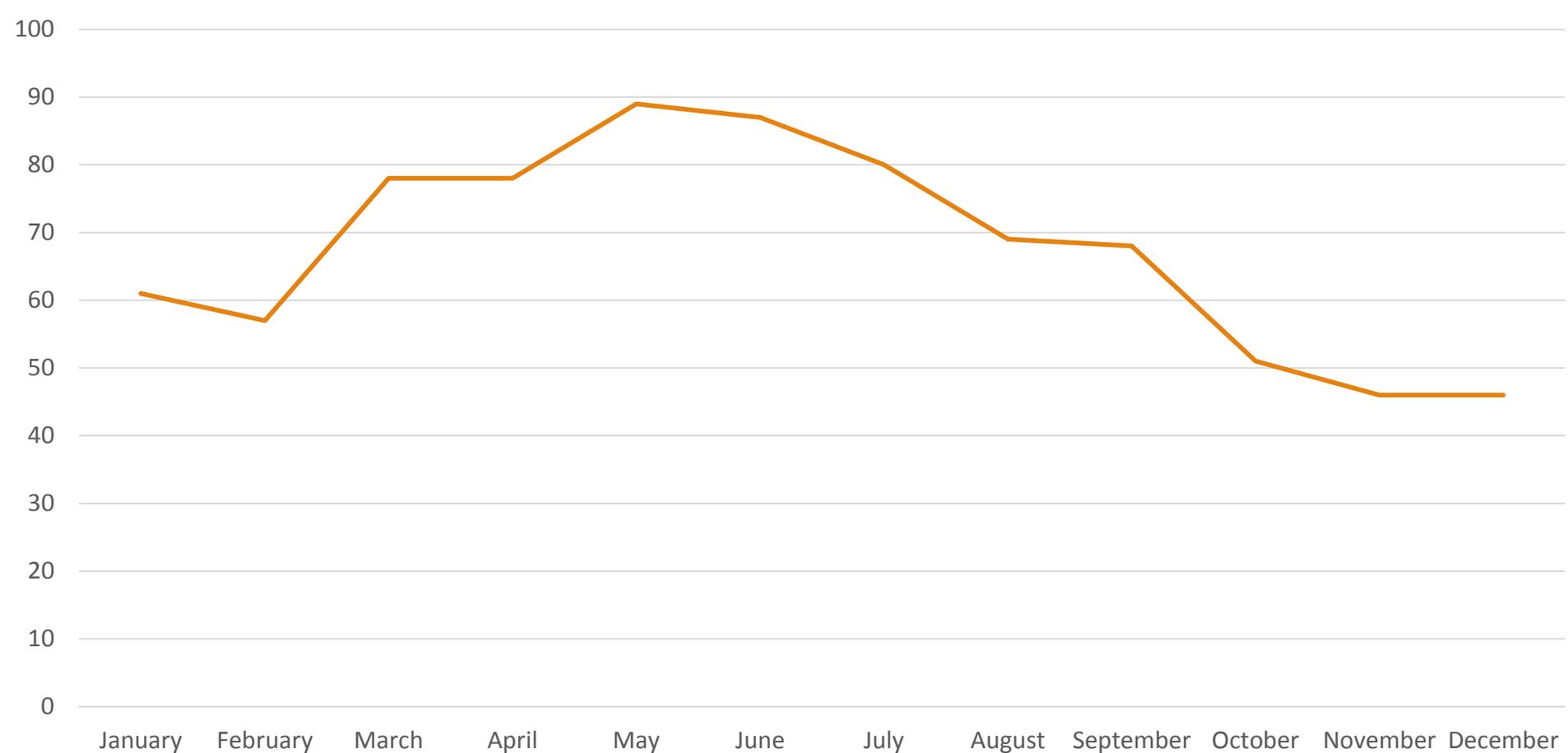
# Means

- Males more frequently use firearms
- Females more frequently use pills or poison
- During the spring time months, there are slight increases in drowning and hanging
  - Firearms remains fairly consistent
- But no conclusive evidence that there is a correlation between certain means and the time of year

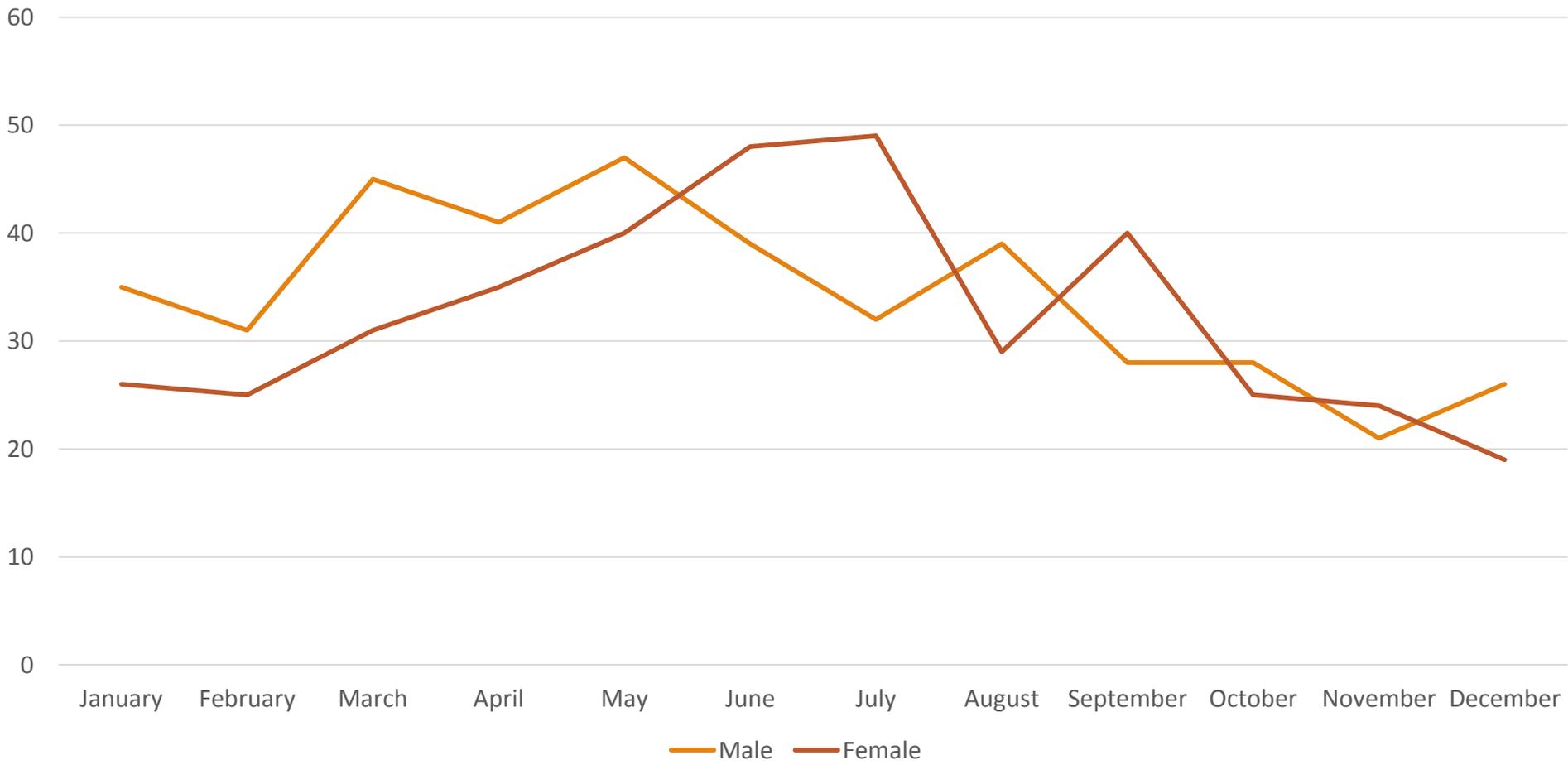
# Myth

- Winter is the most common time for suicides
- Commonly held belief because of
  - Cold, dark weather
  - The holidays cause financial and social stress and pressure

# Frequency of Suicide per Month (1990-2009), Alaska Suicide Study



# Frequency of Suicide per Month by Sex (2002-2009), Alaska Suicide Study



# Overarching Trends

- Higher occurrences of suicide occur in SPRING
  - Not in the winter
  - We see higher percentages of seasonal exacerbations of conditions that could potentially lead to suicidal ideation
- Women more susceptible to seasonal exacerbations
  - Men more likely to commit suicide
- Men are more likely to use a violence means



## Physiological response to little sunlight

- Low Serotonin Levels
  - Sunshine exposure (through retinal and potentially cutaneous exposure) can stimulate serotonin production
  - Low serotonin levels have been linked to depression and suicide
  - Theory that the advent of spring sunshine is akin to initial exposure to an antidepressant with the resulting change in serotonin levels potentially creating an agitated dysphoria that results in suicidal ideation



## Physiological response to little sunlight

- Vitamin D deficiencies
  - Vitamin D3 is created when the skin is exposed to ultraviolet B radiation (sunshine).
- Changes in sunlight patterns may disrupt sleep and the body's internal clock
  - Which in turn affects bodily functions, etc.



## Physiological response to inflammation and environmental factors

- Inflammation is a chronic bodily response that occurs during times of stress.
  - Inflammation is marked by an overactive immune system and dilated blood vessels and the production of certain chemicals in our bodies.
  - Inflammation has been linked to increased depressive symptoms
- Depression has been associated with increased pollen count and increased air pollution
  - Both of which lead to inflammation



## Behavioral response to depressive symptoms

- People who are depressed cannot find the energy to make and go through with a suicide plan in the winter



## Social Explanation

- Vulnerable populations face more challenges when the weather warms and social interaction increases.
- People who are struggling may feel left out of the increase in social engagements
  - Feel that the isolation of winter has withdrawn for everyone except but them

**No singular agreed upon  
reason for the cause**

HOWEVER, THE EFFECT IS GENERALLY ACCPETED

# DSM-5

- Removed seasonal affective disorder as a unique diagnosable mood disorder
- Has added a specifier for depressive disorders “with season pattern”
  - Experience the onset of a mood disorder during a particular time of the year
  - Experience full remission of the episode during a characteristic time of the year
  - Have experienced this pattern for at least two years
  - Have experienced more season episodes than nonseasonal episodes

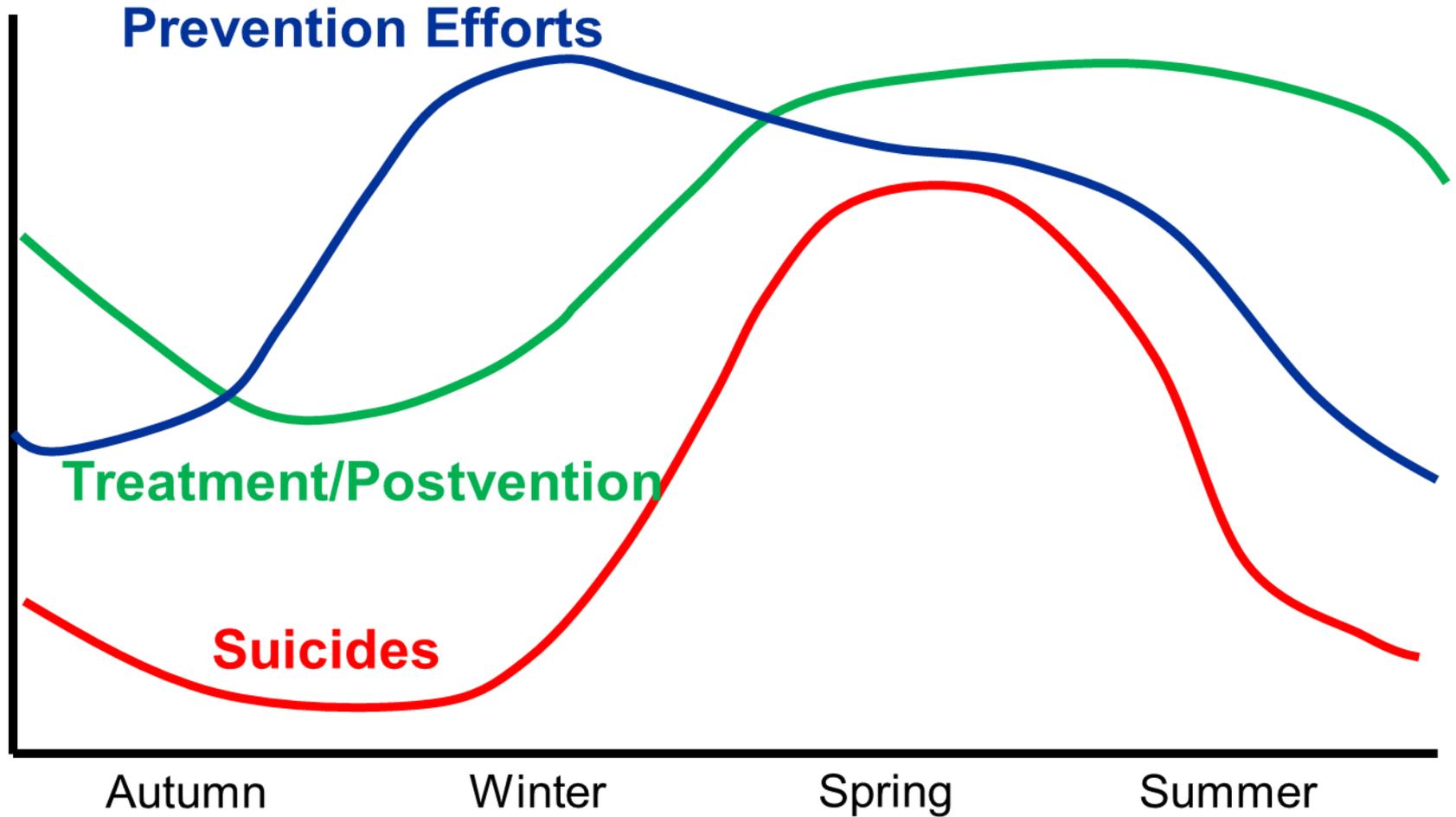
# Who is at Risk

- Females are more likely to feel the effect of the winter months
- Males are more likely to commit suicide
- Young people have a higher risk of winter
- People with a family history of SAD, depression and/or suicide
- People who have existing depression or bipolar disorder
- People who live far from the equator

# What to look for

- Irritability
- Lethargy or low energy
- Problems getting along with other people
- Hypersensitivity to rejection
- Heavy, "leaden" feeling in the arms or legs
- Oversleeping
- Appetite changes, especially a craving for foods high in carbohydrates
- Weight gain
- Social withdrawal
- School or work problems
- Substance abuse

# Potential Intensity of Ongoing Efforts vs. Seasonal Suicide Trends





## FALL & WINTER ACTIVITIES

### Prevention

- Conduct gatekeeper trainings
- Increase number of prayer sessions, sweat lodges or ceremonies for people with existing conditions
- Conduct outdoor activities
- Increase exercise classes and physical activities
- Gender-specific programming

### Treatment

- Psychotherapy
  - Cognitive-behavioral therapy
- Light therapy
- Examine antidepressant regimens that have been shown affective for SAD
  - Supplement with anti-inflammatory agents
- Vitamin D supplementation



## spring ACTIVITIES

### Prevention

- Community education on the changing of the seasons and the effects it can have on people
- Ceremonies
  - Reframe changing of the seasons
- Community education on signs and symptoms of suicidal ideation
- Boosters sessions of gatekeeper trainings
- Conduct proactive school prevention activities

### Treatment/POSTVENTION

- Increase behavioral health presence
- Review effectiveness of psychotherapeutic approaches
- Continue new antidepressant regimens
- Continue vitamin D supplementation
- Ceremonies
- Monitor for significant changes



## Environmental Strategies

- Reorganize your home and office environments to allow for more sun exposure
- Garden your lawn to allow more sun in through the windows

## Take outdoor breaks

## Know the trends in your community and plan appropriately

- Track and report on monthly trends



Suicide is complex with many contributing factors

- Very rarely is one factor the sole cause of a successful suicide
- However, if we can reduce or remove one or more contributing factors (and replace them strong and viable protective factors) then we have the opportunity to prevention suicidal ideation, attempts and completions

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# National Indian Health Board



# Questions



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# Thank you!

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