



# Feeling Stuck

ASSESSMENT AND MANAGEMENT OF NEEDLE PHOBIA

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# Disclosures

- ▶ Consultant for Actic, Inc.
- ▶ No additional disclosures

# A Little Terminology and Common Language

- ▶ Fear

- ▶ Anxiety

- ▶ Disgust

# A Little Terminology and Common Language

- ▶ Specific Phobia
- ▶ Blood-Injury-Injection (BII) Phobia
- ▶ Exposure Therapy

# Specific Phobias

- ▶ Essential Feature:
  - ▶ **Extreme, excessive fear of a specific object or situation**
    - ▶ Avoid phobic objects, or endure with distress
    - ▶ Recognize that the fear and avoidance are unreasonable
    - ▶ Markedly interferes with one's ability to function
- ▶ Lifetime prevalence: 12.5%
- ▶ 2:1 female
- ▶ Chronic course

# Specific Phobia

## Five broad sub-categories

1. Animal type
  - Dogs, snakes, spiders, etc.
2. Natural environment type
  - Storms, heights, water, etc.
3. *Blood-Injury-Injection type*
  - *Injections medical procedures, blood*
4. Situational Type
  - Flying, tunnels, driving, elevators, etc.
5. *Other Type*
  - *Choking, vomiting, illness, space, etc.*

## 3 Cases of Specific Phobia of Needles/Injection

- ▶ Suzy is a 35-year-old woman, mother of 4 children, Assistant Professor of Biology, and small business owner who presented for urgent treatment of BII phobia in the context of third trimester of pregnancy. She reports fear of needles since childhood, and although she cannot recall a specific index event that initiated this fear, she vividly recalls instances of being physically restrained while receiving injections as a child. In addition to her fear of injections, she reports a strong response to other medical procedures, particularly those that might involve palpation or manipulation of her veins and invasive medical procedures in general. She reports a sensation of lightheadedness in previous needle encounters and has concerns for passing out in these events. She identifies a belief that she can “feel the needle in [her] veins.” Venipuncture is the most distressing experience, though this is generalized to any piercing of the body envelope. Notably, she has attempted to modify her experience by intentionally receiving acupuncture treatments and tolerates these with ease, though she does not see the needle enter her body. Finally, she carries comorbid diagnoses of generalized anxiety disorder, emetophobia (fear of vomiting), health anxiety, and a question of post-traumatic stress disorder.

## 3 Cases of Specific Phobia of Needles/Injection

- ▶ Corinne is a 23-year-old woman currently in medical inpatient care for treatment of an acute lung infection secondary to cystic fibrosis. She has a history of requiring medical sedation to place a PICC line, but due to the risk of adverse events from the repeated sedation, the treatment team is challenged to find an alternative means of providing life saving care. Additionally, she is being considered for treatment with elexacaftor/tezacaftor/ivacaftor, a potentially life extending medication that unfortunately also requires frequent blood draws to check for liver function. Her responses to attempts to collect blood draws or set lines ranges from severe fear with crying and screaming to extreme physical violence, the latter resulting in an injury to a nurse. She does not recall a specific event that preceded the onset of needle fear, but readily recalls “a big nurse sitting on [her]” as a child.



## 3 Cases of Specific Phobia of Needles/Injection

- ▶ Jennifer is an 18-year-old woman in a gap year between high school and college. She currently lives at home with parents in a high SES family and social setting. She was referred by her parents, both of whom are in the mental health field. She reports that she has been fearful of injections for as long as she can recall, but has been able to complete routine vaccinations with extreme distress and only with very strong encouragement from her parents. She is currently unwilling to get her annual flu and COVID-19 vaccinations, leading to the referral for treatment. Blood draws and injections are generally equally aversive and she reports a strong fear response to needles and related sharp objects and imagery; however, upon further assessment, she notes a particularly strong disgust response to injections. Indeed, her description of the thoughts about injections and other body envelope violations are “it’s just not supposed to be in there.” When describing these stimuli, she produces a gagging response and a characteristic “disgust face” and general sense of loathing. In addition to the primary concern with injections and blood draws, she has a question of obsessive-compulsive disorder and a history of major depressive episodes. She also presents with an odd affect at times, hinting at a dramatic presentation of symptoms and history, as well as a facile knowledge of medical information and general curiosity about the human body.

# Fear vs. Anxiety

- ▶ Fear: defensive response that motivates protection from an imminent threat
  - ▶ Immediate and short lived response
  - ▶ Example: Seeing a bear during a hike.
- ▶ Anxiety: preparatory response that motivates avoidance of impending threat
  - ▶ Diffuse long-lasting response (i.e., *apprehension*)
  - ▶ Example: Seeing a sign warning of bear activity in the general area of your hike.



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**WARNING**



**FREQUENTING AREA**

Removal of this sign may result in INJURY to others  
and is punishable by law

**THERE IS NO GUARANTEE OF YOUR SAFETY  
WHILE HIKING OR CAMPING IN BEAR COUNTRY**



**STOP**



THE AREA AHEAD HAS THE WORST WEATHER IN AMERICA.  
MANY HAVE DIED THERE FROM EXPOSURE EVEN IN THE  
SUMMER. TURN BACK NOW IF THE WEATHER IS BAD.

**WHITE MOUNTAIN NATIONAL FOREST**

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# Learning to Fear

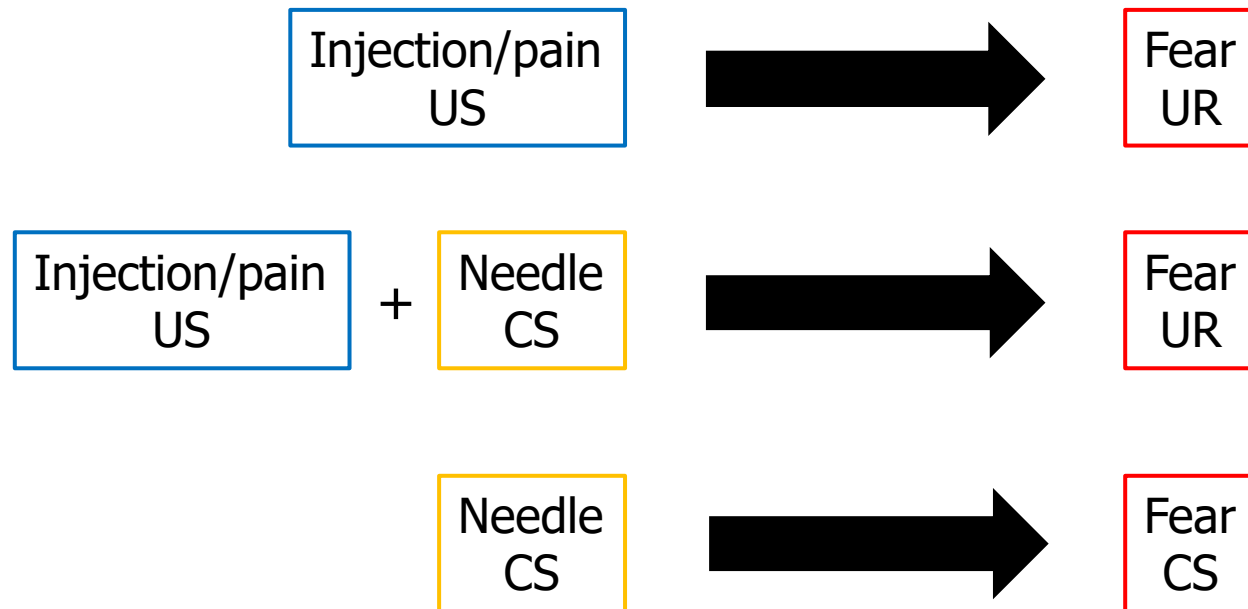
- ▶ Direct aversive conditioning
- ▶ Vicarious learning
- ▶ Direct informational transfer



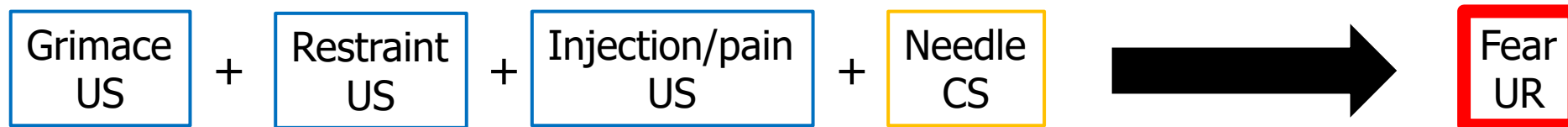
# Learning to Fear

- ▶ Layering of hierarchical associative learning:
  - ▶ This + That = Fear
- ▶ What if it is not the needle?
  - ▶ Pain
  - ▶ Loss of control/agency
- ▶ Contextual indirect modeling
  - ▶ Facial grimace
  - ▶ “It’ll be okay! It’ll be okay! It’ll be okay!”

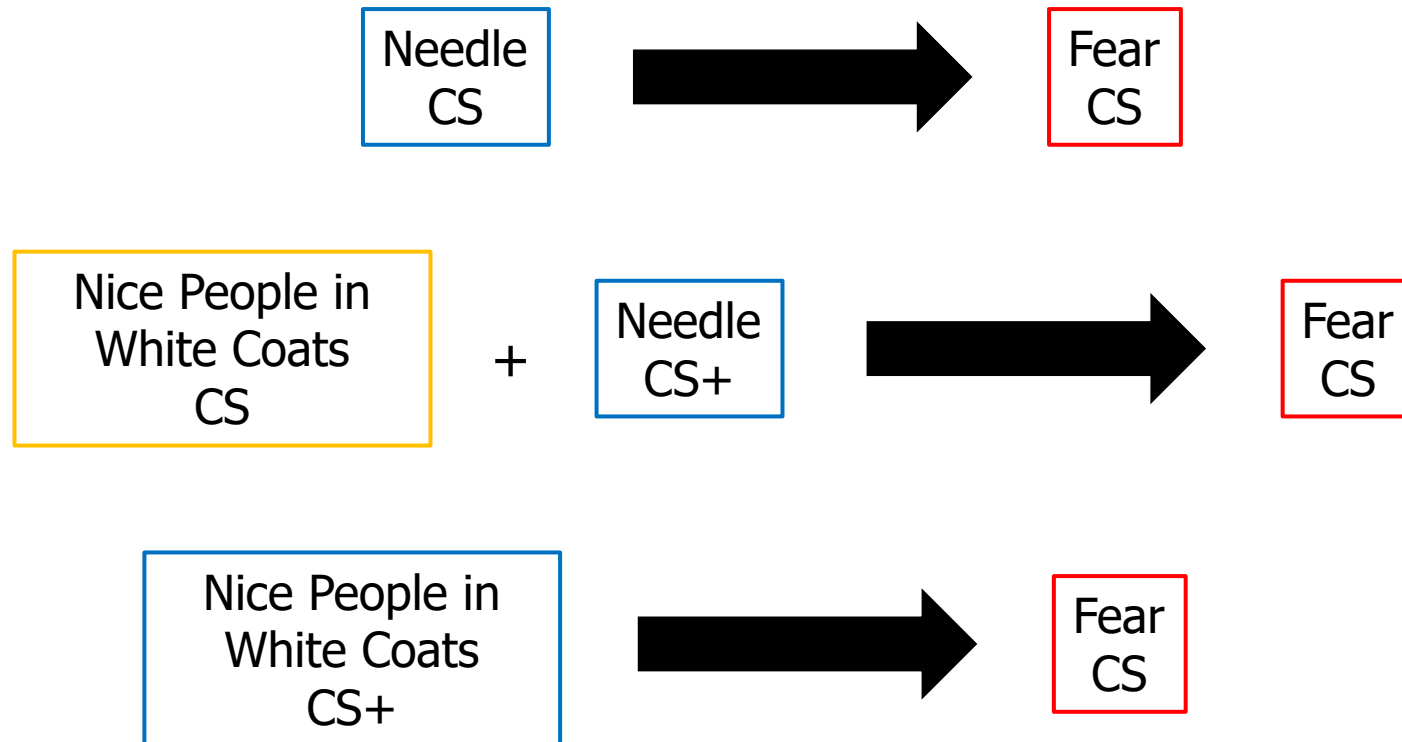
# Learning Model of Needle Fear



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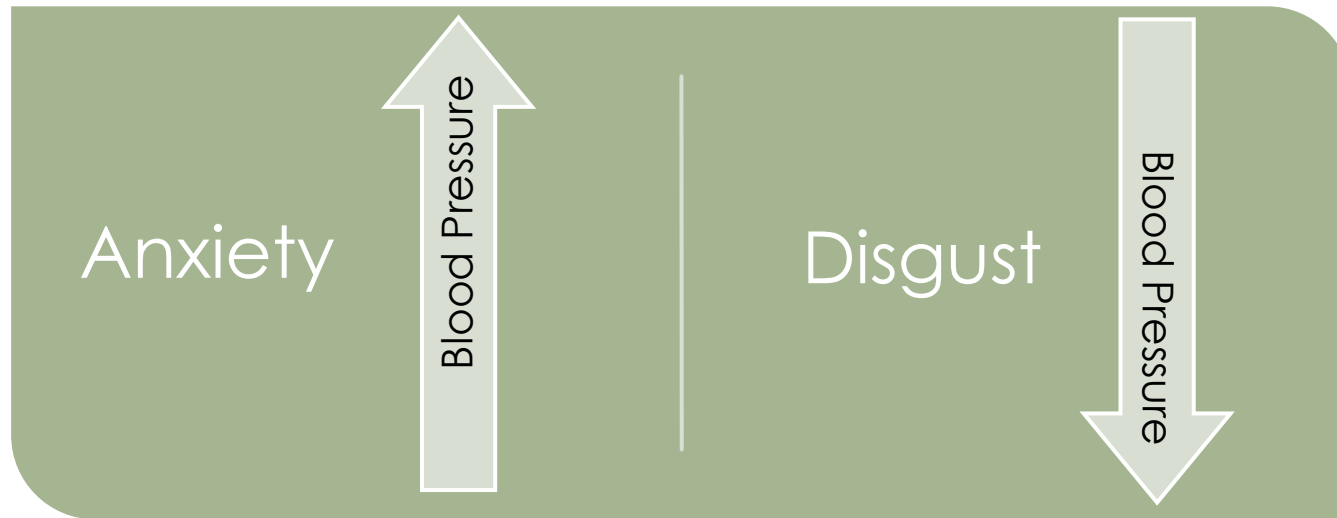
# Learning Model of Needle Fear



# The Interesting, Mysterious Role of Disgust

- ▶ Domains of disgust
  - ▶ Core disgust
  - ▶ Animal reminder disgust
  - ▶ Contamination disgust
- ▶ Disgust as protective emotion
- ▶ Prominent in BII phobia complicating clinical presentation and treatment

# Complications with Syncope



# How Do We Help?

- ▶ Prevention
  - ▶ What Not To Do
  - ▶ What To Do
- ▶ Treatment
  - ▶ Things We Don't Do
  - ▶ Things We Do

## Prevention: What *Not* To Do

- ▶ No restraining
- ▶ No surprises
- ▶ No punishment
- ▶ No avoidance
- ▶ No shame



# Prevention: What To Do

- ▶ Give them ALL of the control
- ▶ Give them more time
- ▶ Provide helpful distraction  
(especially for children)
- ▶ Praise the heck out of them
- ▶ Offer reasonable support and reassurance
- ▶ Consider topical numbing
- ▶ Refer out!

## Treatment: What We Don't Do

- ▶ Teach relaxation strategies
- ▶ Teach accommodation
- ▶ Cognitive Therapy?
- ▶ Systematic Desensitization?

## Treatment: What We Do

- ▶ Exposure Therapy
- ▶ Exposure Therapy + Applied Tension

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# 3 Cases of Specific Phobia of Needles/Injection

- ▶ Suzy's Course of Treatment:
  - ▶ Three sessions (ran out of time before scheduled C-section!)
  - ▶ Session 1:
    - ▶ Hierarchy development
    - ▶ Initial exposure to sheathed needles, including viewing, handling, and unsheathing
    - ▶ Loads of processing!
    - ▶ Practice at home with materials and video (<https://youtu.be/RKuUPO6NNcU>)

## 3 Cases of Specific Phobia of Needles/Injection

- ▶ Hierarchy includes (1-10 SUDS):
  - ▶ Blood draw-3
  - ▶ Video of blood draw-8
  - ▶ Mentalization of moment before draw-5
  - ▶ Handling needle-4
  - ▶ Watching someone else get IV-9
  - ▶ Blood draw prep-2
  - ▶ Finding a vein-6
  - ▶ Someone touching lower back-8
  - ▶ Getting epidural-10

# 3 Cases of Specific Phobia of Needles/Injection

- ▶ Suzy's Course of Treatment:
  - ▶ Session 2:
    - ▶ Mild couples therapy
    - ▶ Live IV placement observation
    - ▶ Practice at home with materials and sustained vein pressure/mobilization
  - ▶ Session 3:
    - ▶ Processing planned and unplanned exposures
    - ▶ Discussion regarding safety behaviors

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# 3 Cases of Specific Phobia of Needles/Injection

## ▶ Corrine's Course of Treatment:

- ▶ 8 sessions, inpatient and outpatient

### ▶ Session 1:

- ▶ Rationale for exposure
- ▶ Relationship building

### ▶ Session 2:

- ▶ Hierarchy development
- ▶ Initial exposure to cartoon drawings, still images

### ▶ Session 3:

- ▶ More still images
- ▶ Imaginal exposure

### ▶ Session 4:

- ▶ Videos, videos, and more videos

### ▶ Session 5:

- ▶ Videos
- ▶ Handling materials

- ▶ Mock IV placement

### ▶ Session 6:

- ▶ Mock IV placement

- ▶ Observation and role play

### ▶ Session 7:

- ▶ Actual blood draw
- ▶ Processing failure

### ▶ Session 8:

- ▶ Processing success and future

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## One Less Successful Case

- ▶ Reba is a 52-year-old divorced woman who presented for treatment of specific phobia of needles during the COVID-19 pandemic with the goal of receiving her vaccination in anticipation of future travel. She is self-referred. She is partnered and employed in a clerical town position. She reported a lifelong fear of needles resulting in essentially no non-emergency medical care for 20+ years. She has not received any preventative care or vaccinations for that interval. She has also been identified as pre-diabetic and instructed to monitor her glucose with home testing which she has never done. She has no other psychiatric history. She recalls being restrained as a child and several instances of injection that she describes as extremely painful. Indeed, she characterizes injections as resulting in severe pain. Her typical response to these situations is to flinch, flee, or strike out at others, which causes substantial embarrassment. She is also extraordinarily careful handling sharp objects for fear of cutting herself unintentionally.

## Further Reading & Resources

- ▶ Overcoming Medical Phobias: How to Conquer Fear of Blood, Needles, Doctors, and Dentists
  - ▶ Martin Antony, PhD & Mark Watling, MD
- ▶ Mastering Your Fears and Phobias
  - ▶ Michelle Craske, PhD, Martin Antony, PhD & David Barlow, PhD
- ▶ Face Your Fears
  - ▶ David Tolin, PhD
- ▶ [ABCT Find-A-Therapist](#)
- ▶ [ADAA Find-A-Therapist](#)