



— SYDNEY —  
PHOBIA CLINIC

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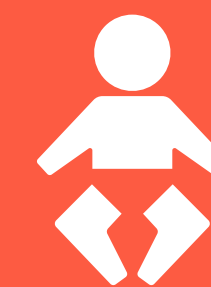




# The Problem

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Anxiety. Fear. Pain.



**90% Children**  
Very frightened  
of needles



**25% Adults**  
Avoid hypodermic  
needle procedures

Resource intense  
Practitioner & Patient  
stress  
Healthcare Avoidance



## Phobia myths:

Everyone has one

The mildest of issues, don't need to be treated or taken seriously

Something traumatic must have happened

Can't be fixed

Not a psychological issue, hypnosis only

People just need to get over it

"it's not *that* painful"





Needle phobia- a **diagnosable psychological disorder**.

DSM 5 criteria: Specific Phobia, 300.29 Blood, injury, injection (BII) type

- Marked fear or anxiety about the specific situation (including crying, tantrums, clinging in children)
- The situation almost always provokes immediate fear or anxiety
- The situation is actively avoided or endured with intense fear or anxiety
- The fear or anxiety is out of proportion to the actual danger posed by the situation
- The fear or anxiety is persistent, typically lasting for 6 months or more
- The fear, anxiety, or avoidance causes clinically significant distress or impairment in important areas of functioning.

## Interesting facts about needle phobias:

Affect men more equally with women, compared to other phobias- several theories about why this is

These are our fainters <- and this is often a focus of the phobic concern

While the prevalence rates are around 10-15% for clinical cases, subclinical needle anxiety prevalence is up around 40% and this is still associated with unhelpful behaviours/attitudes towards procedures

Can generalize into interesting areas/ can *not* generalize into expected areas

It's different for every needle phobia person- what it easier/harder, included/not included, and the specific concern...

## Common concerns associated with needle phobias

Needles hurt/ I can't cope with the pain	What if I faint	I can't handle the sight of it/ the sight of blood	I will feel trapped	A needle piercing the skin is the worst feeling ever	It will be dehumanizing/ it will be done against my wishes
I will be out of control/ I can't handle being out of control	Something could go terribly wrong	What if I have a panic attack	Injections are disgusting/ unnatural	It always goes badly	I will freak out and it will be embarrassing

## Development of phobias

*Traumatic event in childhood*

Negative learning experience

Vicarious learning experience

Negative portrayal influencing initial learning

Lack of latent inhibition

## Maintenance of phobias

Subsequent reinforcing events

Avoidance/ subtle avoidance behaviours

The phobic avoidance can actually create self-fulfilling reinforcing events, by avoiding proactive positive health appointments, this leads the 'big ones' as the remaining events, reinforcing the horror of *all* medical procedures



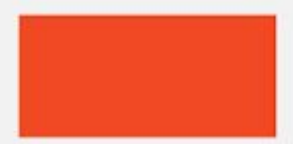
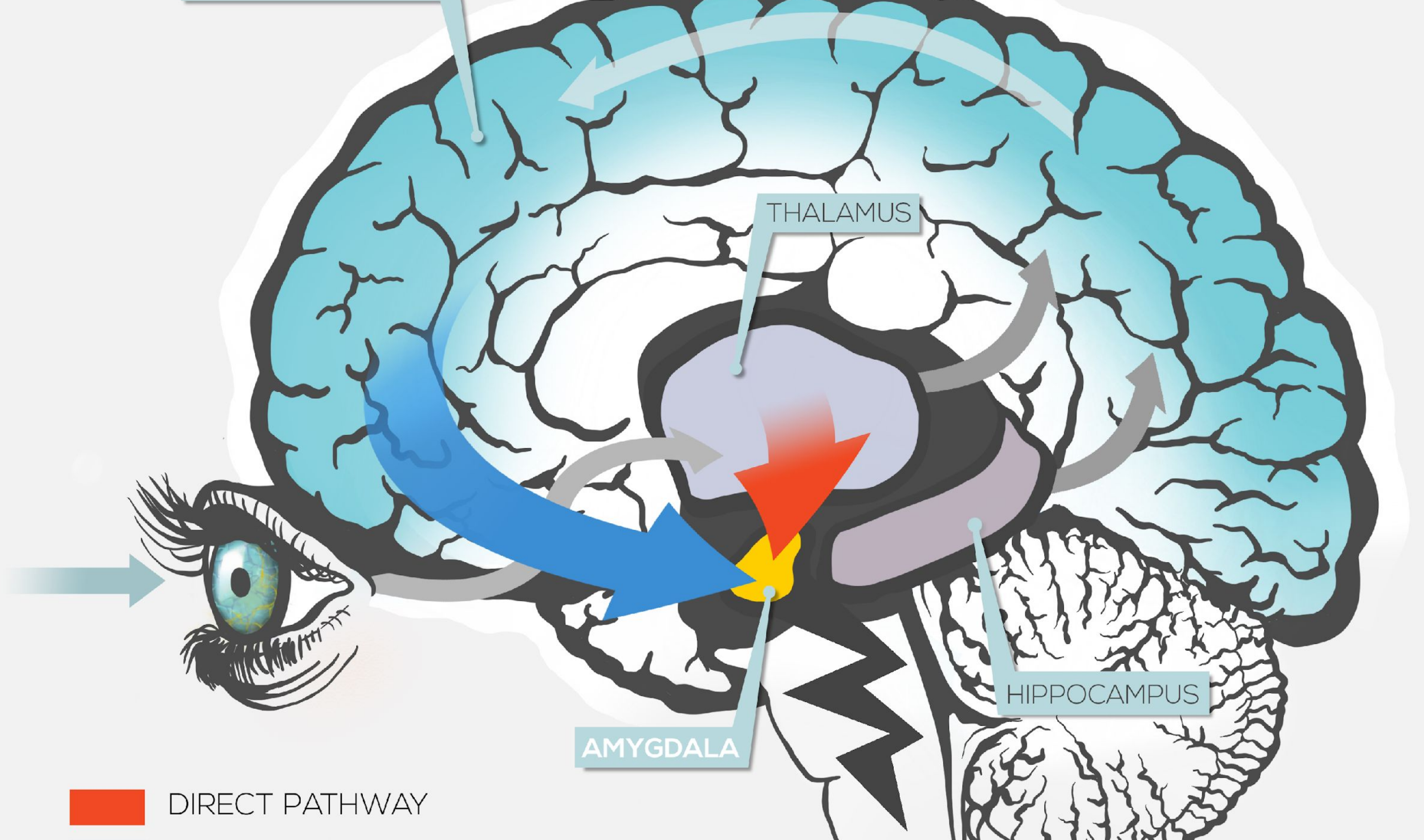
Fear and phobia-  
the fight or flight response





Anxiety Symptom	Adaptive response
Disturbed breathing rate	Increase oxygen available to the body
Increased heart rate	Transport oxygen around the body
Sweating	Cool body down
Nausea/ butterflies	Suspend digestion, redivert resources
Agitation/restlessness	Preparation for action

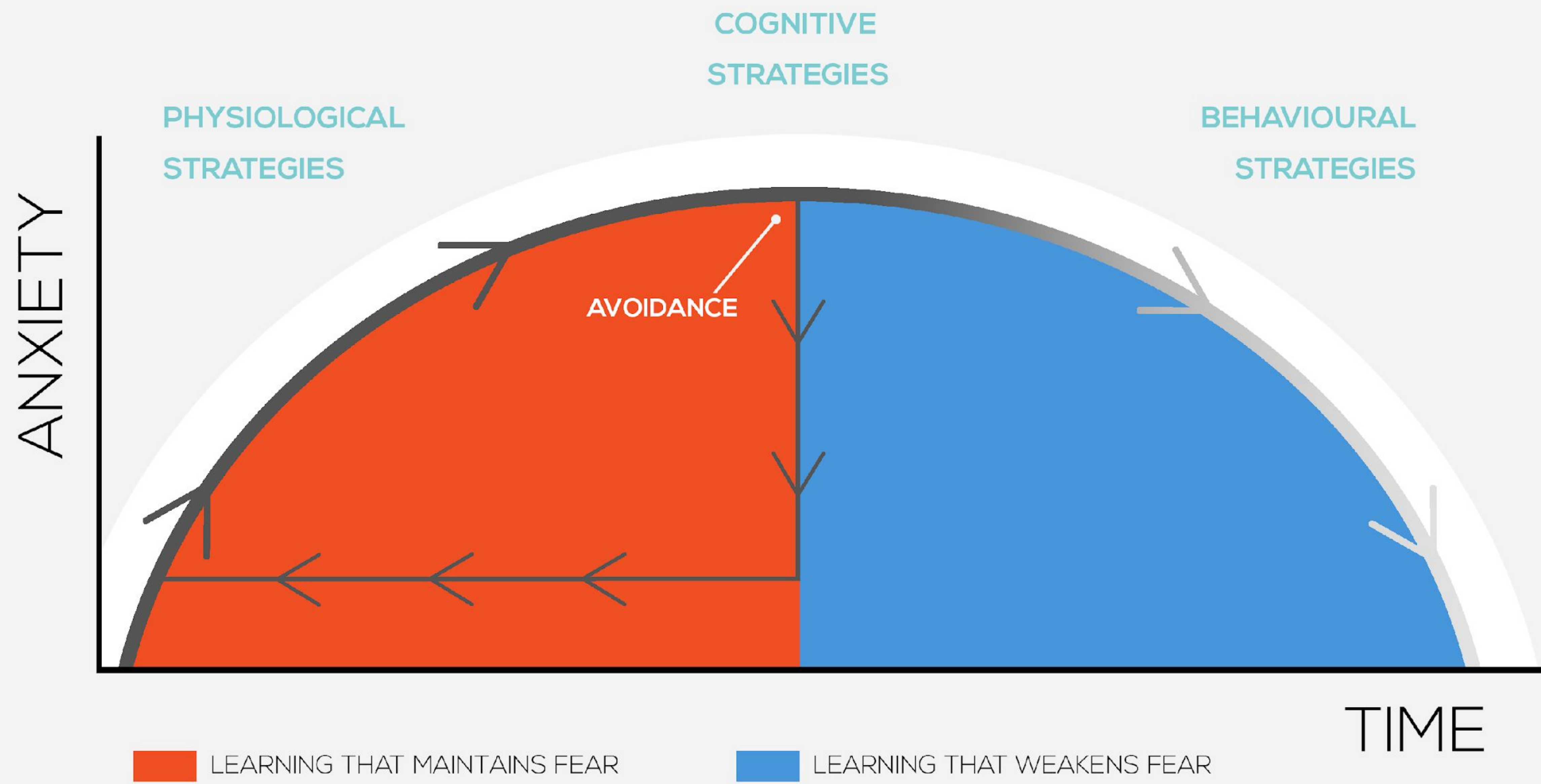




DIRECT PATHWAY

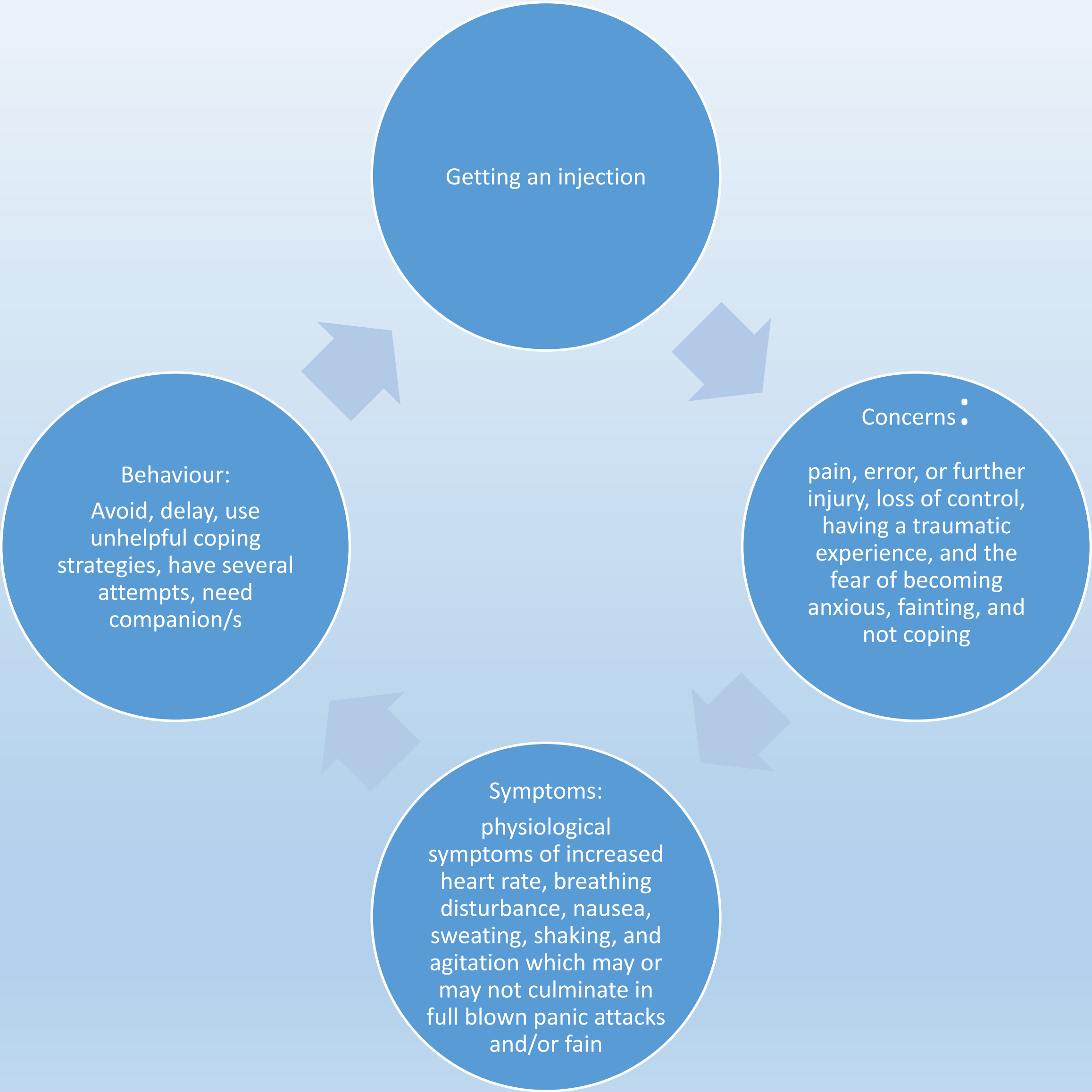


Learning Theory





CBT example of phobic cycle:





## Impact of needle phobia

All phobic individuals:

Have a strained relationship with the health system

Outright avoid medical procedures of concern

Rely on a suite of unhelpful coping strategies

Are time-consuming and somewhat burdensome on medical professionals

They are individuals who are not having investigative blood tests and so are not discovering underlying health conditions in the earlier stages; individuals who are not considering family planning due to medical procedures involved in pregnancy and labour, or who are not having routine procedures during pregnancy at the risk of their health and the health of their pregnancies. These are certainly individuals who are not having recommended vaccinations for flu season, travel, or to protect vulnerable members of our community (whooping cough).

Therefore, we expect that this is a group who would avoid, or at least procrastinate, getting any upcoming COVID vaccine and thereby interfere with national goals for vaccine uptake.



## The impact of COVID on needle phobia



We have seen an increase in needle phobia referrals

We have seen concerns directly related to COVID-

Media related (difficulty watching the news due to images shown)

Concern for messaging around vaccination

Anxious apprehension about vaccines and the need to have one

Treatment needs to commence in advance of when an injection is needed  
Treatment takes longer for BII phobias (compared to other phobias, ie animals)





## Patient treatment options

Evidence-based treatment, Cognitive Behaviour Therapy with Exposure

- This Way Up- online
- oVRcome- app-based
- Sydney Phobia Clinic- manualised
- Private psychologist- standard



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"We are very pleased oVRcome approached us to pilot the Distraction app.

My patients feel relaxed and less anxious before and during some procedures like injections or minor surgeries.

This is a great example of how Virtual reality intersects with medicine and we are pleased to be the first clinic in New Zealand to embrace this technology in General Practice."

**Dr Pleayo Tovarante**  
Doctors on Cashel, Christchurch



NEEDLE  
**DiSTRACtiON**  
by oVRcome



## What can you do?!

Identify the signs of needle phobia

Normalise, don't dismiss, the concerns

Educate on the reinforcing effect of phobic behaviour and the effectiveness of treatment

Refer proactively to an appropriate service

Be more involved in the gradual exposure

Recognise the time required for treatment





# The Size of the Problem

Needle Events  
in AUS –  
128.4m per  
year (pre  
COVID-19)

- Vaccinations 2.6m
- Hospital Interventions 21m
- GP Injections 9m
- Blood donations 1.3m
- Pathology 94.4m

Most people  
don't like  
needles



50%

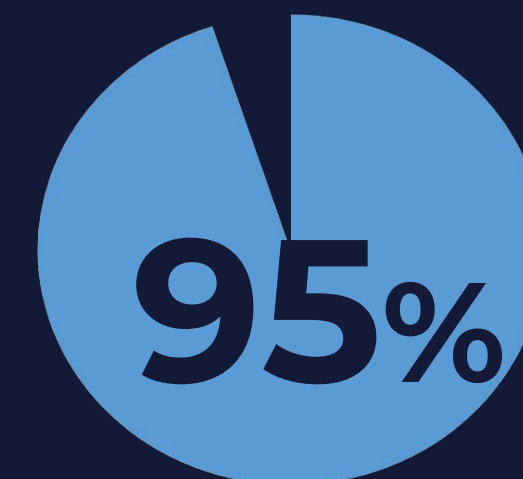
poor experience such as  
pain, bruising, anxiety,  
repeated insertions.



\*NeedleCalm survey 2018,  
n=413

39  
%

reluctant to  
have  
the procedure  
again.



do not like having  
the procedures  
due to pain,  
needles, bruising,  
time consuming,  
and anxiety  
provoking.

Needle  
Phobia  
(Blood Injury  
Injection –  
DSM5)

20-40  
%

of population



95%  
Goal

Increase patient uptake to national  
COVID-19 vaccine strategy