TEMPERATURE FLUCTUATION EFFECTS ON PLASTIC SURGERY TRAUMA VOLUMES AT LEVEL 1 TRAUMA CENTER

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Prior studies
strong correlation between
trauma and temperatures

A year's trauma admissions and the effect of the weather

W.G. **Plastic Surgery?**

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Materials & Methods

- Retrospective Study:
  - July 2008 to July 2013
  - 3055 Electronic Medical Records
  - Maxillofacial and Hand Traumas
  - UC Davis Medical Center
  - Data:

    Mechanism, Dates, Age, Gender



Materials & Methods

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- National Oceanic and Atmospheric Administration
  - Monthly Climatological Summary
  - Mean Maximum Temperature
  - Location: Sacramento Executive Airport

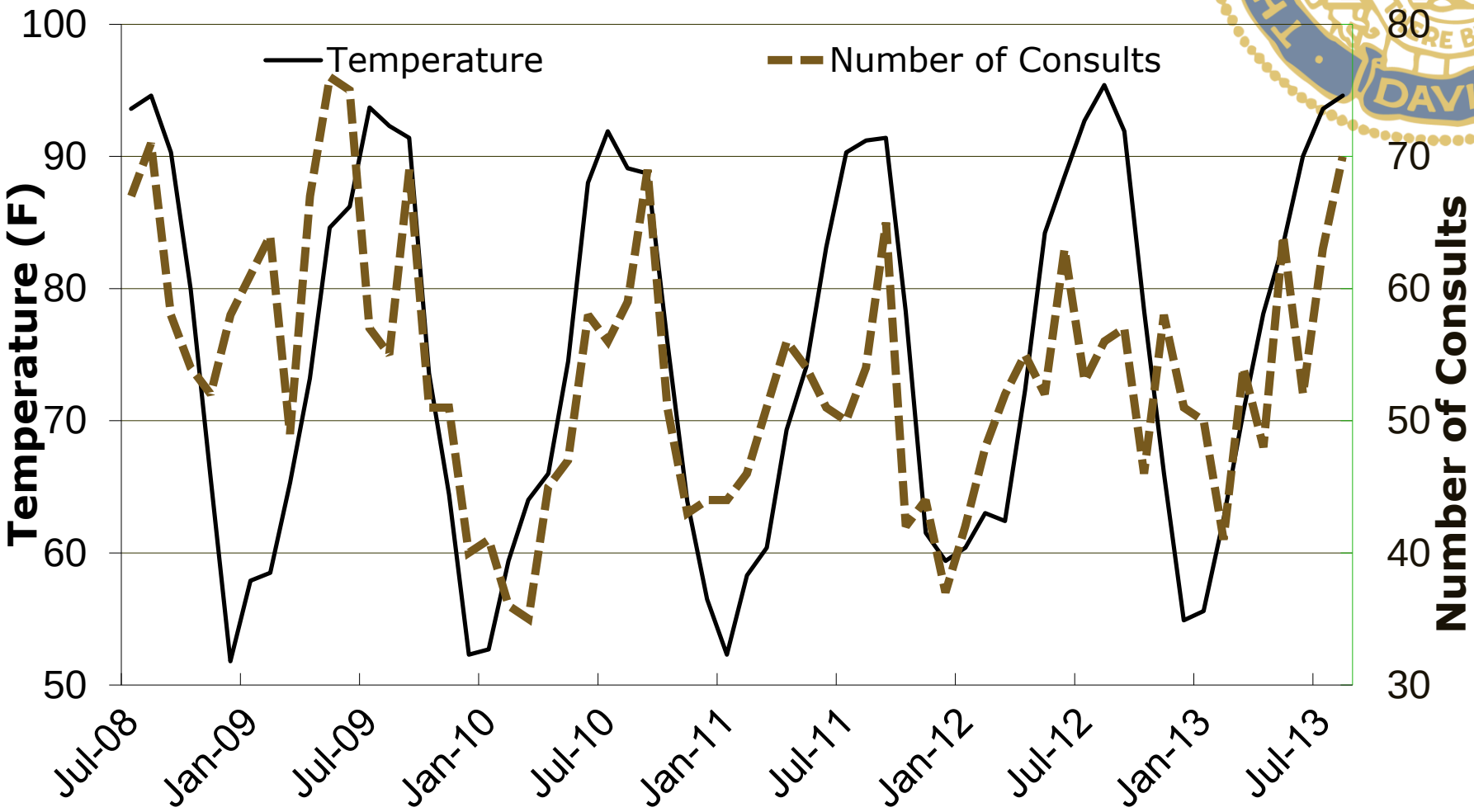
Hypothesis

As temperatures increases,

- Hand & maxillofacial consults will increase
- Most consults will occur on weekends
- Young adult males will be most prevalent
- Aggressive behavior will increase

Trauma and Temperature

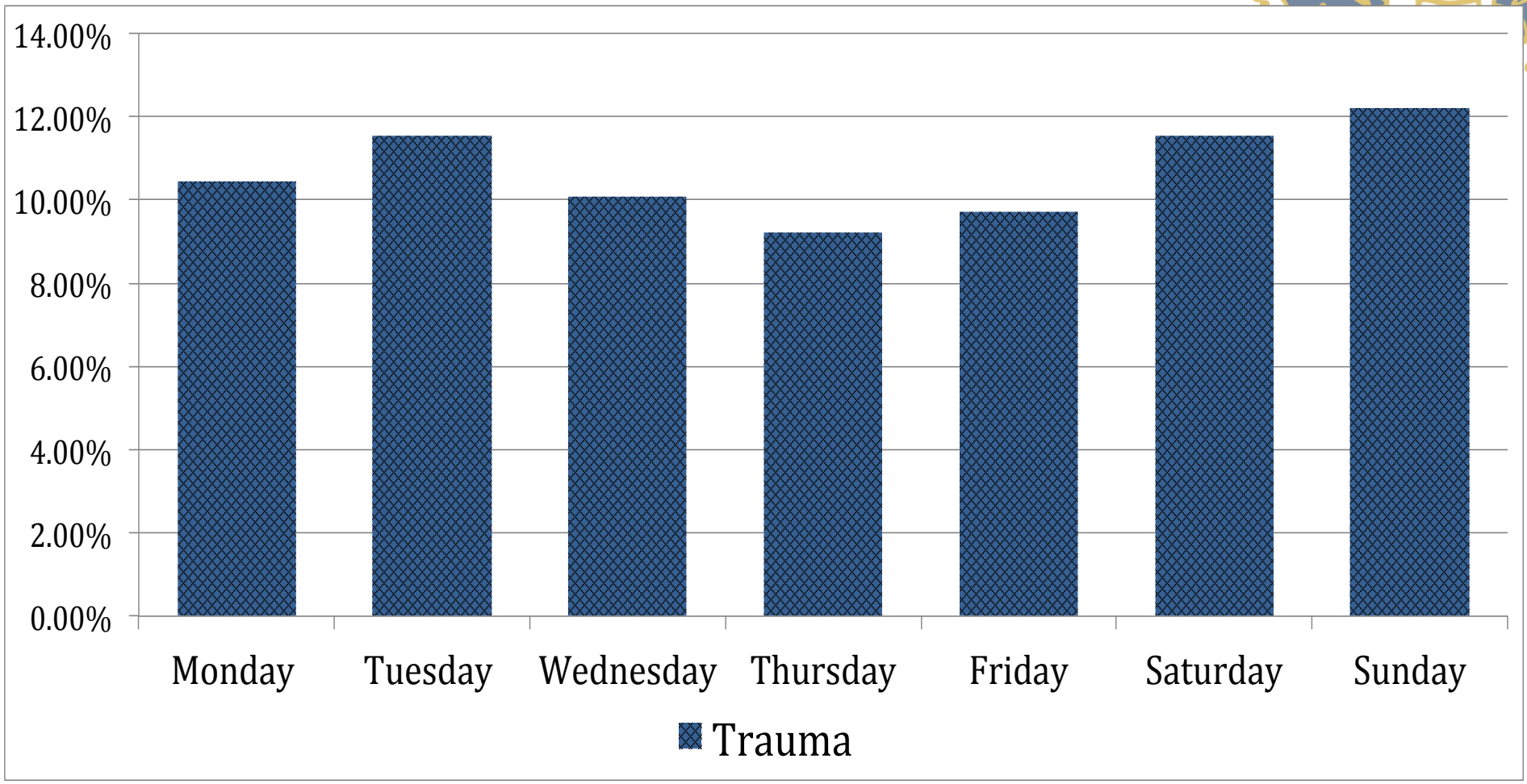
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R= 0.58 P-value < 0.001

Weekly Distribution

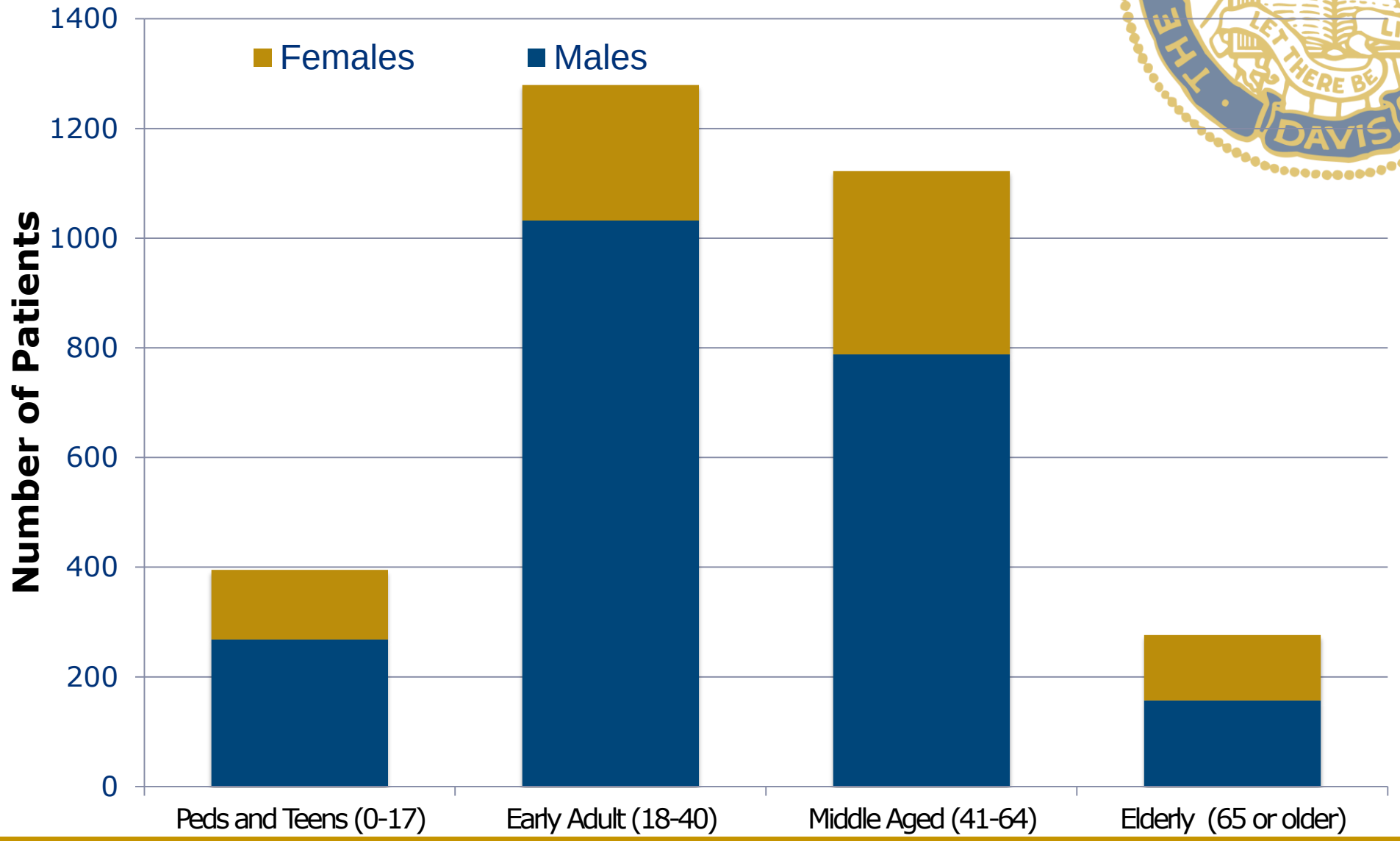
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P-value < 0.001

Gender Distribution

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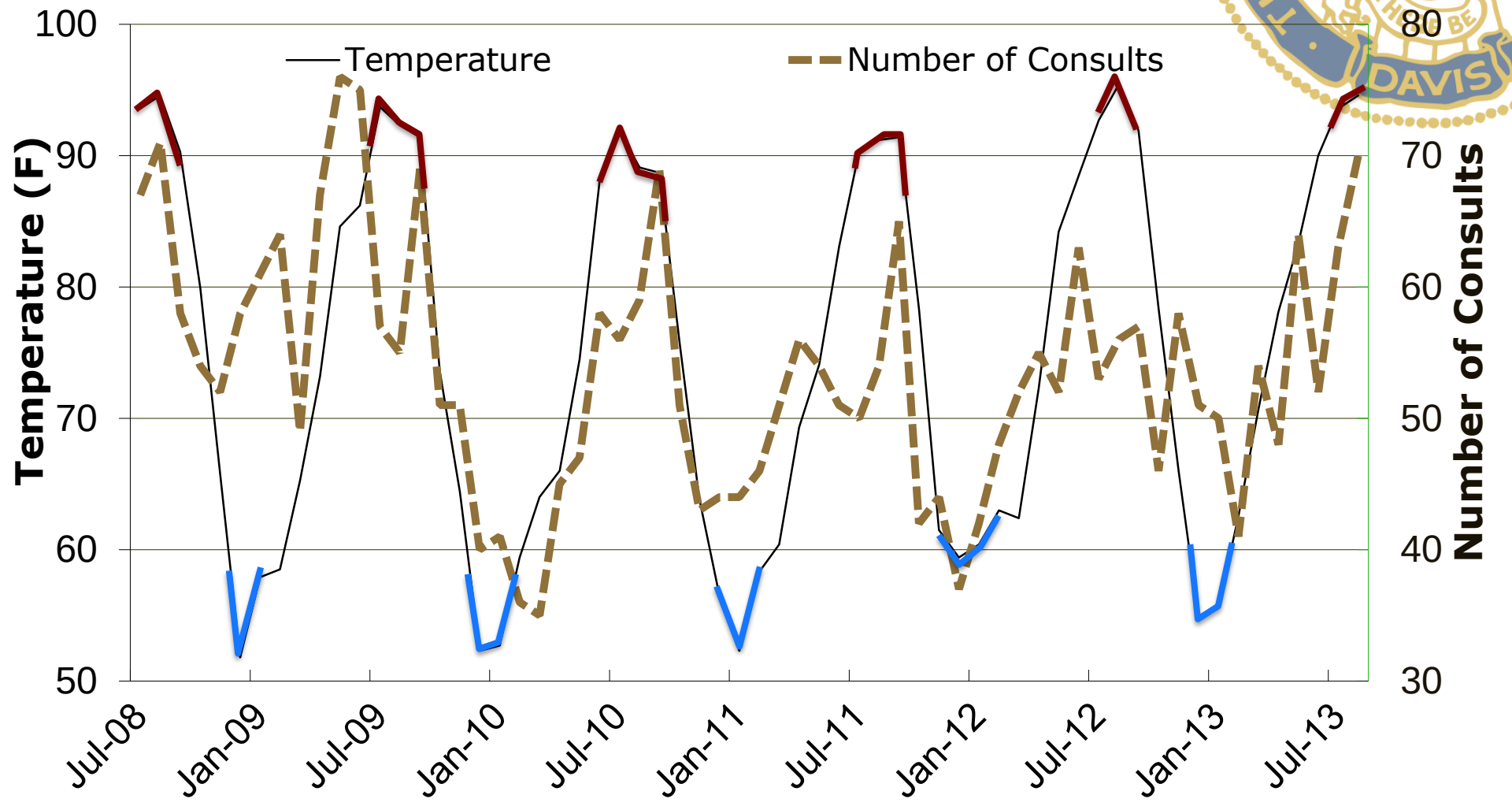
Age Groups

P-value < 0.001

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High and Low Temps

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Mechanisms of Injury

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Fall Accidents



Aggressive Behavior



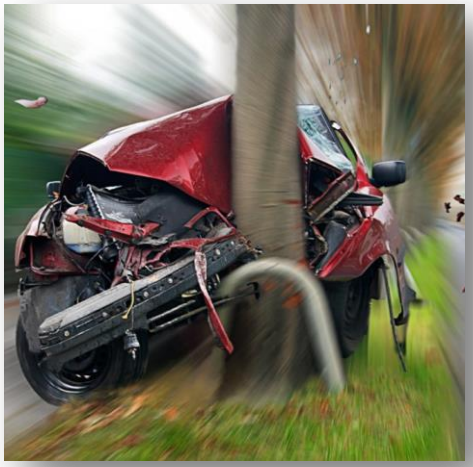
Industrial Accidents



Sport Related Injuries



Animal Related Injuries



Transportation Accidents

Mechanisms Breakdown

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	High Temperature Months (%)	Low Temperature Months (%)
Transportation ★	34	24
Aggressive Behavior	25	26
Fall	16	15
Animal Related	6	10
Non Trauma	14	20
Industrial Accidents	3	4
Sport Related Injuries	2	1

Conclusion

- Strong correlation between temperature and trauma
- Highest volume consult days: Saturday - Sunday
- Majority of consults: Adult Males
- Aggressive behavior not found related to temp

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- We welcome you all to our future conferences of OMICS International
- 7th Annual Global Pharma Summit
- On
- June 20-22, 2016 at New Orleans, USA

http://american.pharmaceuticalconferences.com/

Acknowledgements

Thank You