



# Fears, Anxiety & Stress (FAS)

Understanding &  
Recognising FAS  
Part 1





# Learning outcomes

- Understanding types of FAS
- Recognising signs and symptoms
- Your role as a trainer



# Some Definitions!

- **Stressors:** Any environment, object, experience, being which disrupts the bodies normal state of functioning (stress response). 3 categories.
- **Fear:** An aversive emotional state consisting of physical and physiological responses to perceived threat or danger.
- **Anxiety:** A generalised feeling of apprehension or anticipation of danger.
- **Stress:** State of mental or emotional strain resulting from averse or demanding circumstances.







# WTF?

---

- Not all bad!
- Part of life, growth and survival.
- Respond to the world around them and survive
- Protect resources
- Eustress: Good stress
- Distress: Bad stress
- Maladaptive: Prolonged without serving a function, attempts to return to homeostasis fail.



The conundrum...





“Good welfare  
includes freedom  
from fear”

(Fraser, 1993)



# Lasting and unwanted effects of stress...

- Poor emotional wellbeing
- Diminished quality of life
- Fear based learning negative effect
- Progressive decline
- Danger to dog and person
- Barrier to care
- More frequent and higher doses of sedation
- Misdiagnosis & skewed diagnostics
- Poor recovery time, impaired healing & increased risk of post surgery complications



# Genetic mapping

- Genetic markers discovered in dogs fear and aggression traits on chromosomes 20 and 7.
- Canine fear and aggression traits to single haplotypes at the *GNAT3-CD36* and *IGSF1* loci.
- *CD36* is widely expressed, but areas of the amygdala and hypothalamus are among the brain regions with highest enrichment.
- The regions overlap human neuropsychiatric loci for fear, anxiety and aggression
- Confirmed a genetic predisposition
- Suggest a shared molecular aetiology of anxiety across species.







# The Dog Training Instructors Role

- Give dogs a voice and a choice
- Identify signs of FAS
- Teach owners to develop body language awareness
- Work to reduce FAS as much as possible
- Establish cooperative care & voluntary participation
- Proactive approach to everything that animal is going to need to cope with
- Minimise stress escalation
- Adjust business services to accommodate need
- Be creative in finding solutions which suit BOTH species



# Physiology of the stress response: Part 1

- Part 1: changes to sympathetic nervous system (SNS)
- Less than 1 second.
- Physiological response
- Not maladaptive if return to baseline reasonably quickly.

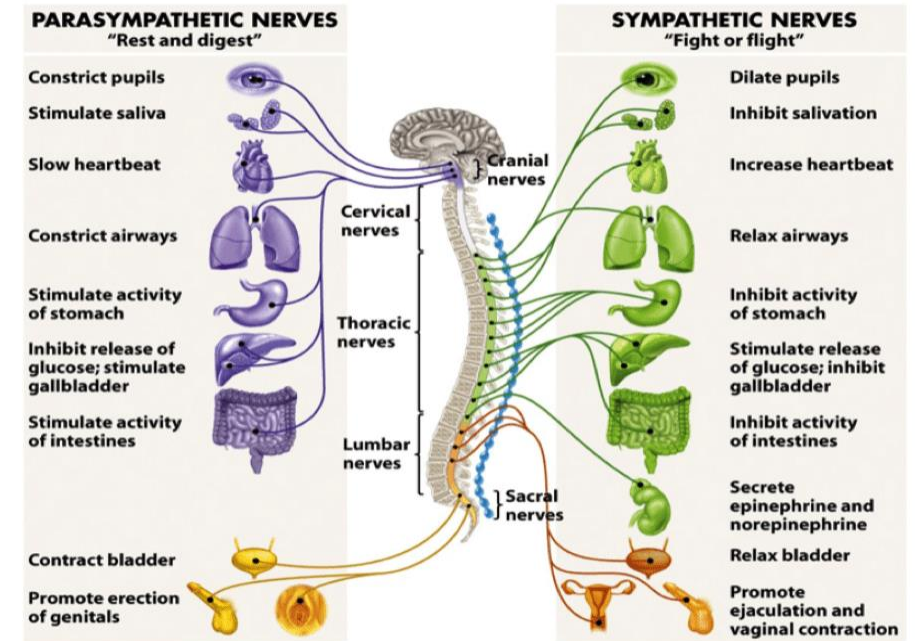
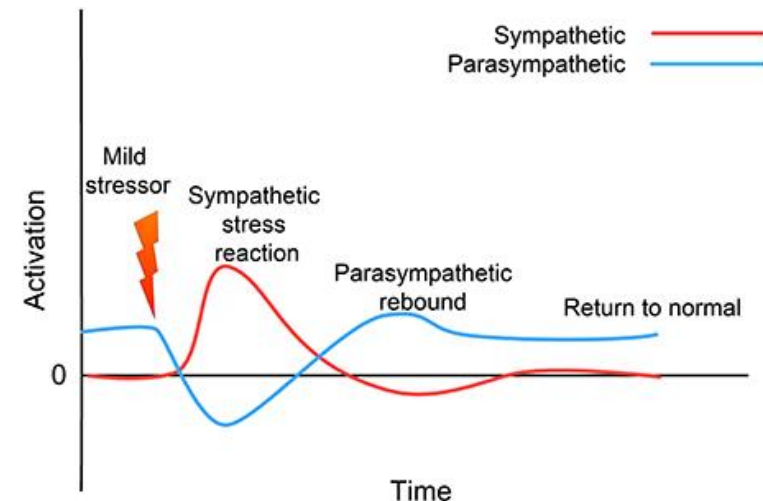
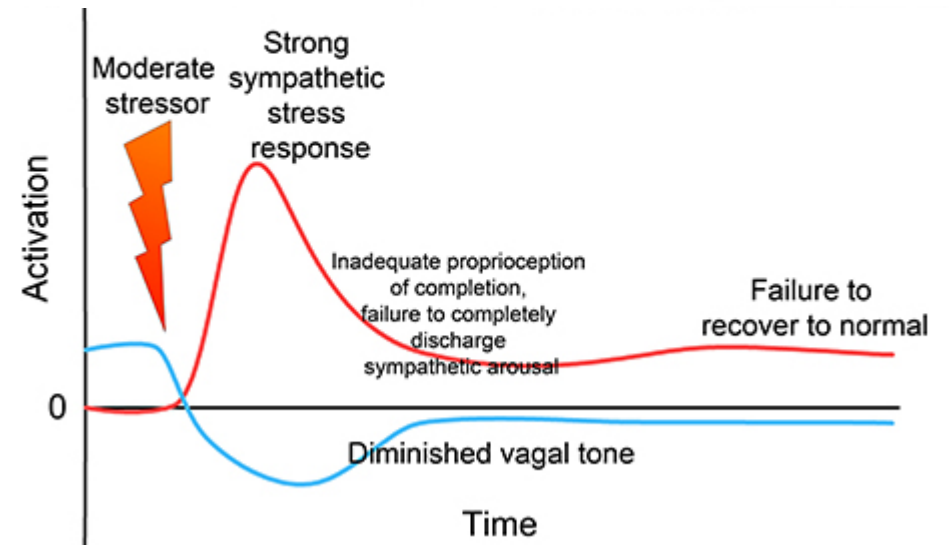
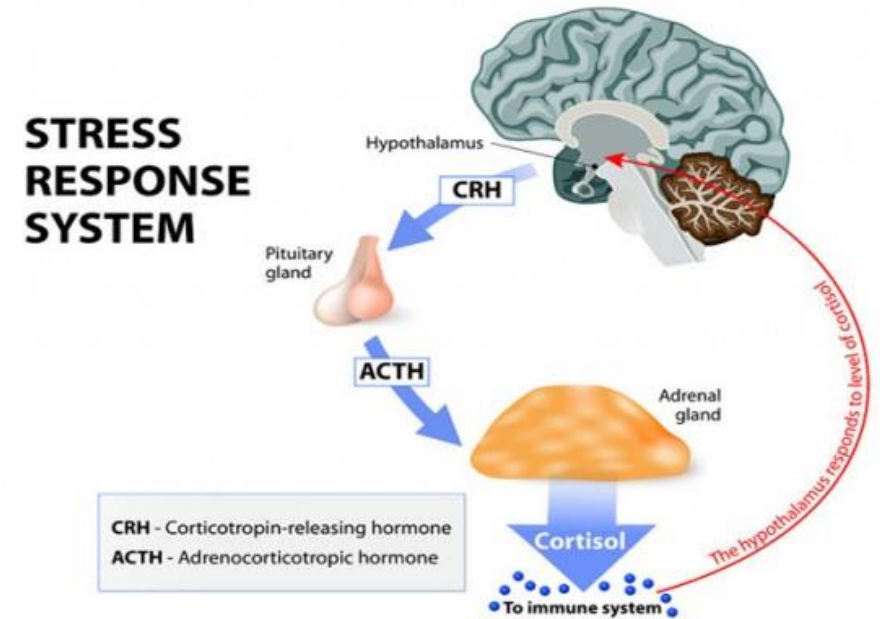


Figure 45-20 Biological Science, 2/e  
© 2005 Pearson Prentice Hall, Inc.



# Physiology of the stress response: Part 2

- Delayed response
- Long term health decline
- Significant trauma from stressor  
OR Prolonged exposure to stressors





## **SYSTEM 1**

**Sympathetic-Adrenal-Medullary  
(SAM) System**

Adrenal Medulla  
(Adrenaline and Noradrenalin)

Adrenaline  
(The "Fight-or-Flight Hormone")

Acute Stress Response

Short-Term Capacity

Affects Cardiovascular System

Mobilises the Body for Action

**Metaphor: Injection**



**VS**

## **SYSTEM 2**

**Hypothalamic-Pituitary-Adrenal  
(HPA) System**

Adrenal Cortex  
(Cortisol)

Cortisol  
(The "Stress Hormone")

Chronic Stress Response

Long-Term Capacity

Affects Immune System

Keeps the Body in a State of Alert

**Metaphor: Drip**



## **SYSTEM 1**

**Sympathetic-Adrenal-Medullary  
(SAM) System**

**VS**

## **SYSTEM 2**

**Hypothalamic-Pituitary-Adrenal  
(HPA) System**

Adrenal Medulla  
(Adrenaline and Noradrenalin)



Adrenal Cortex  
(Cortisol)

Adrenaline  
(The "Fight-or-Flight Hormone")



Cortisol  
(The "Stress Hormone")

Acute Stress Response



Chronic Stress Response

Short-Term Capacity



Long-Term Capacity

Affects Cardiovascular System



Affects Immune System

Mobilises the Body for Action



Keeps the Body in a State of Alert

**Metaphor: Injection**



**Metaphor: Drip**



# Bodily Symptoms



Often missed or misunderstood

- Drooling
- Panting
- Trembling
- Dilated pupils
- Whale eye
- Loss of control over bowels or bladder
- Shedding
- Perspiration
- Muscle tension
- Pheromone release





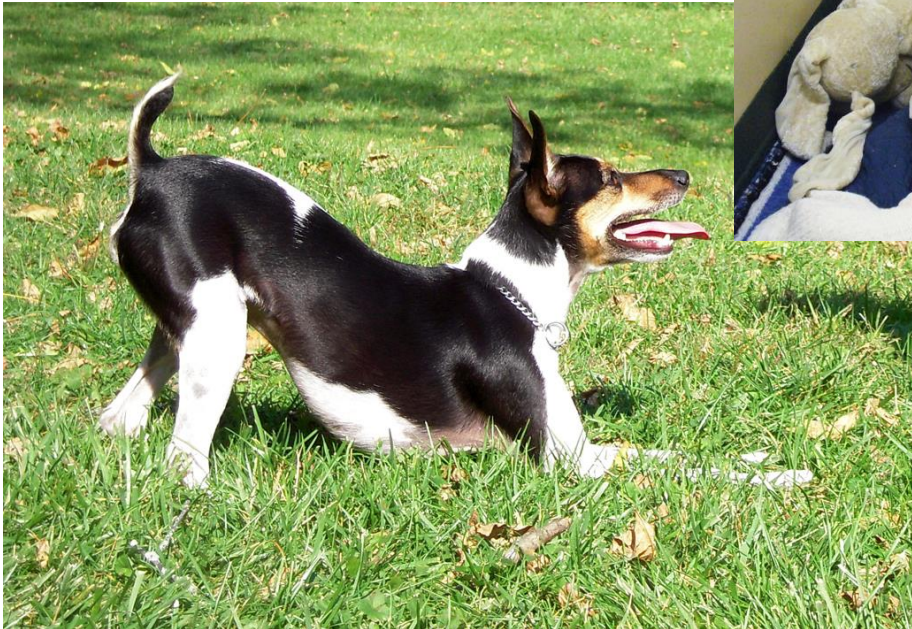
# Body language

- Move/shy away
- Flattened ears
- Tail tucked between the hind legs
- Cowering/hunched over
- Bum tucked
- Lip licking
- Yawning
- Raised hair on the back of the neck
- Avoiding eye contact/averting the eyes



# The danger of isolating behaviours or symptoms...

Environment/circumstances/history/base line/state health  
Whole body picture is essential









# Behaviours

- Fidget/Flight/Freeze/Fight
- Vocalisation
- Submissive urination
- Defecation
- Growling
- Biting/DIB
- Pacing
- Hiding
- Destructiveness
- Clinginess to owner
- Barking
- Change in accepting food
- Displacement behaviours



# The four F's

---

Fidget, flight, freeze, fight



## Fidget/Fret/Fiddle

What does it look like? On edge, unsettled, can't relax, pace, vigilant, overly energetic, silly, skittish, zoomies, "playful/excited".

Where can we see it? When dogs are scared to pass cats.







# Freeze

**What does it look like?** Paralysed with fear, inhibited, immobilised, still or very slow movements, often lifted up, avoids eye contact, unresponsive, calm before storm.

– commonly misunderstood as ‘compliance’ –

**Where can we see it?** Restriction: When fleeing hasn't worked or not possible i.e: dog lifted onto vet/grooming tables, dogs harassed by other dogs.





# Flight

What does it look like? Tuck tail, lower body, ears back, orientation away, muscle tension, hiding, lean away, moving away, quick movements, pull struggle when restrained, escape attempts.

Often misdiagnosed as 'playful'

If cornered, trapped or restrained, prevented from escape may progress to defensive aggression. Often very vocal in a high pitched scream and mouth/snap/aggress if thwarted from escape.

Where can we see it? Rescue videos, dog parks.







[Youtube.com/LetUsWatchAnimals](https://www.youtube.com/LetUsWatchAnimals)

Play (k)





© Hope For Paws



Pause (k)







# Restraint

- More FAS than THE "event" (dog approach/formal examination)
- Highly invasive
- Socially threatening
- Escalate FAS levels
- Requires increasing force or pressure
- Emotional distress



# Fight

What does it look like? Struggle, growl, snap, bare teeth, bite, distancing increasing behaviour. Attempt to drive away threat. Defensive aggression.

Other behaviours haven't worked, needed to escalate.  
Learned component good offence is best defence.

Where can we see it? Groomers, rescue captures, The Dog Whisperer!

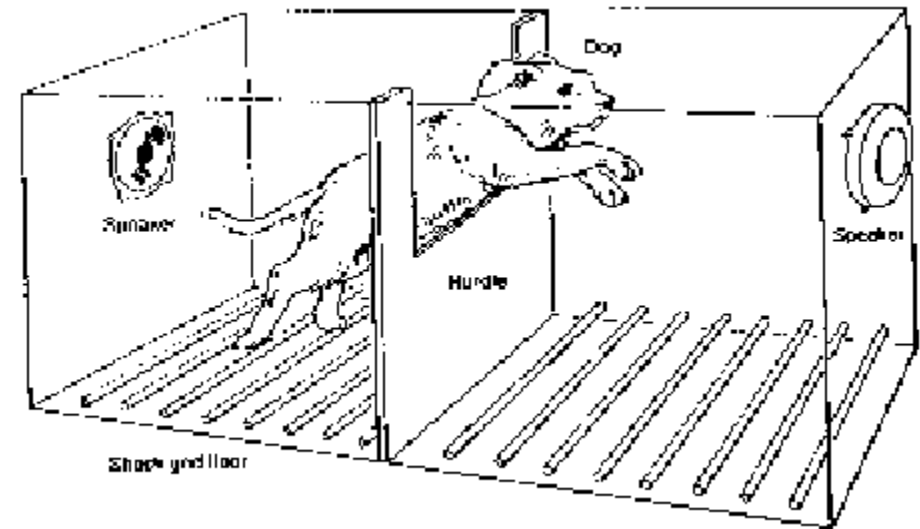


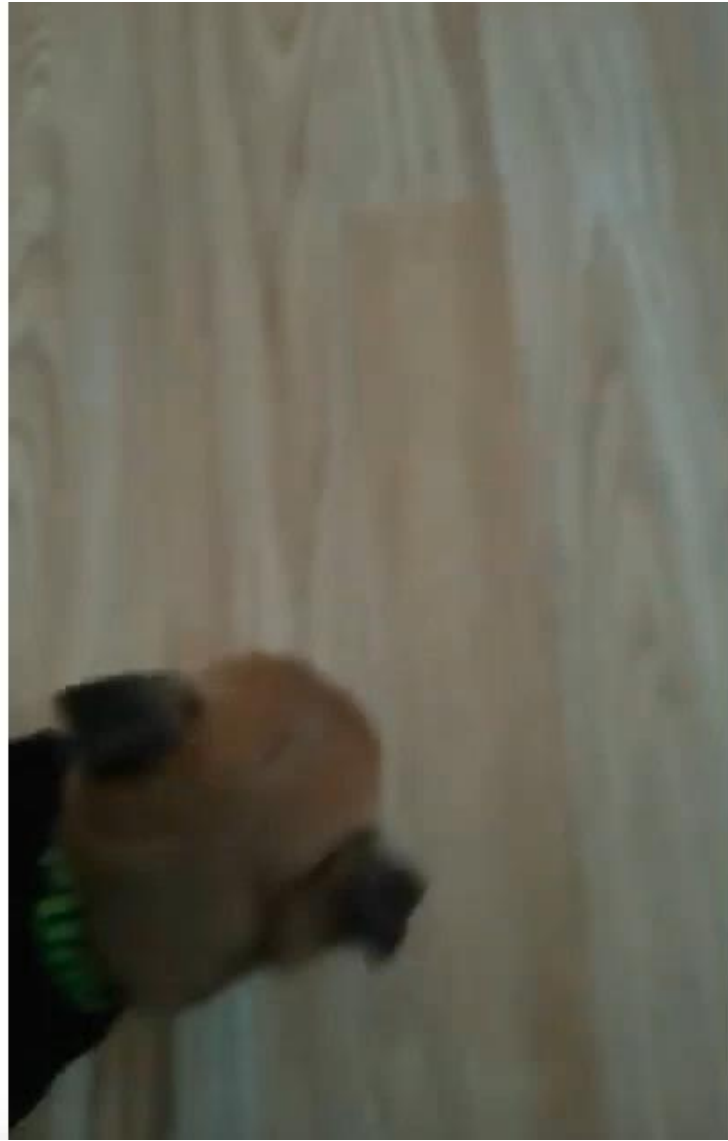




# Learned helplessness...

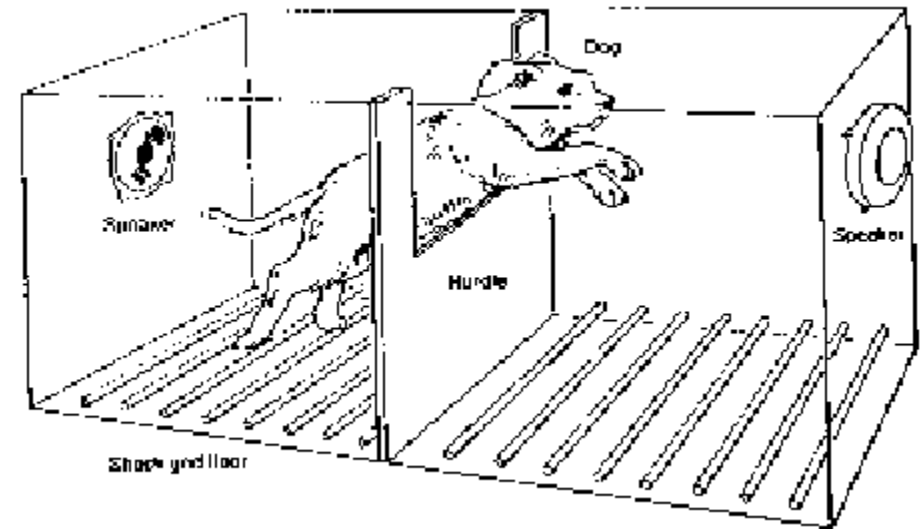
- Learned response: Behaviour has no effect on outcome
- Total shut down, trance like 'Collapsed immobility'
- Stop responding, can't follow direction or respond normally
- Compression garments





# Learned helplessness...

- Learned response: Behaviour has no effect on outcome
- Total shut down, trance like 'Collapsed immobility'
- Stop responding, can't follow direction or respond normally
- Compression garments





# When does FEAR become problematic...

Generalised anxiety	Unavoidable	Phobia
<ul style="list-style-type: none"><li>• Nervous disposition</li><li>• Multiple triggers</li><li>• Co-morbid beh. probs</li><li>• Startles at loud noises</li><li>• Medication essential component</li></ul>	<ul style="list-style-type: none"><li>• Frequent exposure</li><li>• Can't avoid</li><li>• Interferes with quality of life</li></ul>	<ul style="list-style-type: none"><li>• High intensity</li><li>• Generalisation/ "Global fear"</li><li>• Long duration of recovery</li><li>• Interferes with daily life and ability to function.</li></ul>



