



**Agria**   
Pet Insurance

# Agria Breed Stats

*Brechyconference*

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**Agria**   
Djurförsäkring





# Hot Topics on DogWellNet.com

## Brachycephalics

Many articles already on the website on Breed-Specific Breeding Strategies; programs at dog shows, fitness testing, etc.



# Hot Topics on DogWellNet.com

## Brachycephalics

- New formal research from the Royal Veterinary College in the UK
  - Interesting – measuring skulls, etc.
  - Good evidence of the severity of BOAS in individual dogs
- Quoted... *and misquoted* ...

# Statistics / data / information

**All of us show bias when it comes to what  
information we take in.  
*(... and then share)***

**We typically focus on anything that agrees  
with the outcome we want.**

Noreena Hertz

<http://www.brainyquote.com/quotes/keywords/bias.html>

# Background to Agria data: Collaboration since 1994

- Agria Animal Insurance
- SLU – Swedish University of Agricultural Sciences
- 
- University of Guelph, Canada
- Swedish Kennel Club (SKK)

# Background to Agria data: Collaboration since 1994



Agria Animal Insurance

SLU – Swedish University of  
Agricultural Sciences

University of Guelph, Canada

**Partnership !**

***‘Demanded’ by the  
breed clubs/ SKK !***

**Agria**   
Djurförsäkring

# Background to Agria Breed Statistics

- Agria Insurance:
  - **Willingness to share**
  - **Research and development funded by Agria-SKK Research Fund.**
  - Database has been used in **>32 scientific publications** in refereed journals

# Background to Agria Breed Statistics: Dogs

- Approximately **40% of the Swedish population**
  - **80% of insured dogs are purebred**
  - On average **>76%** of dogs within a breed are **registered with SKK**
- Dogs insured to any age (best representation <12 years)
- Coverage is very broad; some exclusions
  - Owner must realize there is a problem and take dog to vet.
  - Visits within 120 days must exceed ‘self-risk’
- Stats calculated **per dog** NOT per claim or visit
  - Therefore may differ from veterinarians’ perceptions
  - ‘Conservative estimates’



# Agria Breed Statistics and the Work of Breed Clubs

## Identifying the *most important* conditions in a breed

- Most **common** conditions – i.e. affects the most dogs?
- Breed shows a **higher risk** compared to other breeds
  - Hereditary, use, other reasons
- The most **severe**
  - **Health**: veterinary care, death
  - **Welfare** – suffering, poor quality of life, impact on overall soundness and well-being

# Agria Breed Statistics and the Work of Breed Clubs

## Identifying the *most important* conditions in a breed

- Those conditions we can **measure**/ detect and about which **something can be done...**
- Conditions recognized by the public as affecting health / welfare
  - **Breathing**
  - **Eyes**

# Agria Breed Statistics and the Work of Breed Clubs

## Identifying the *most important* conditions in a breed

- Those conditions we can **measure**/ detect and about which something can be done...
- Conditions recognized by the public as a threat to welfare
- **Breathing**
- **Eyes**

Agria statistics are part of  
the 'Big Picture'

# Population Statistics

## Interpretation:

number sick or number dead

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**dog-years-at-risk (HEALTHY AND SICK DOGS)**  
(number of dogs and how long we followed them)

**How common is it?**

- **Rate** per 10,000 DYAR
- **Risk** compared to All Breeds (Rate in Breed divided by rate in All Breeds)

**Is the condition more or less likely in this Breed compared to All Breeds, combined?**



# Updates: 2006-2011

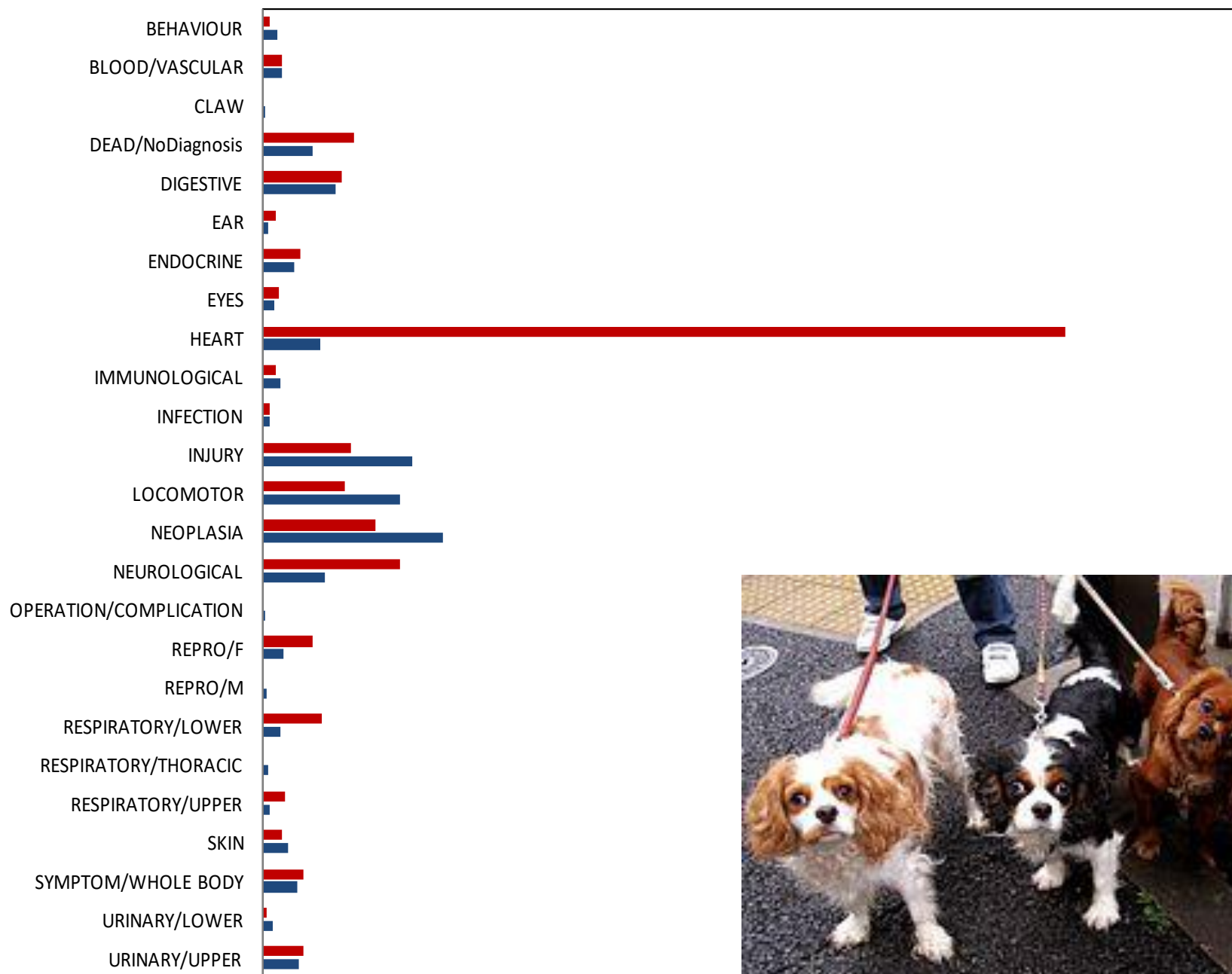
- 6 years of data
  - Over 120 breeds
  - Comparative: **Breed: All Breeds**

## Examples of Dog Updates...



## General Causes of Death : Rates in 2003/06

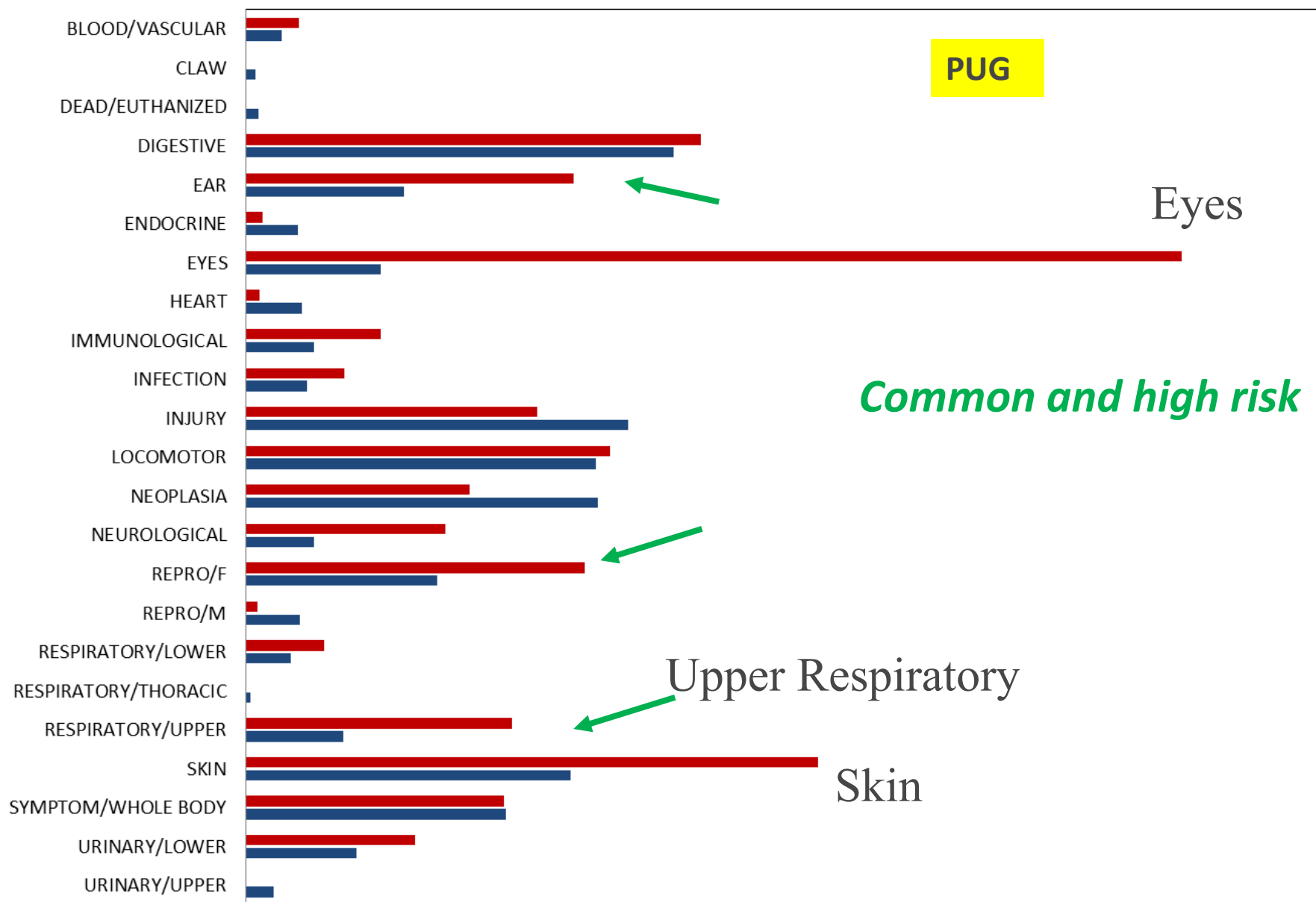
■ Cavalier King Charles Spaniel



# General Causes of VCEs : Rates in 2006-2011

■ Pug

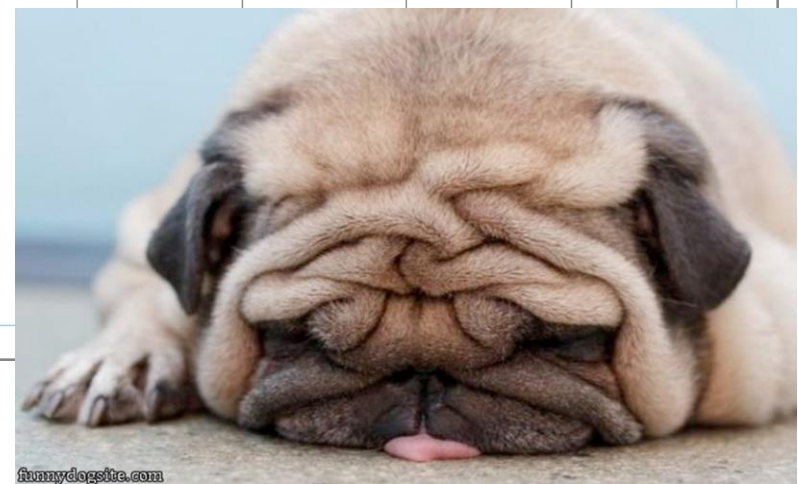
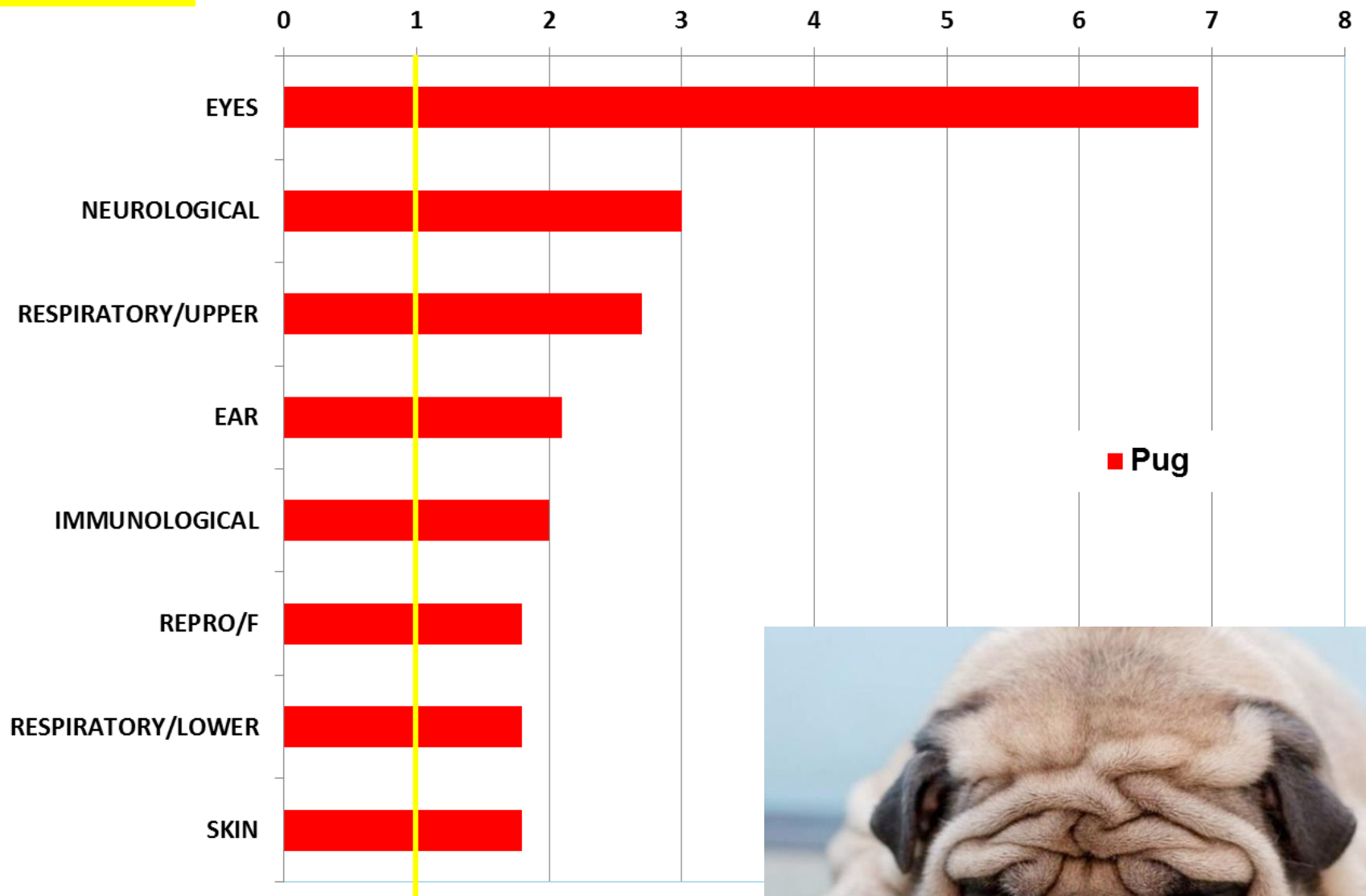
■ ALL BREEDS





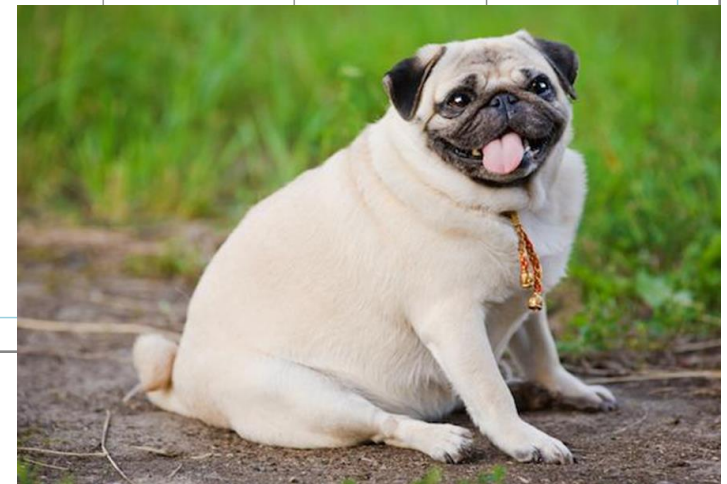
## General Categories

of VCEs Ordered by Relative Risk compared to All Breeds 2006-2011

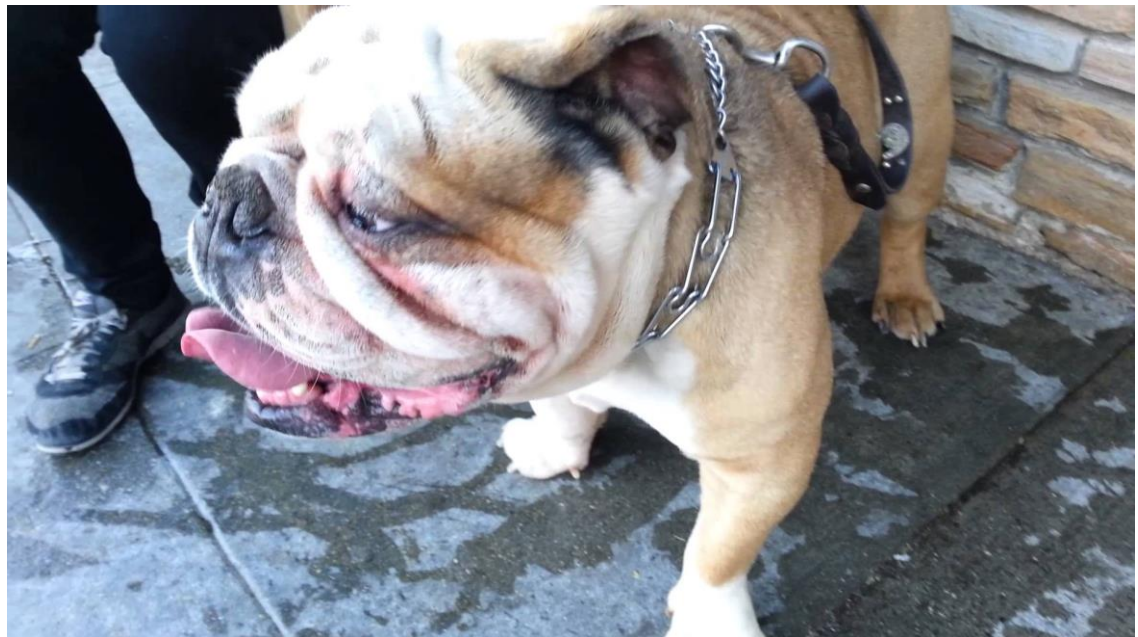
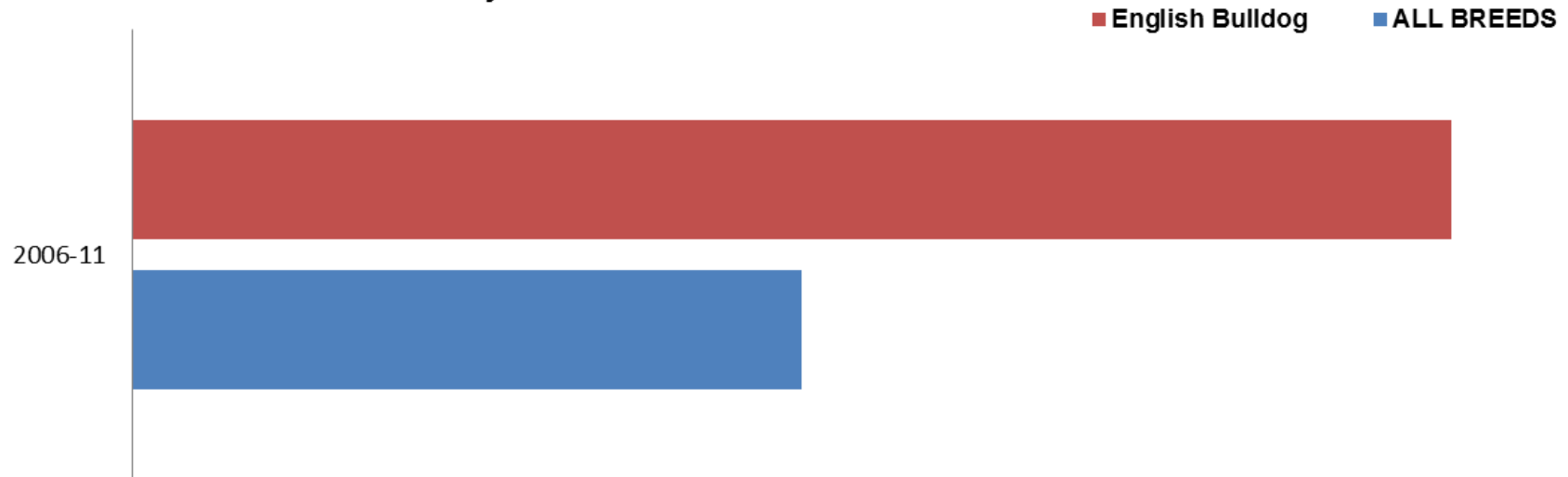


## More Specific Diagnoses

of VCEs Ordered by Relative Risk: Pug compared to All Breeds 2006-2011



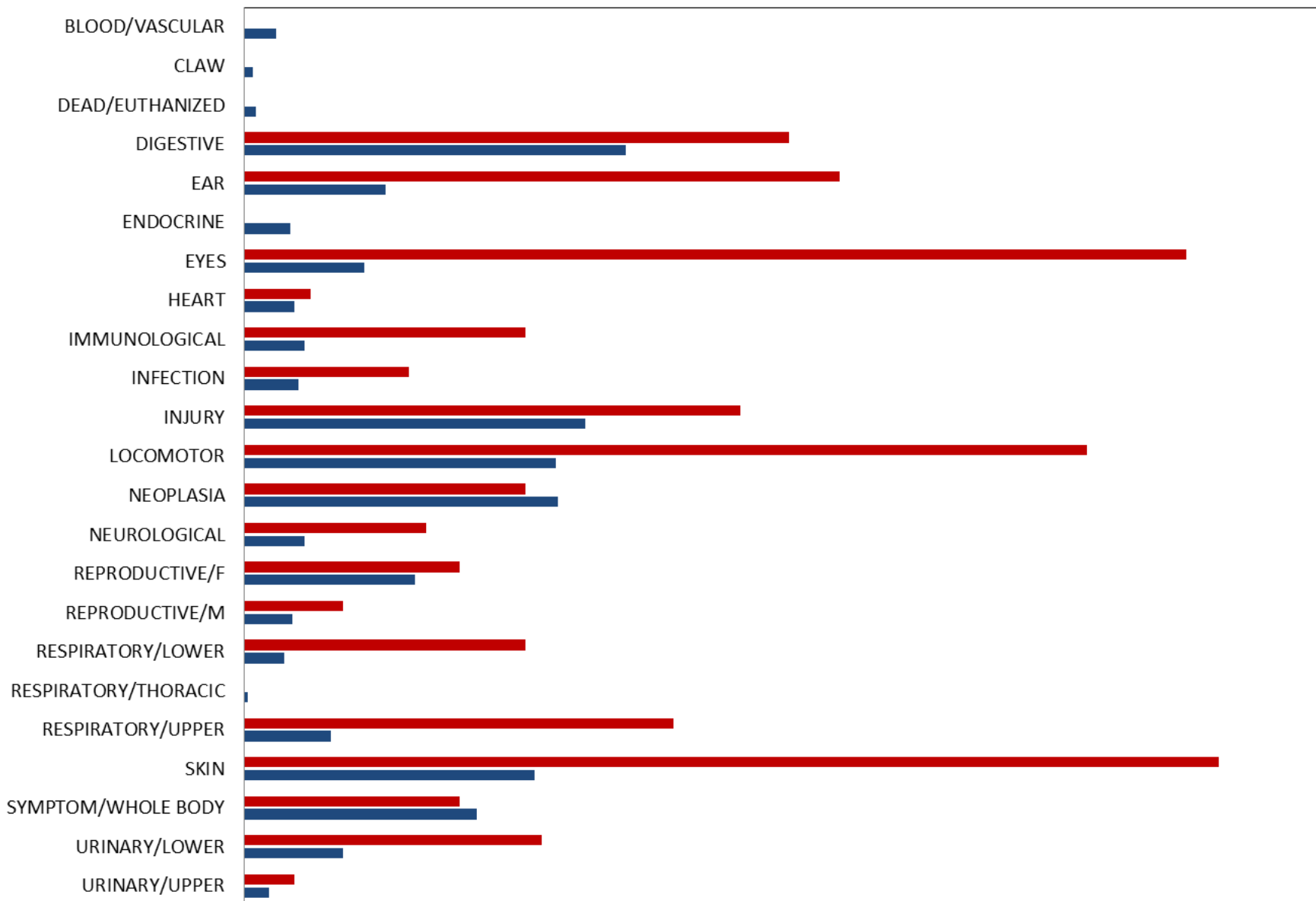
## Overall Rates of Veterinary Care 2006-2011



# General Causes of VCEs : Rates in 2006-2011

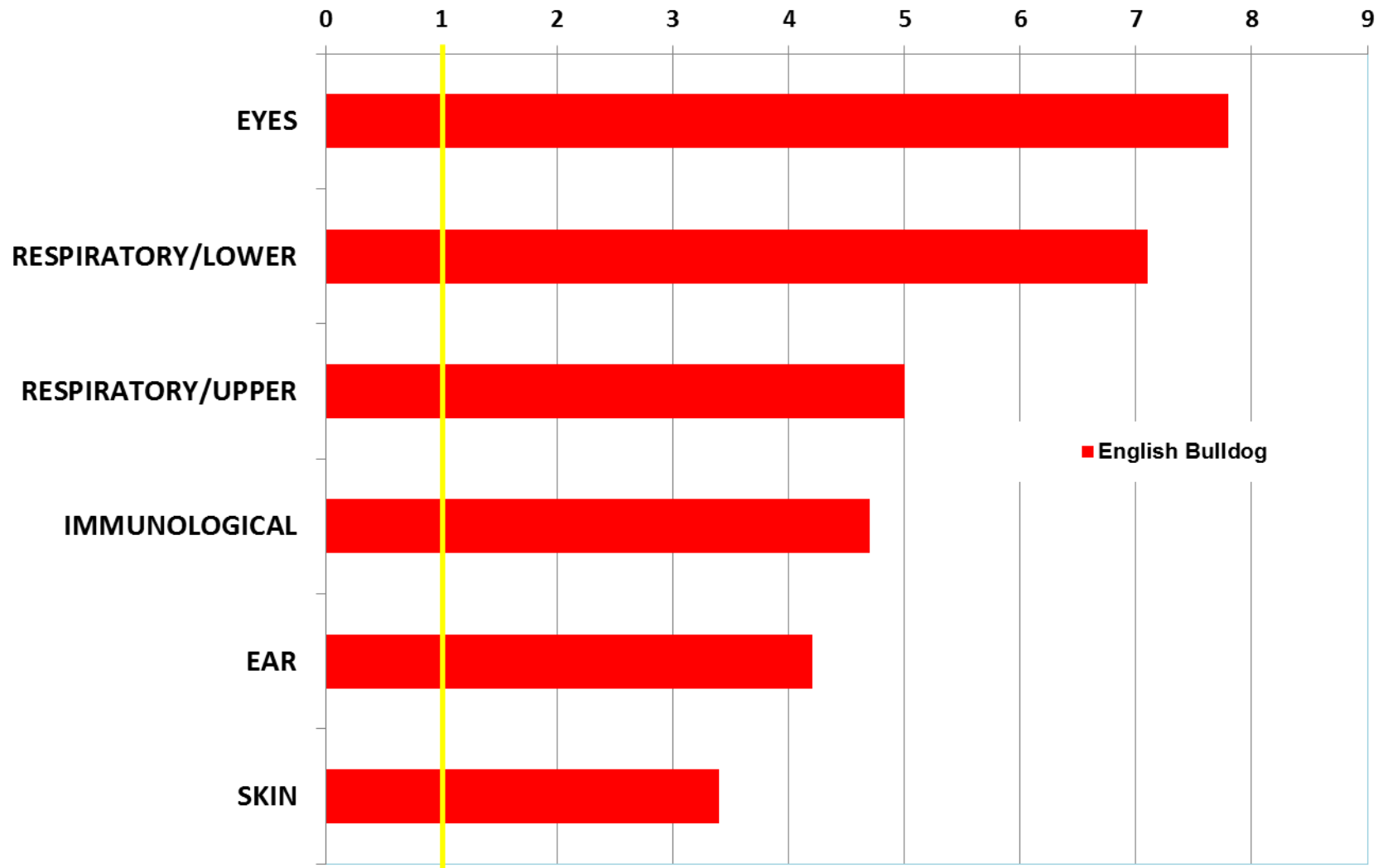
■ English Bulldog

■ ALL BREEDS

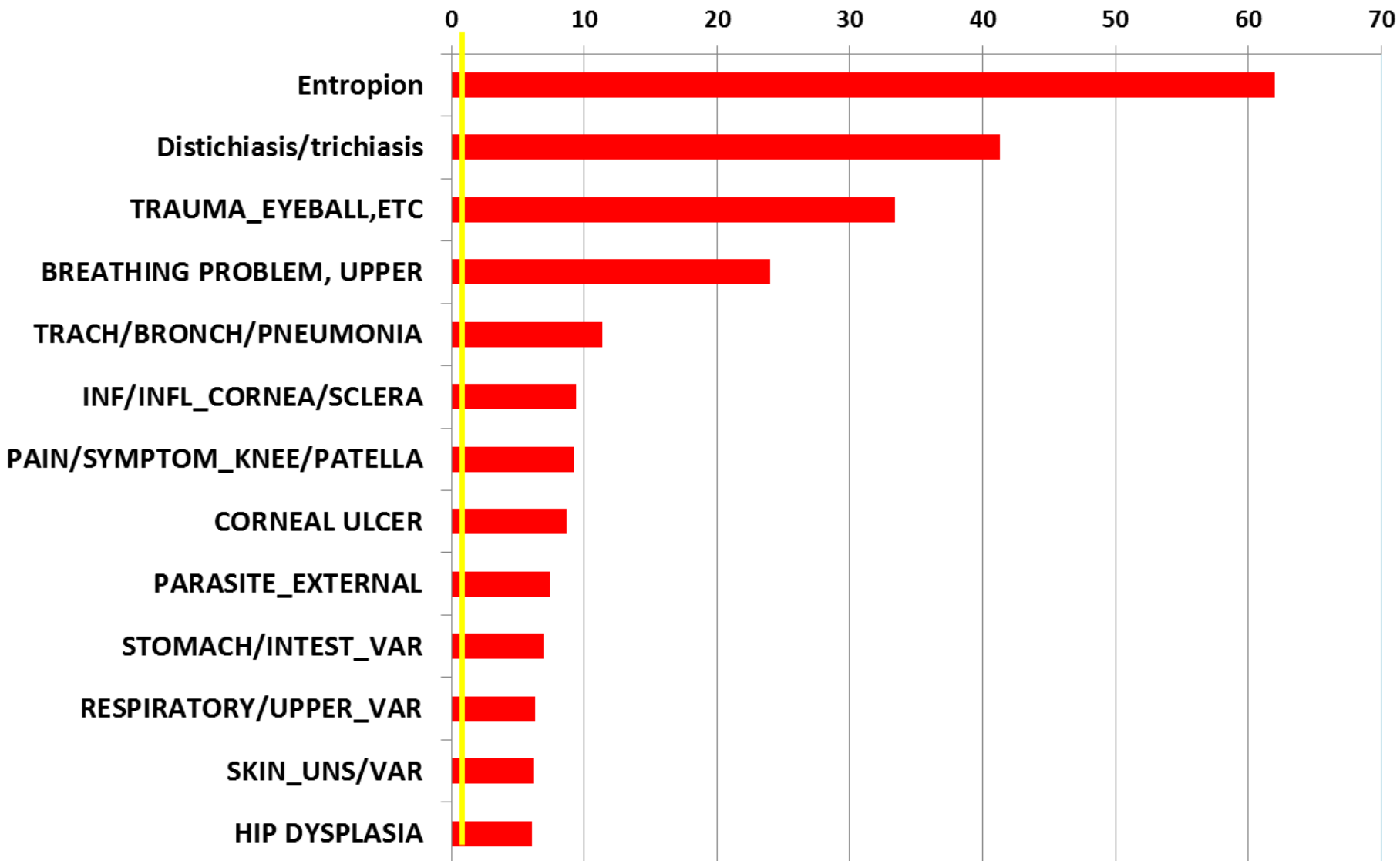




General Causes of VCEs Ordered by Relative Risk compared to All Breeds 2006-2011



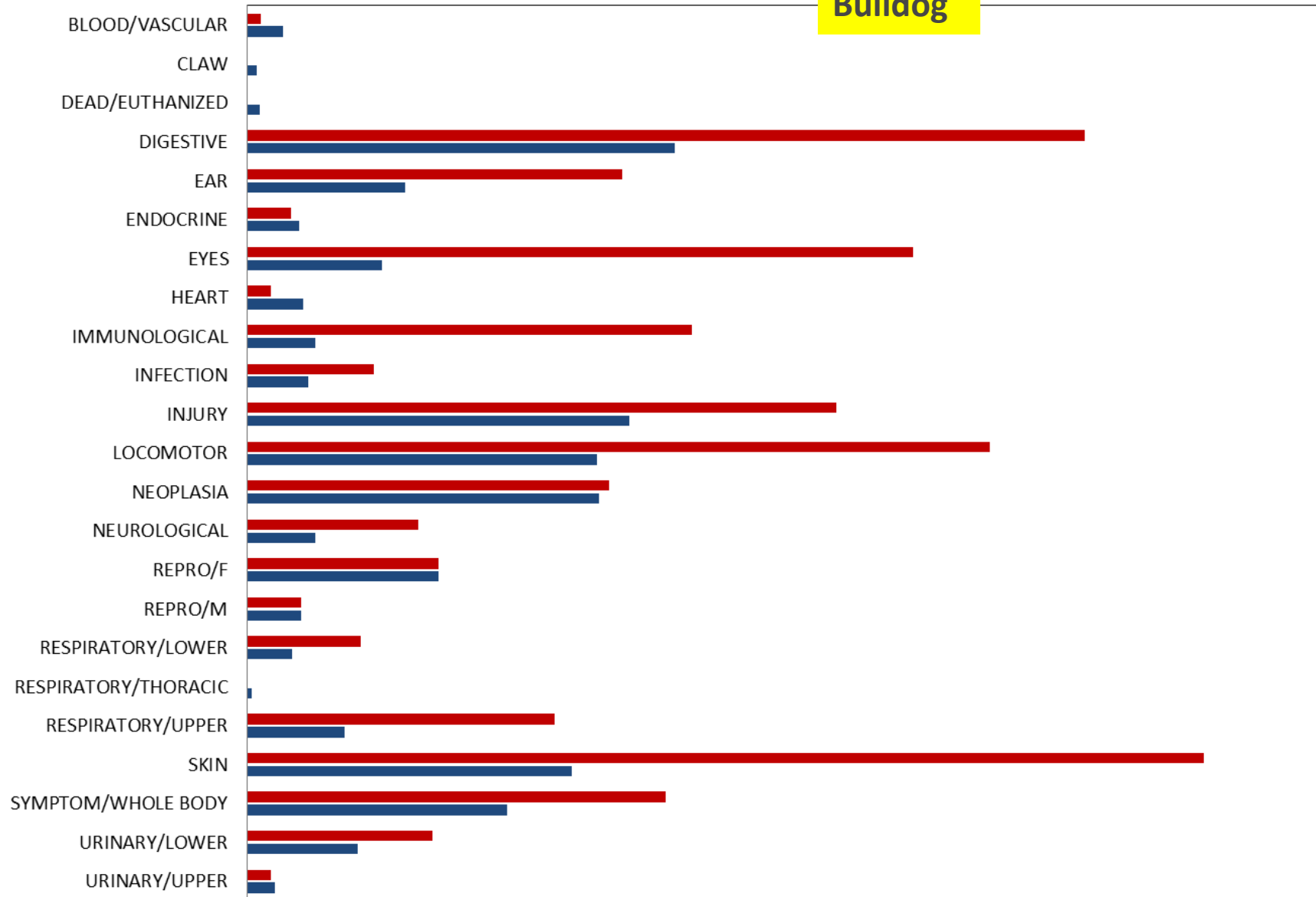
Specific Causes of VCEs Ordered by Relative Risk: English Bulldog compared to All Breeds 2006-2011



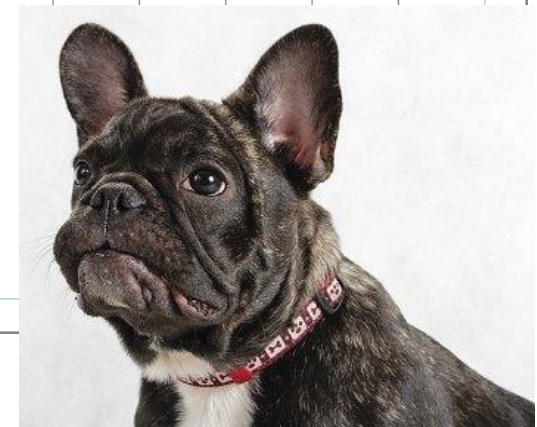
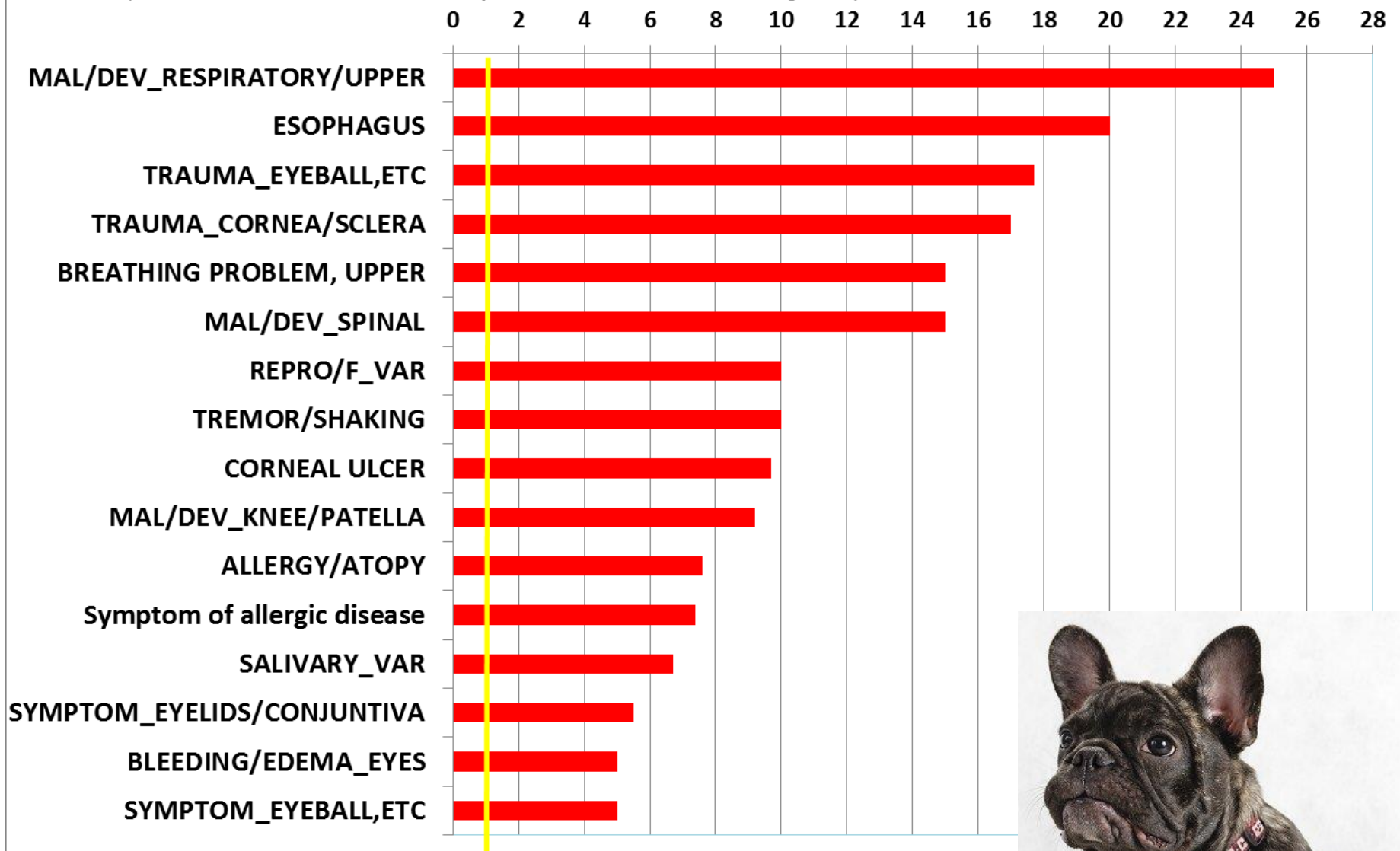
# General Causes of VCEs : Rates in 2006-2011

**French  
Bulldog**

■ ALL BREEDS



Specific Causes of VCEs Ordered by Relative Risk: French Bulldog compared to All Breeds 2006-2011





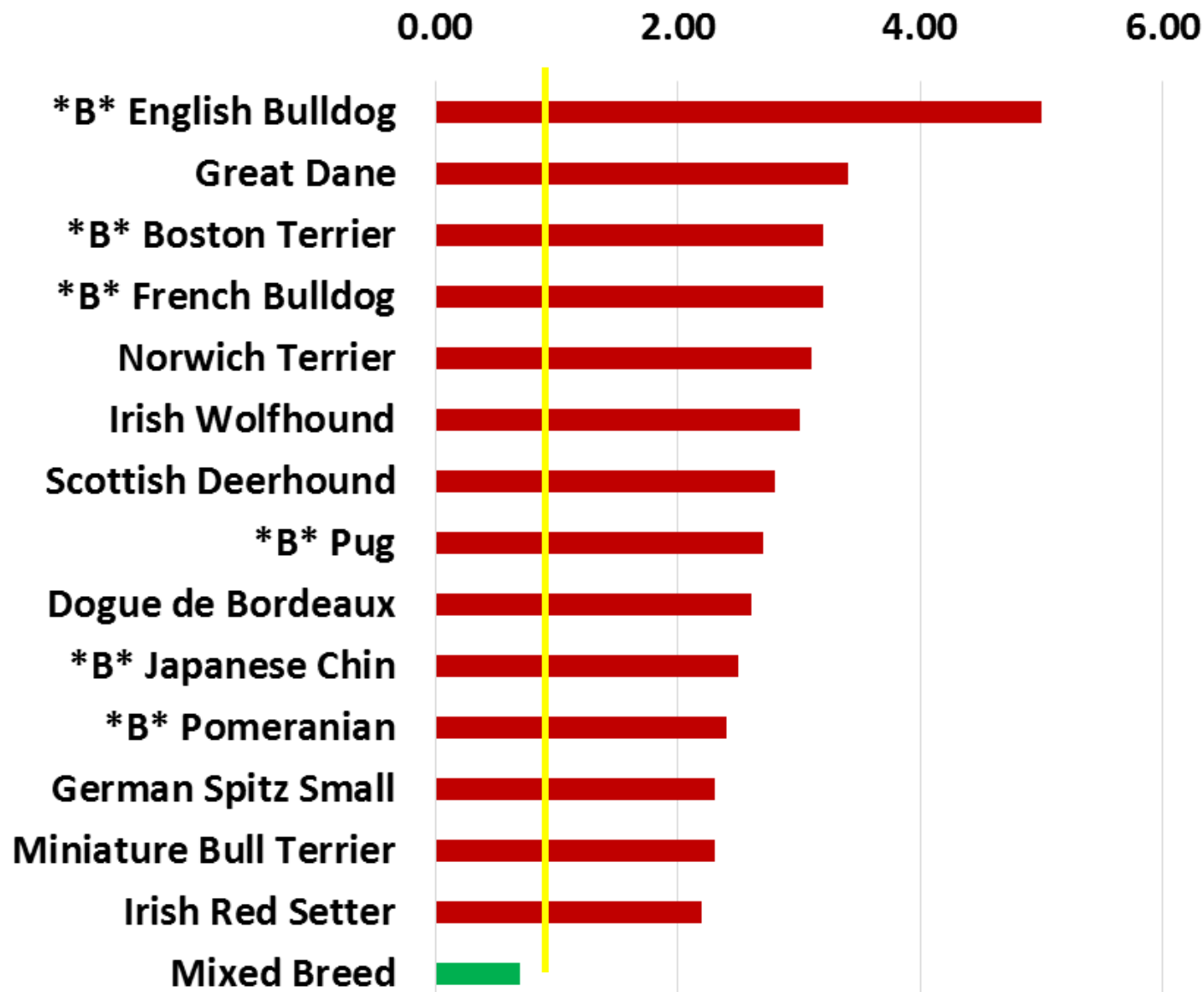
# Overall – similar risk... but higher for certain conditions



■ Griffons

Note – some of the high risk eye problems are not those generally associated with Brachycephaly.

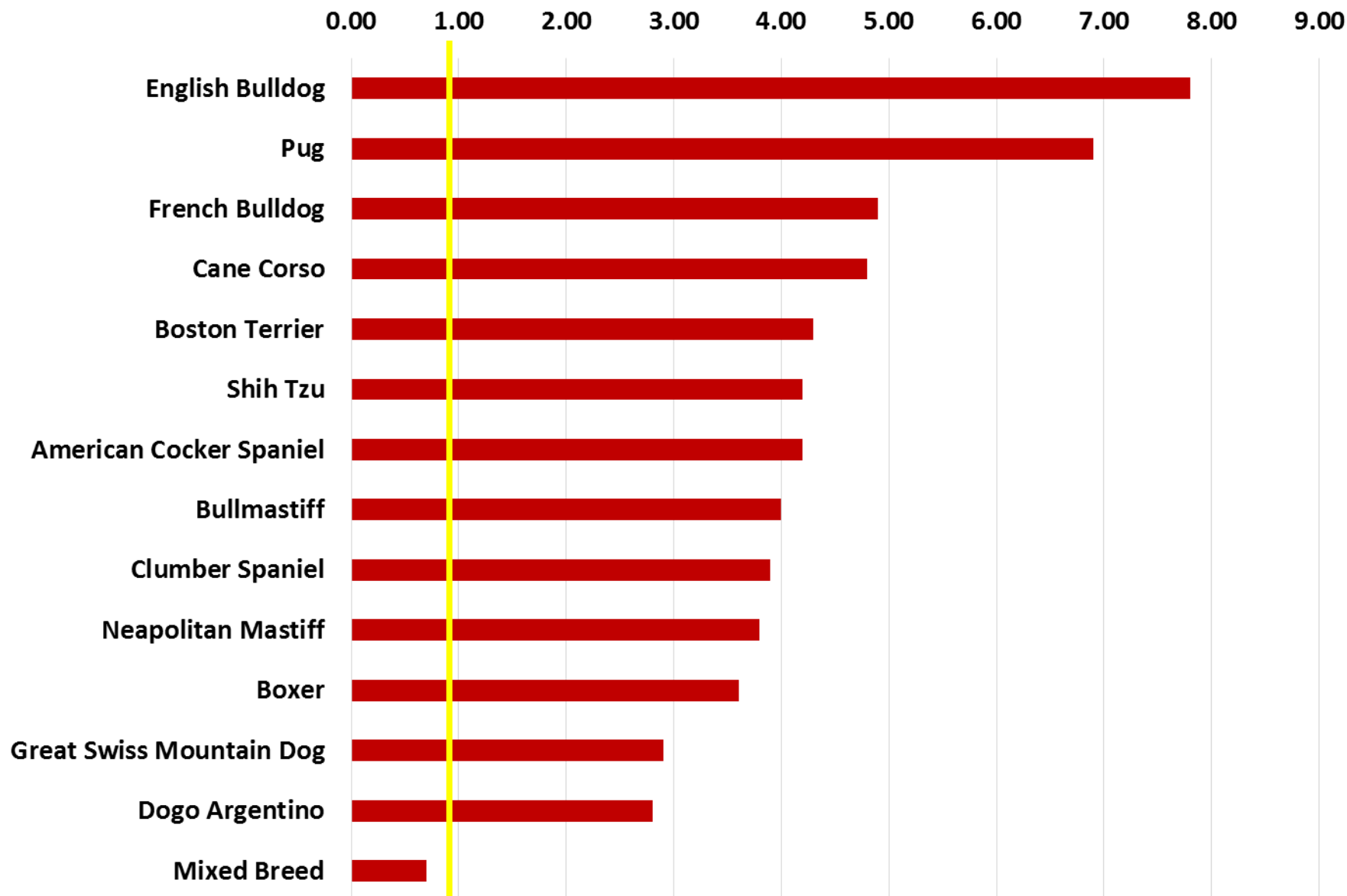
## RESPIRATORY/UPPER: Relative Risk Compared to All Breeds



**RESPIRATORY/UPPER: Ranking for  
Relative Risk Compared to All Breeds**

<b>Brachys</b>	<b>Rank/ 200</b>
English Bulldog	1
Boston Terrier	3
French Bulldog	4
Pug	8
Dogue de Bordeaux	9
Japanese Chin	10
Boxer	25
CKCS	27
Griffons	46
Pekingese	47
Shih Tzu	62
Affenpinscher	77

## Veterinary Care EYES: Risk Compared to All Breeds



**Veterinary Care Eyes: Ranking for  
Relative Risk Compared to All Breeds**

<b><u>Brachys</u></b>	<b><u>RANK</u></b>
English Bulldog	1
Pug	2
French Bulldog	4
Boston Terrier	6
Shih Tzu	7
Boxer	12
Griffons	20
Pekingese	21
CKCS	22
Affenpinscher	31
Japanese Chin	58

Data 2009-2013

## RR for Corneal Ulcer

0.0 2.0 4.0 6.0 8.0 10.0 12.0

Brachycephalics



CKCS



Mollosoids-Brachy



TOY



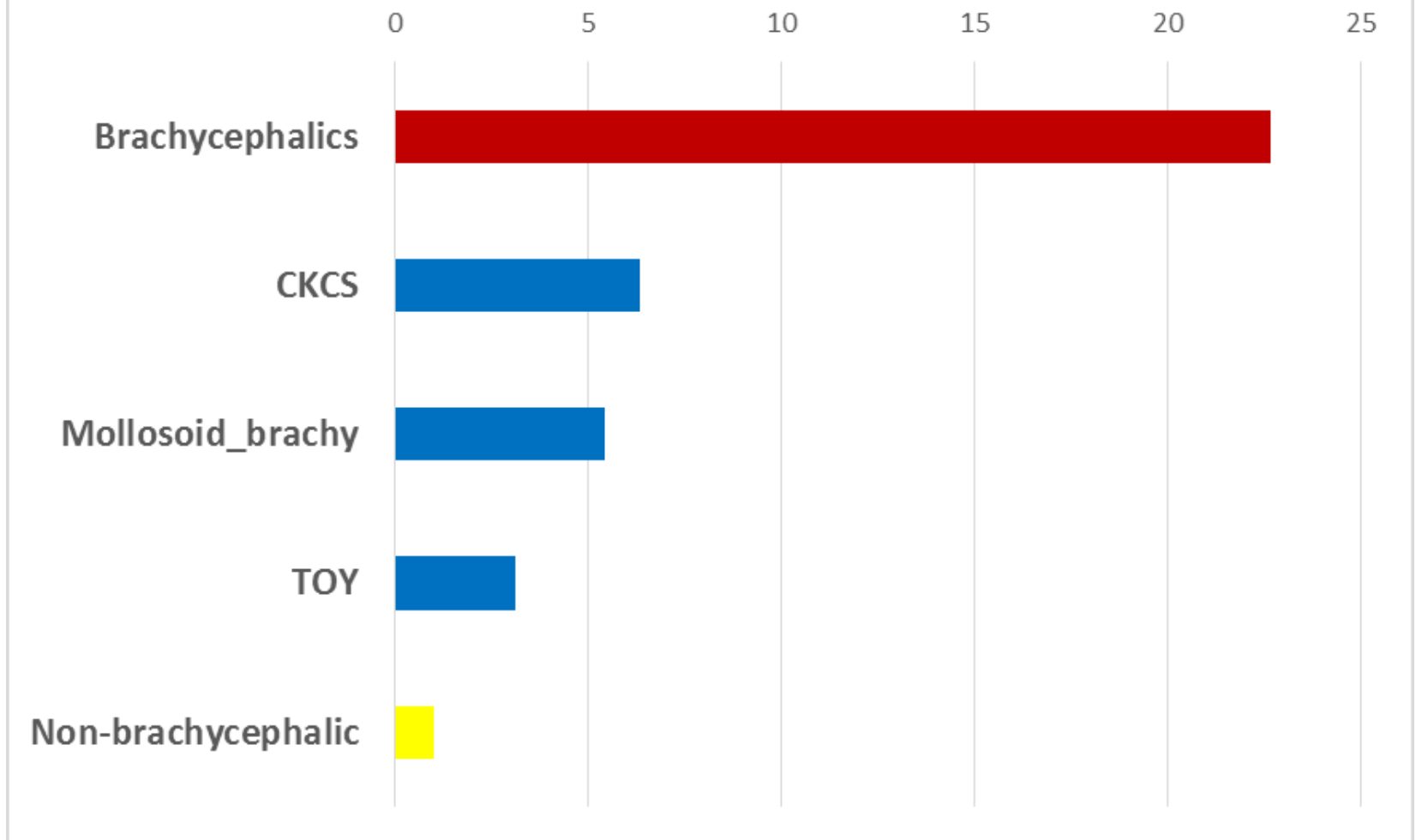
NON-Brachy





Data 2009-2013

**"Breathing Problem" in dogs <6 years of age:  
Relative Risk compared to Non-Brachy breeds**

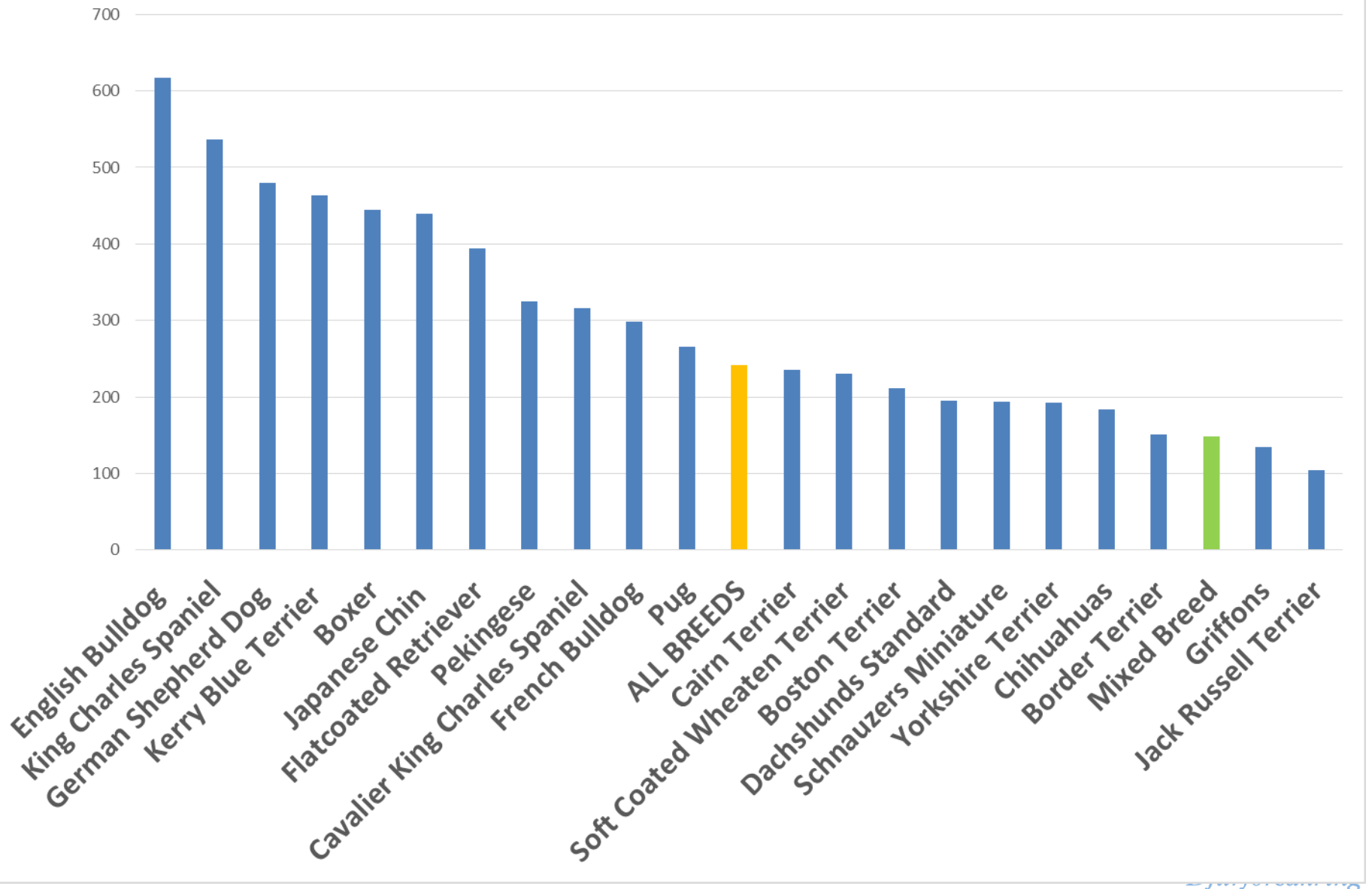


Data 2009-2013

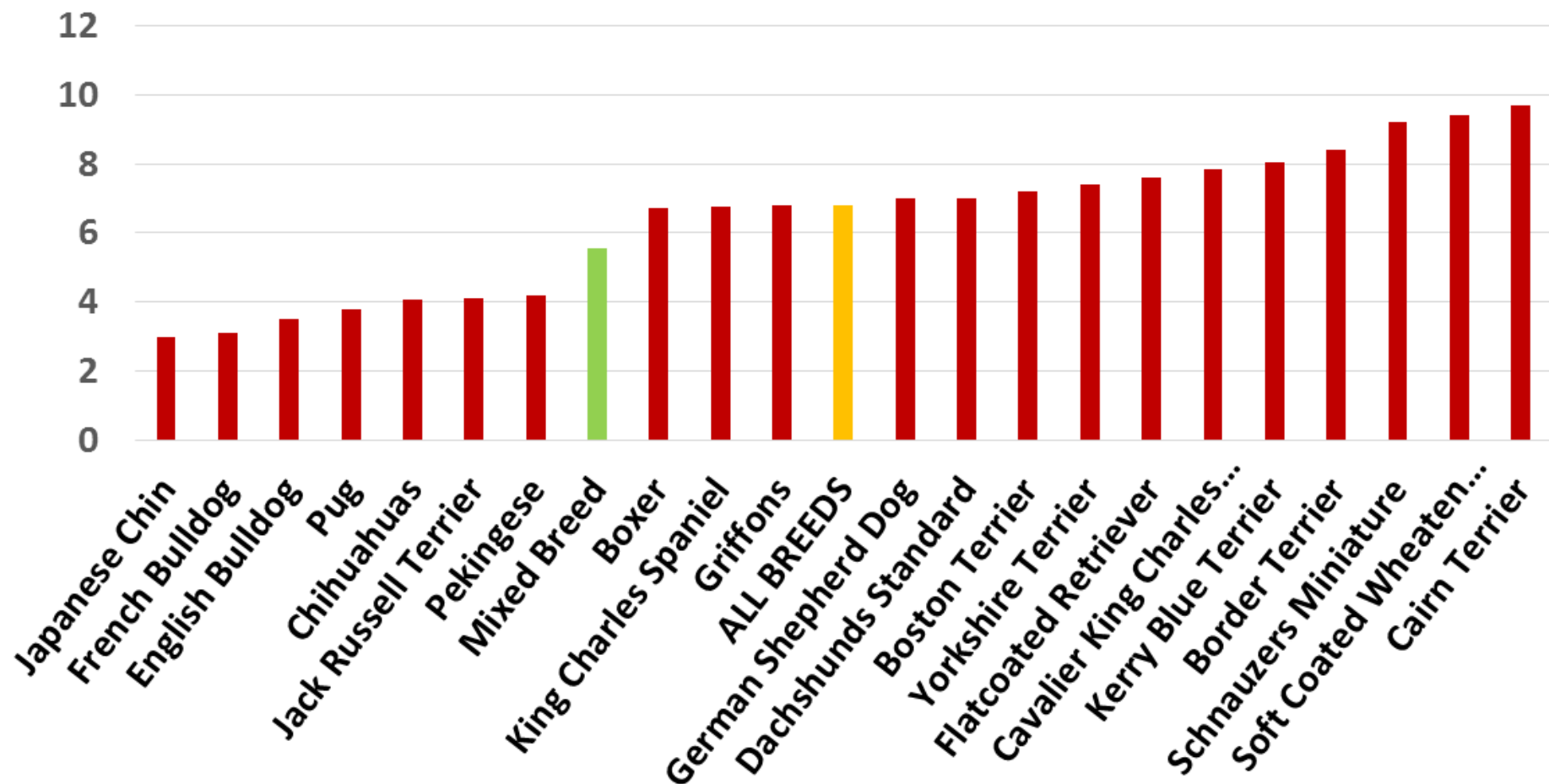
Upper Respiratory Claims with a Registration Number	
Cavalier King Charles Spaniel	96%
Chinese Crested Dog	92%
Boxer	90%
Tibetan Spaniel	90%
Boston Terrier	88%
Pug	88%
Griffons	83%
English Bulldog	76%
OTHER	74%
French Bulldog	74%
Yorkshire Terrier	71%
Pomeranian	66%
Chihuahuas	60%
Shih Tzu	54%

# Mortality ... and age at death

# Mortality (all causes): Common, High Risk and Brachycephalic Breeds (minus Giant Breeds)



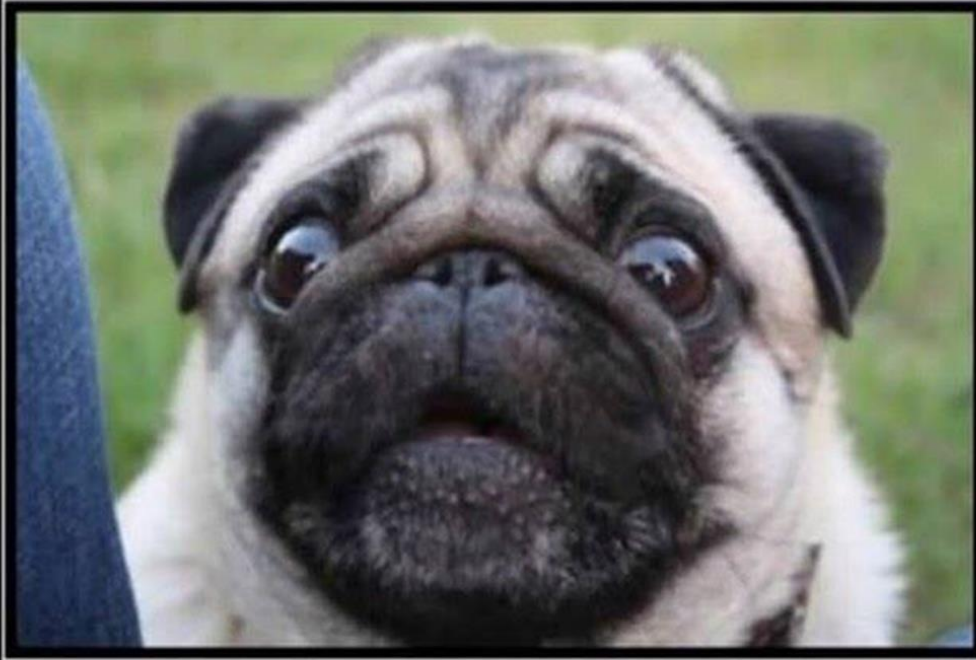
# Median age at death in life-claimed dogs Common, High Risk and Brachycephalic Breeds (minus Giant Breeds)



# Summary Comments on Death Data

- English Bulldogs and Japanese Chin:
  - High mortality rate and die at younger than average ages
- Pugs and French Bulldogs:
  - slightly increased rate of mortality compared to All Breeds, markedly higher than Mixed Breeds, and die at younger than average ages.
- Boston Terriers:
  - have lower mortality rate than All Breeds, somewhat higher than mixed breeds and die at a relatively high age.





**EXERCISE?**

**I thought you said "extra fries"**

Cute and funny?  
*Ignoring a welfare issue?*

Embedded in culture or  
mindsets – ‘normal’  
*Maybe it is time to  
change?*

What is ‘**okay**’ in terms of  
levels / types of disease?

What is your role personally – and professionally?

How do we proceed with **respect, compassion and cooperation?**



*Djurforsäkring*