



**CHILDREN AND FAMILY  
| RESEARCH | CENTER**

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN  
SCHOOL OF SOCIAL WORK

# DNA, Biological Evidence, Injuries and Arrests for Child and Adolescent Sexual Assault Victims with Acute Medical Examinations

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## Importance of forensic medical examinations following sexual abuse

- Assures children and adolescents that their body is healthy
- Addresses any medical needs children have as a result of the abuse
- Can supply important evidence if done acutely
  - Biological evidence can counter perp denial
  - DNA can help identify suspects
  - Documentation of injuries counters consent defense



# Gaps in knowledge

- Limited research on results from medical examinations
- No study presents results for adolescents
  - Are adolescent cases more like children or adults?
- No study considers age of consent
  - Below age of consent, sexual assault cases may involve less force and injury
- Limited research on criminal justice actions following medical examinations



# Current study

- Compares child, adolescent and adult sexual assault victims with forensic medical exams
  - Case characteristics
  - Non-genital and genital injuries
  - Evidence of biological products (sperm, blood)
  - DNA evidence and matches
  - Unfounding (police deciding no grounds to pursue investigation)
  - Arrests





# Sample

- Massachusetts statewide sample of emergency department exams in sexual assault cases
- Years: 2008-2010
- N=563
- Victims age 1 to adult
- Relevant age cutoffs:
  - Pediatric kit: Age 11 and younger
  - Age of consent: 16



# Types of Data Collected

## State Medical Exam Database

- Victim age, sex, race/ethnicity
- Location of assault (city and surroundings)
- Location/date/time of exam
- Exam provider (SANE/non SANE)
- Number of assailants
- Assailant-victim relationship
- Weapon type
- Description of assault
- Reported to police
- Completion of evidence kit/toxicology

## Crime Laboratory Data

- Injury type, frequency, location
- Type of examinations completed
- Type of evidence collected (physical, forensic)
- Date/time of evidence kit collected
- Date/time kit arrival to lab
- Date/time of report of lab results
- Laboratory results

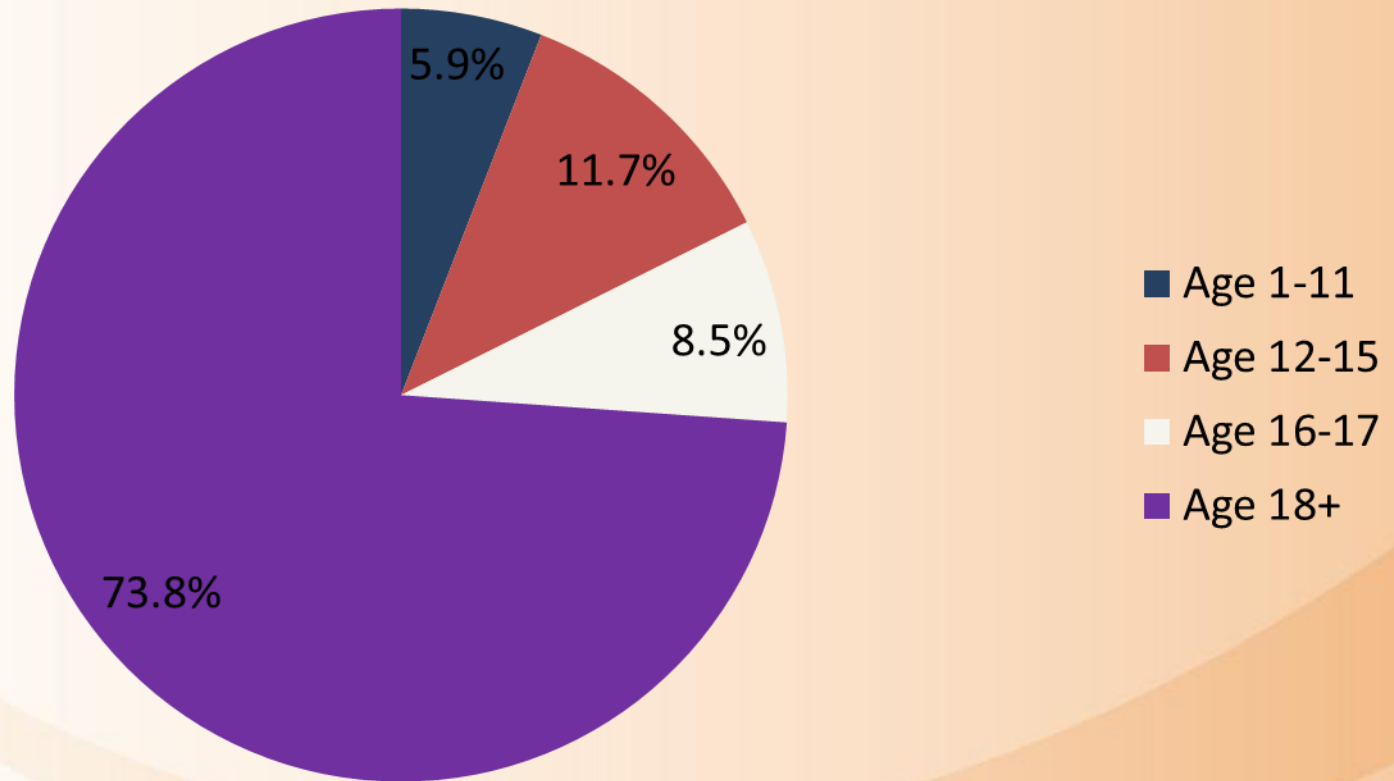
## Police Outcome Data

- Unfounded
- Arrest made/arrest date
- Charged/charge date

Some data not collected for victims age 11 and younger

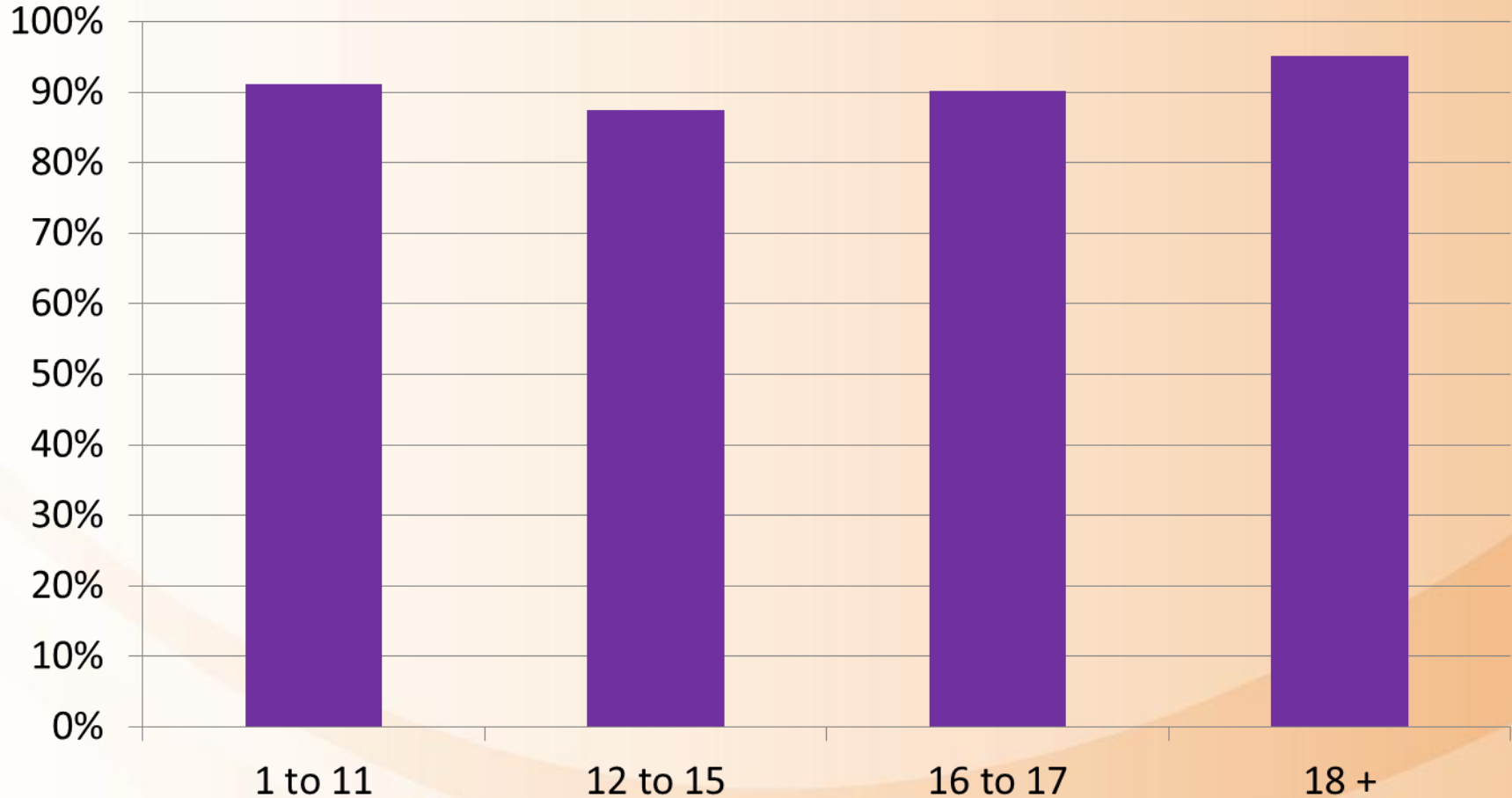


# Age distribution of sample





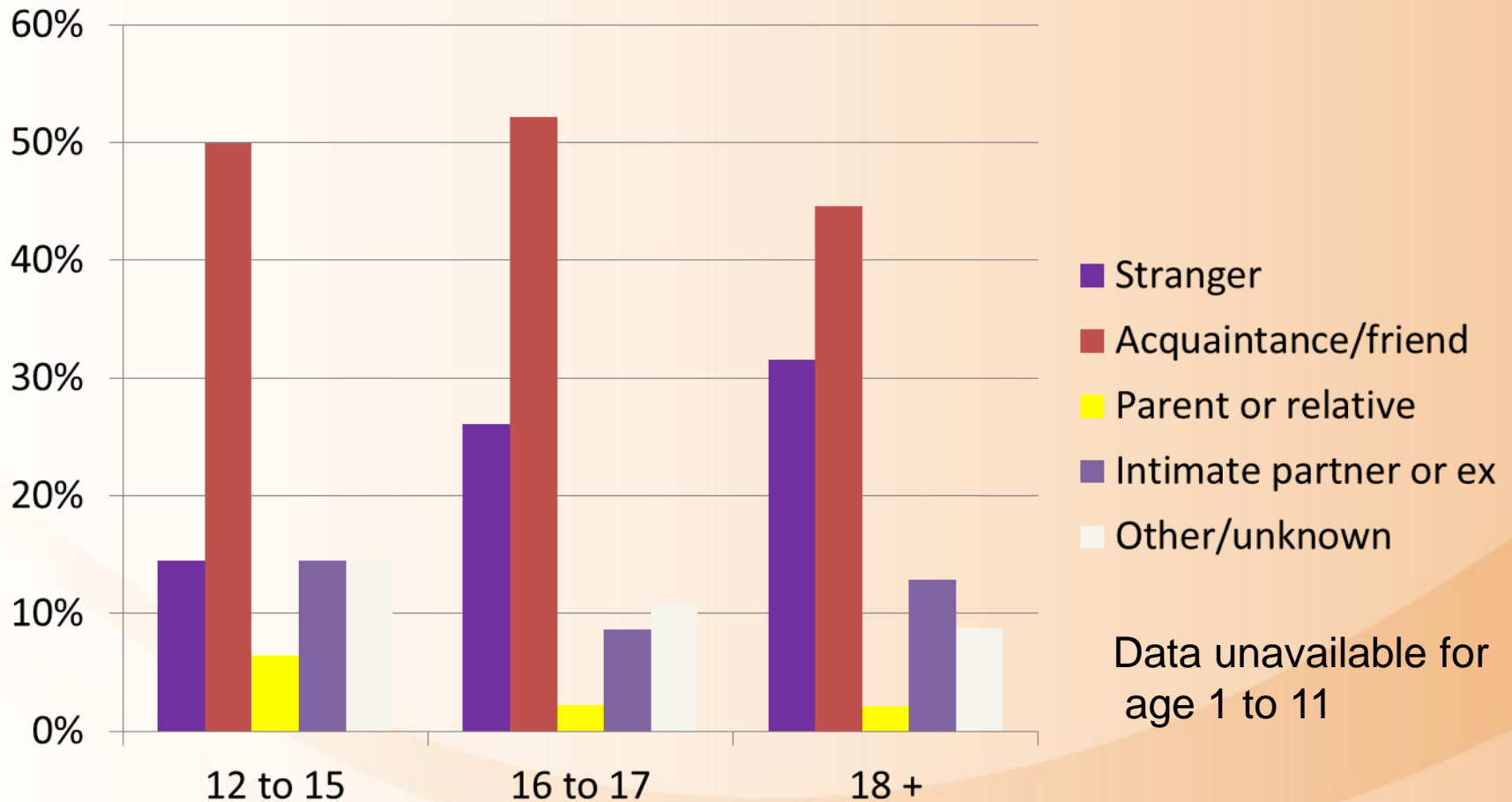
# Exam conducted within 72 hours of assault by victim age







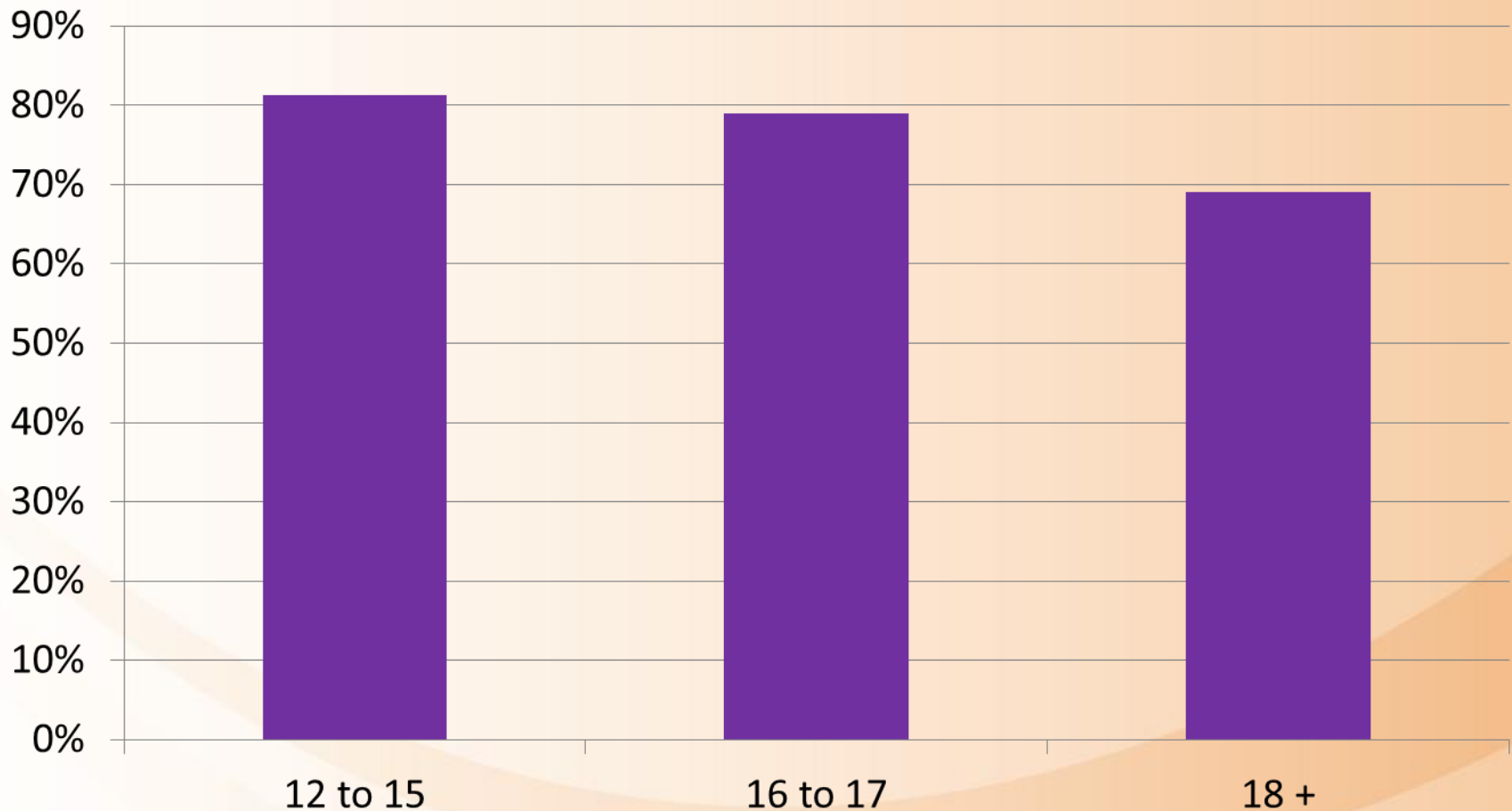
# Perpetrator type by age



Adolescents not much different from adults!



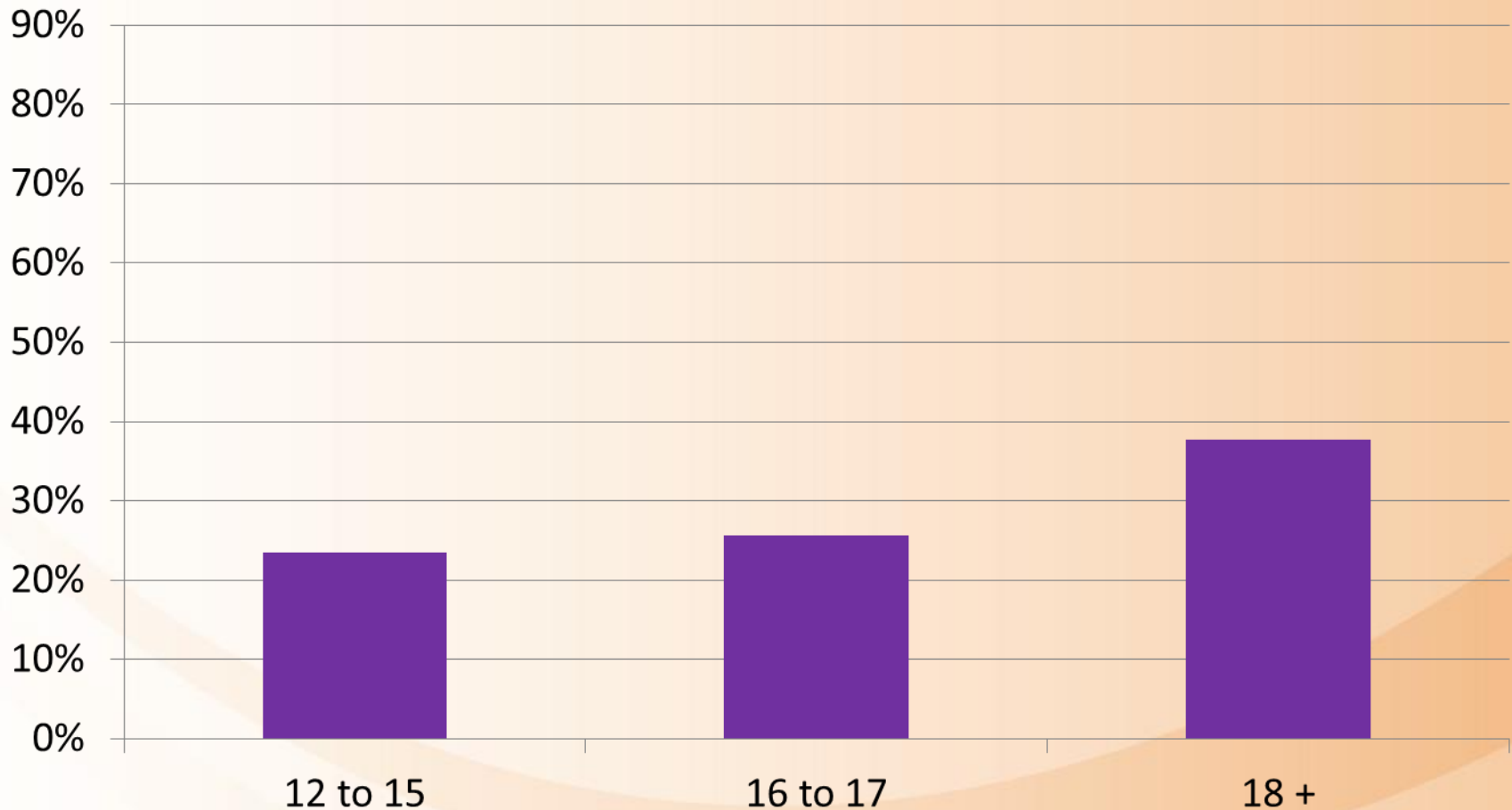
# Penetration by age of victim



Data not available for Age 1 to 11



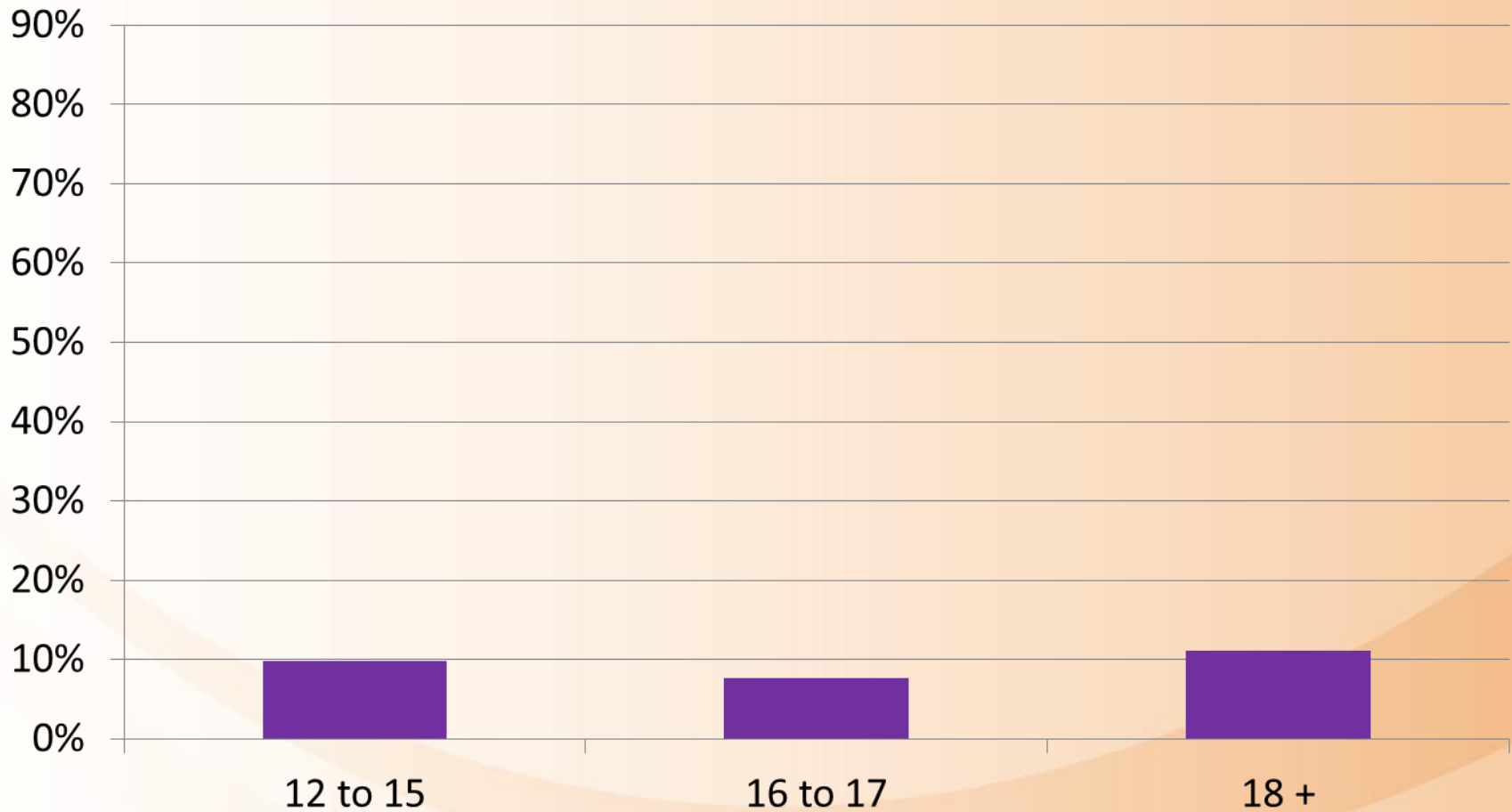
# Use of force by age of victim



Data not available for Age 1 to 11



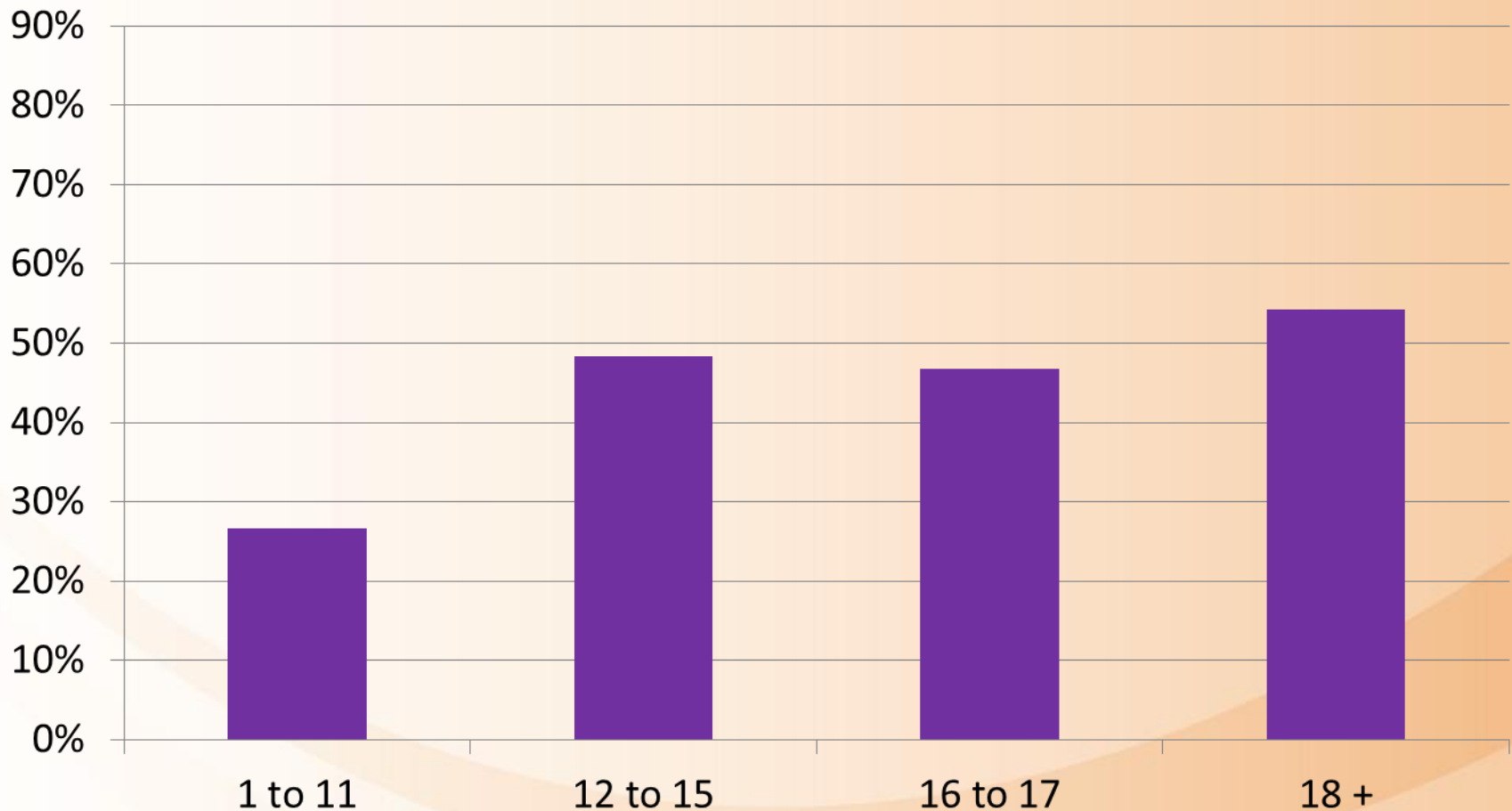
# Use of weapon by age of victim



Data not available for Age 1 to 11



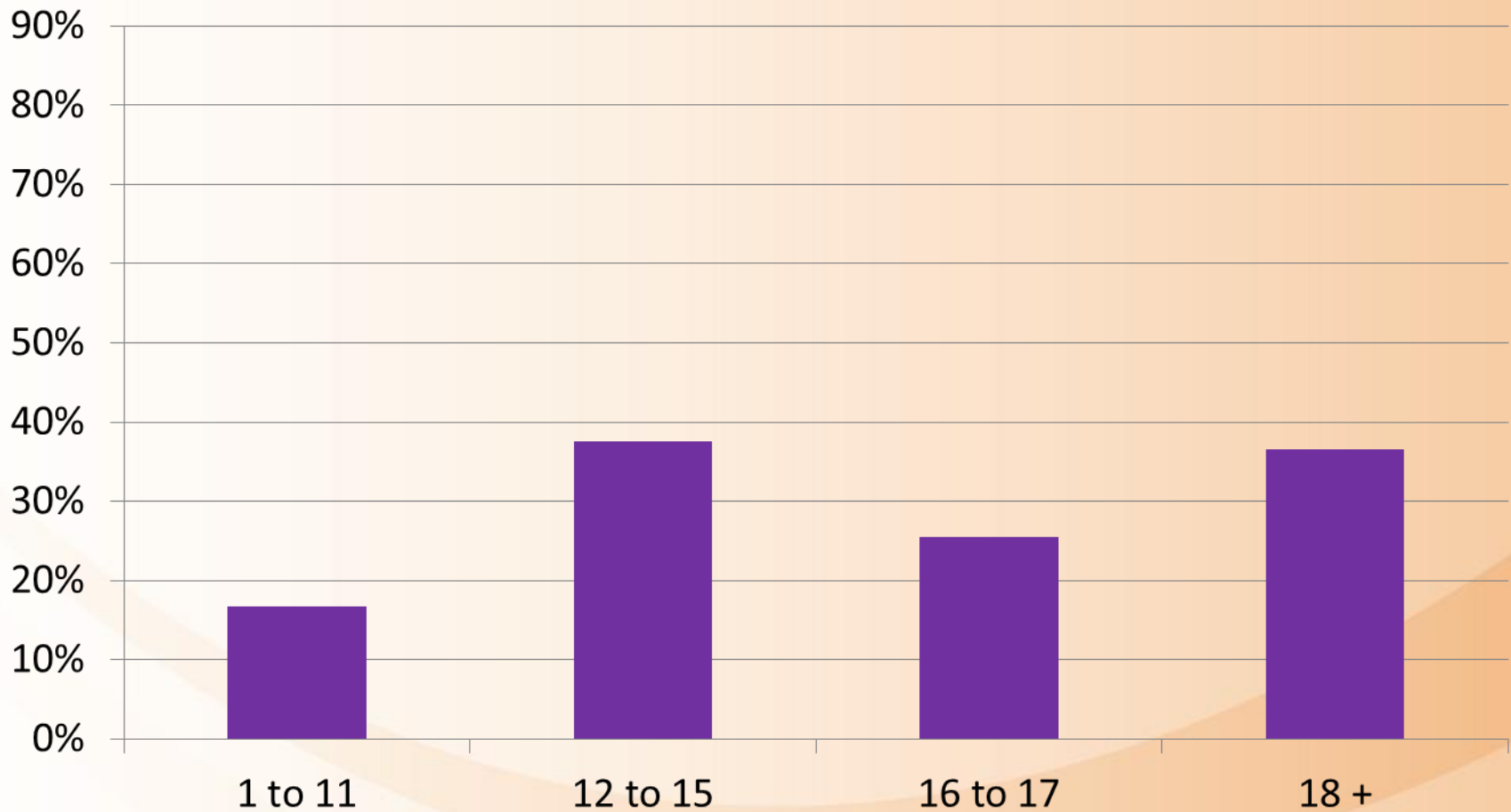
# Non-genital injury rate by age





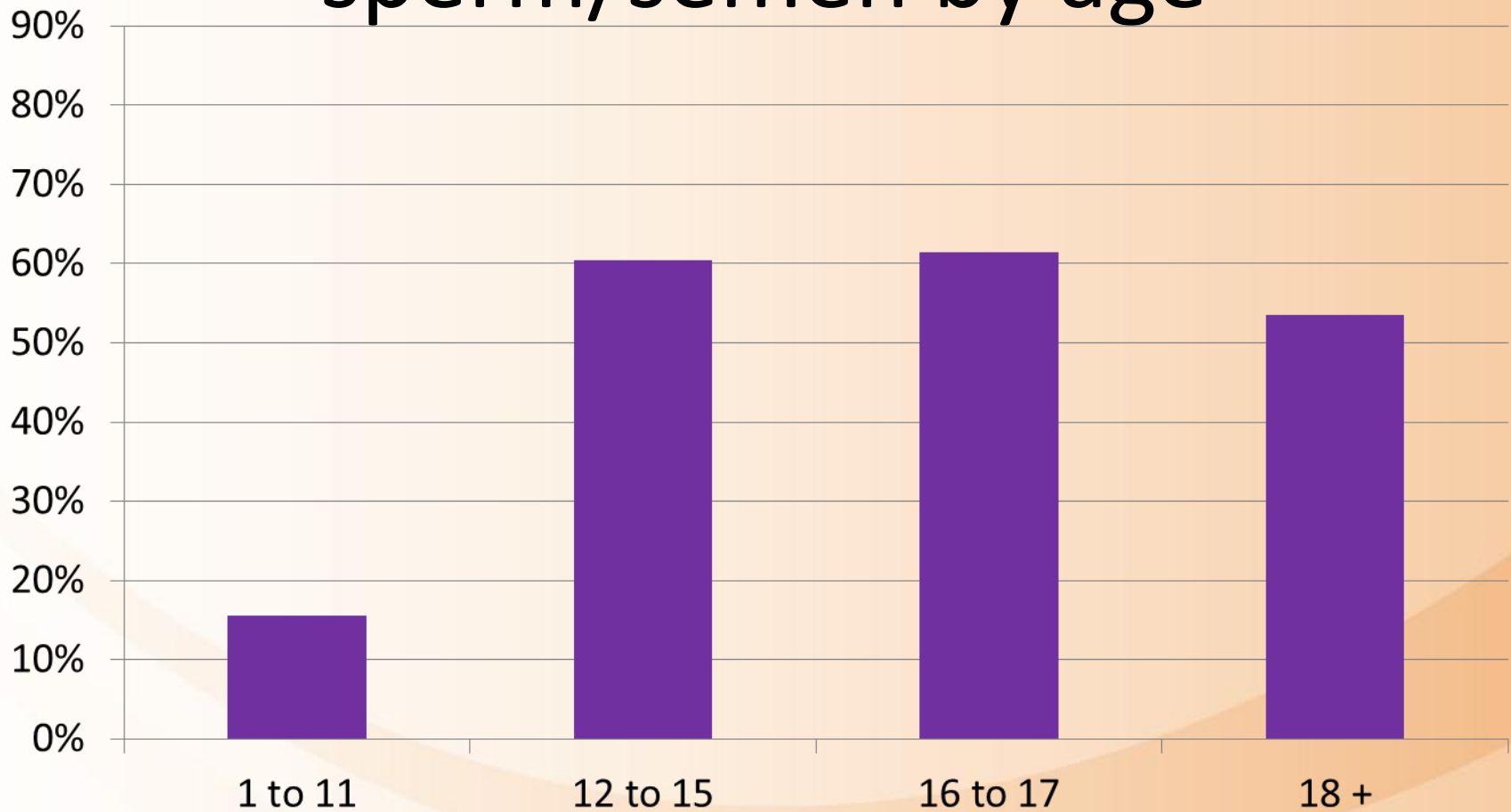


# Genital injury rate by age



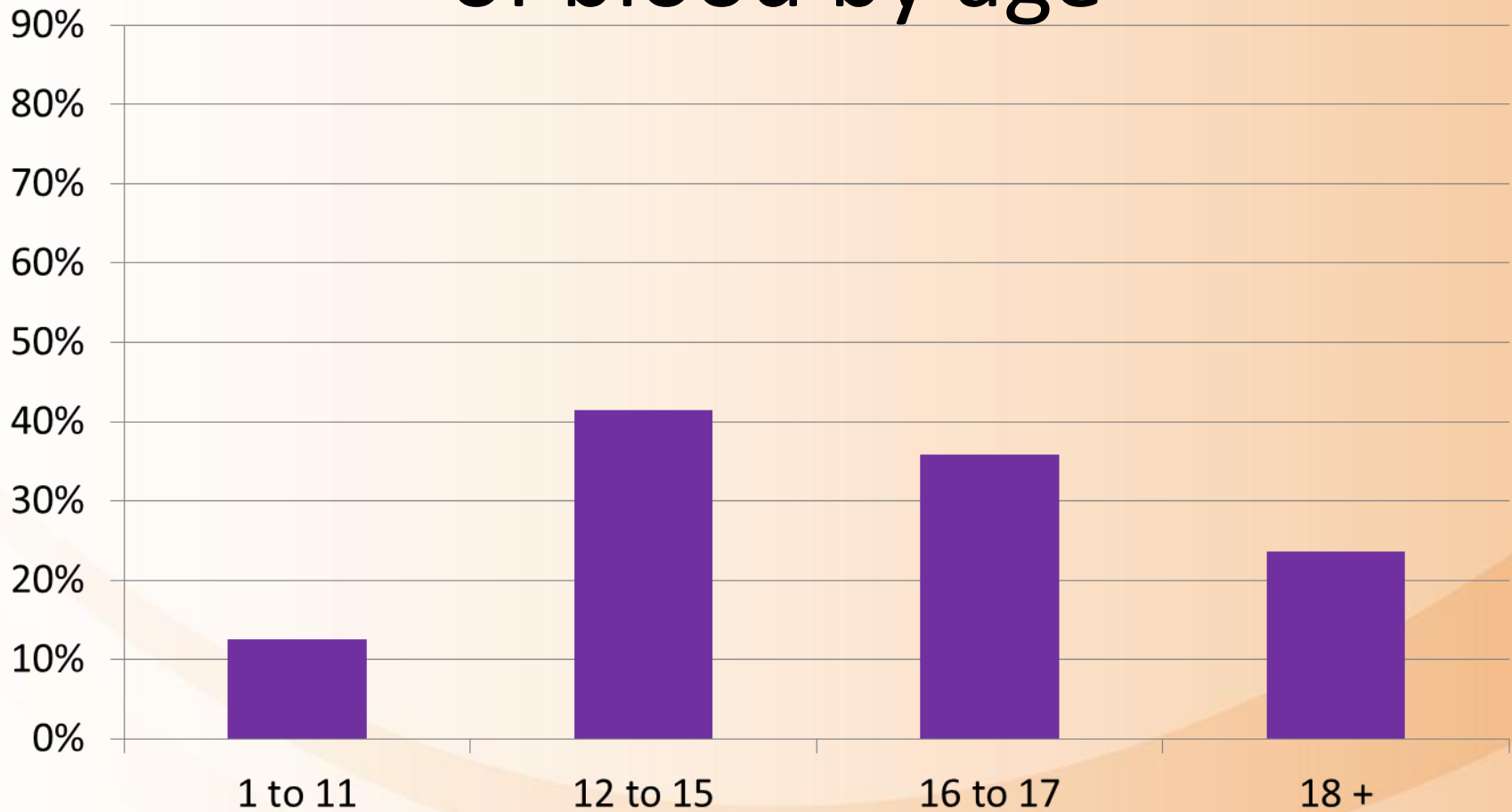


# Crime lab evidence of sperm/semen by age



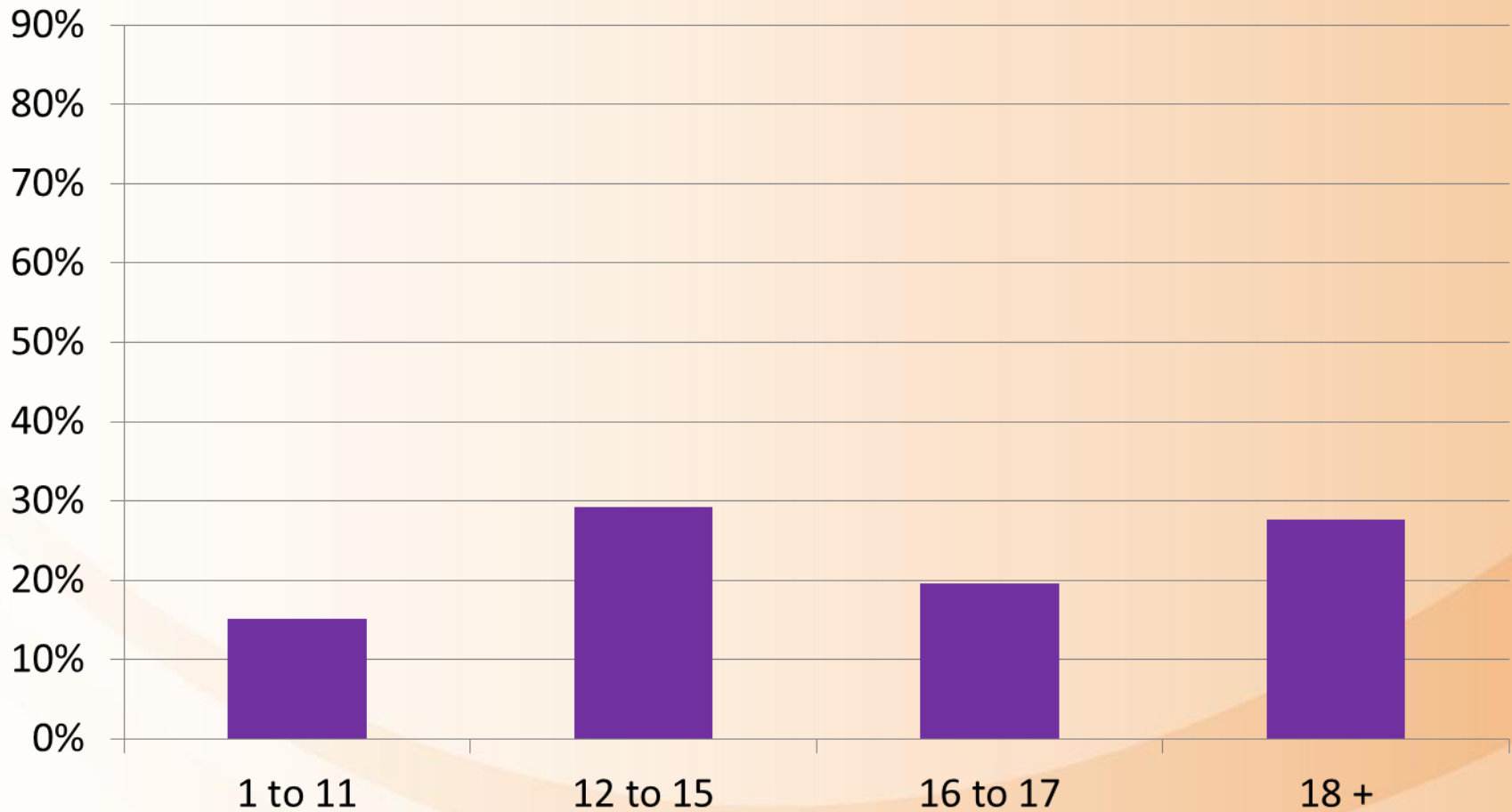


# Crime lab evidence of blood by age



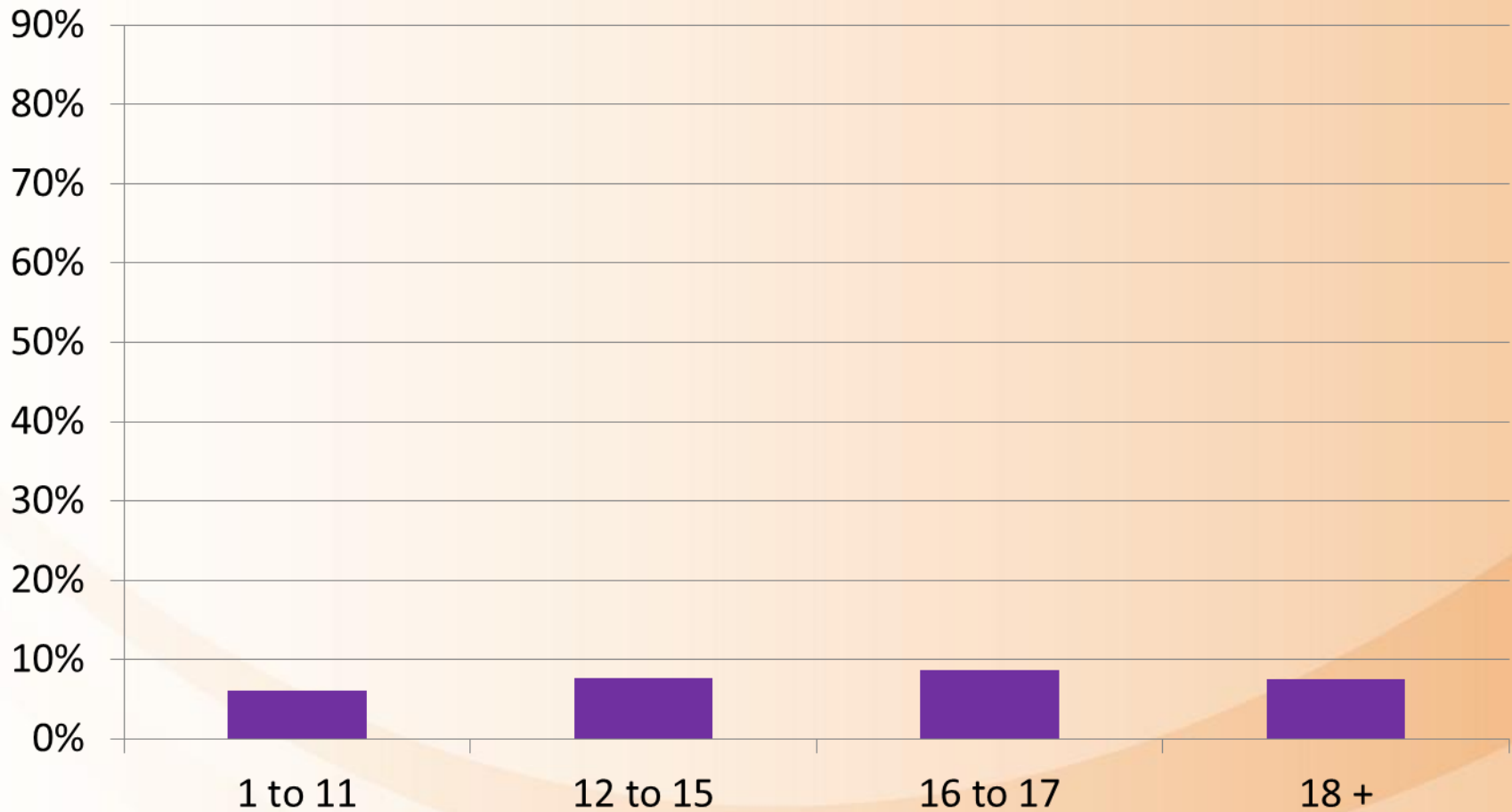


# DNA profile generated by age





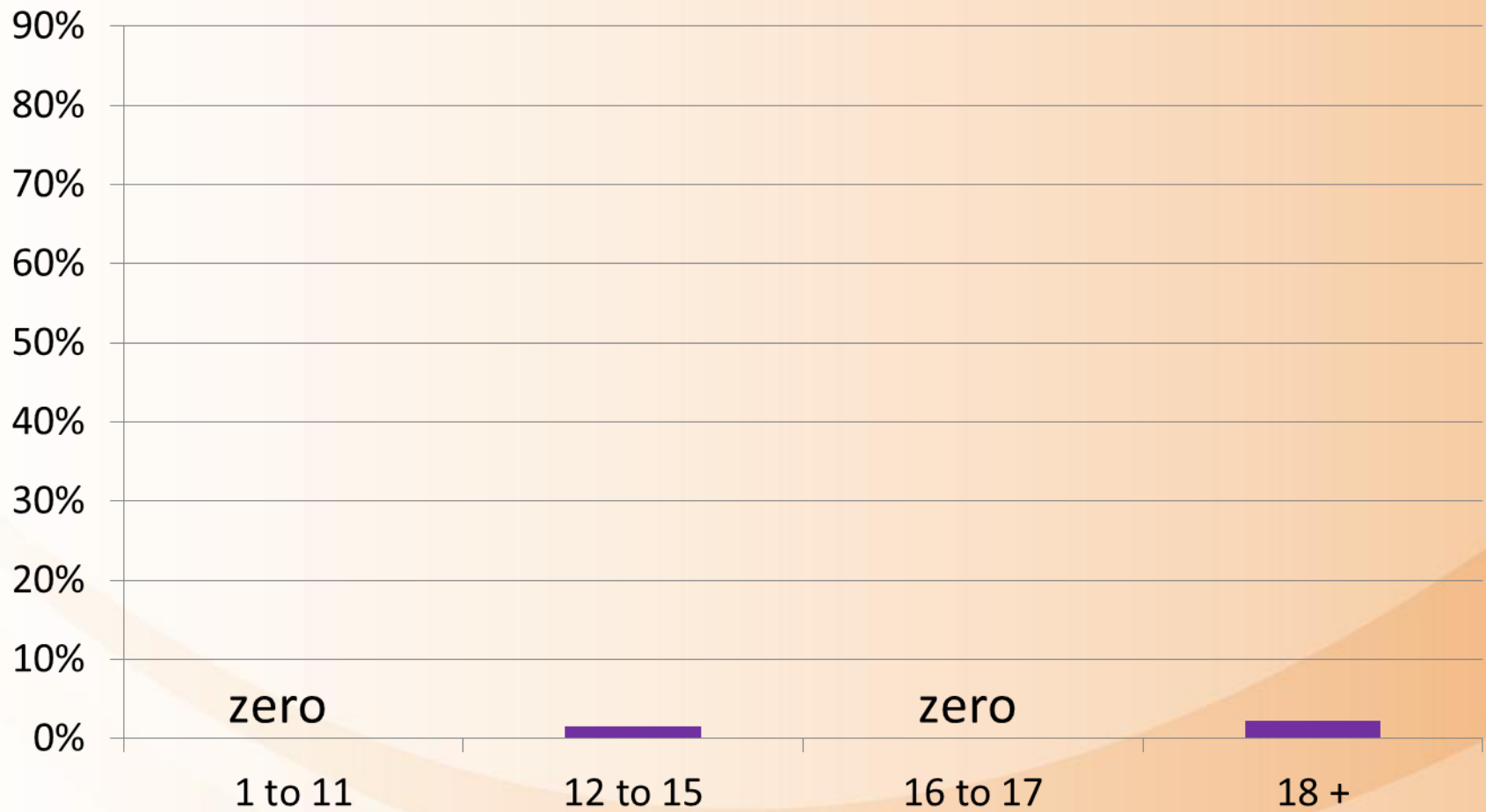
# DNA match to suspect by age





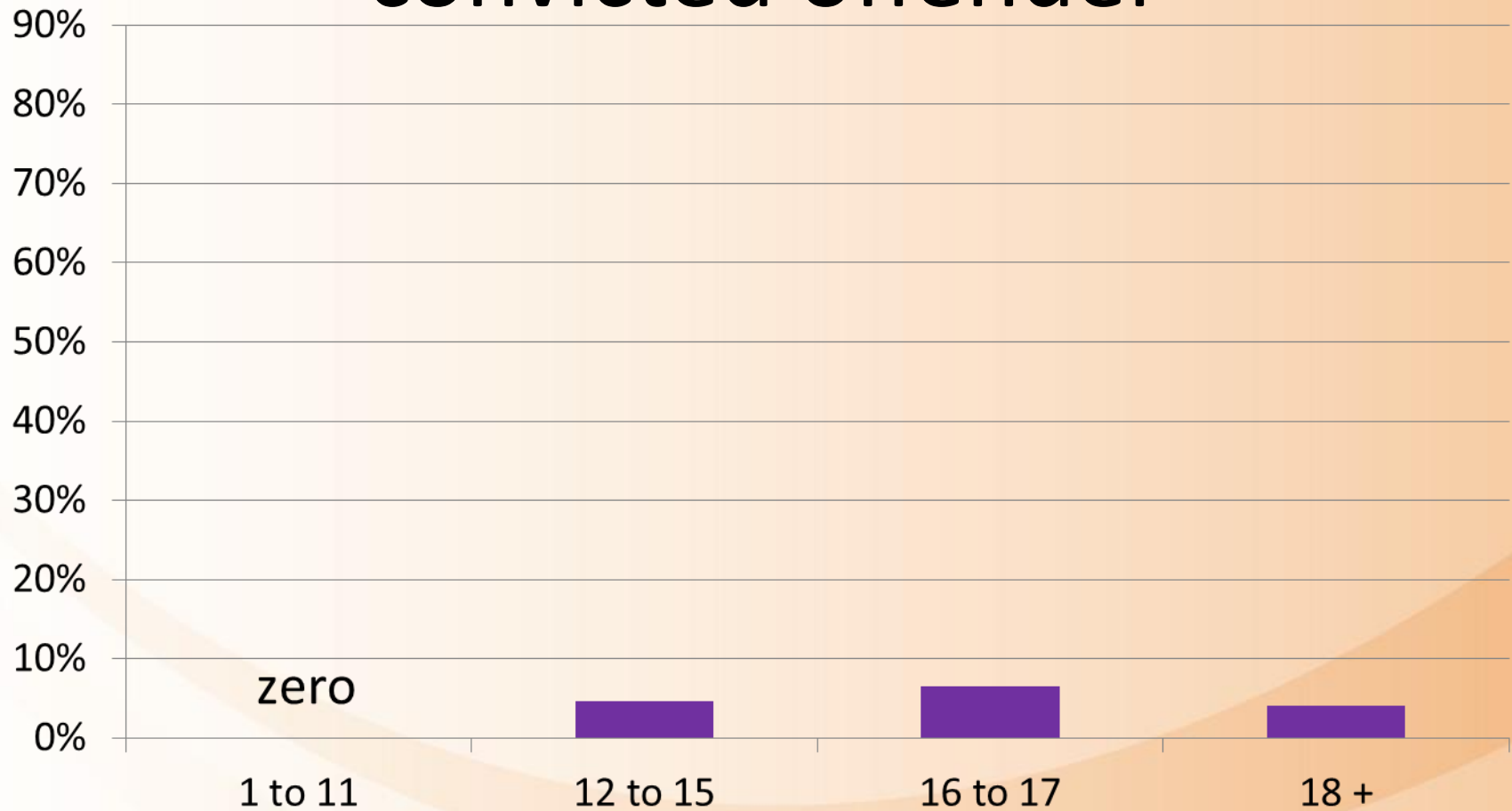


# DNA match to suspect in another case



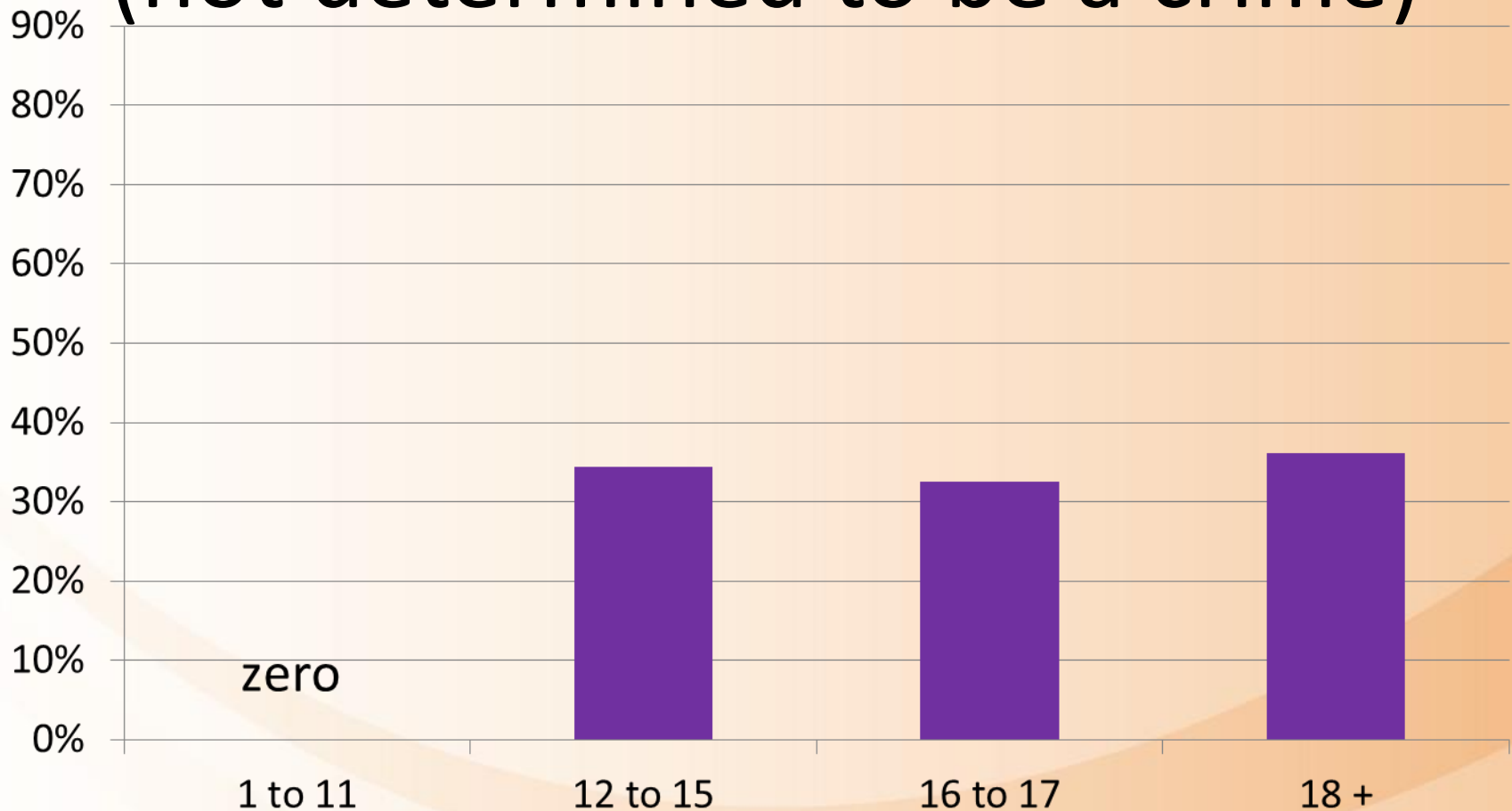


# DNA match to a convicted offender



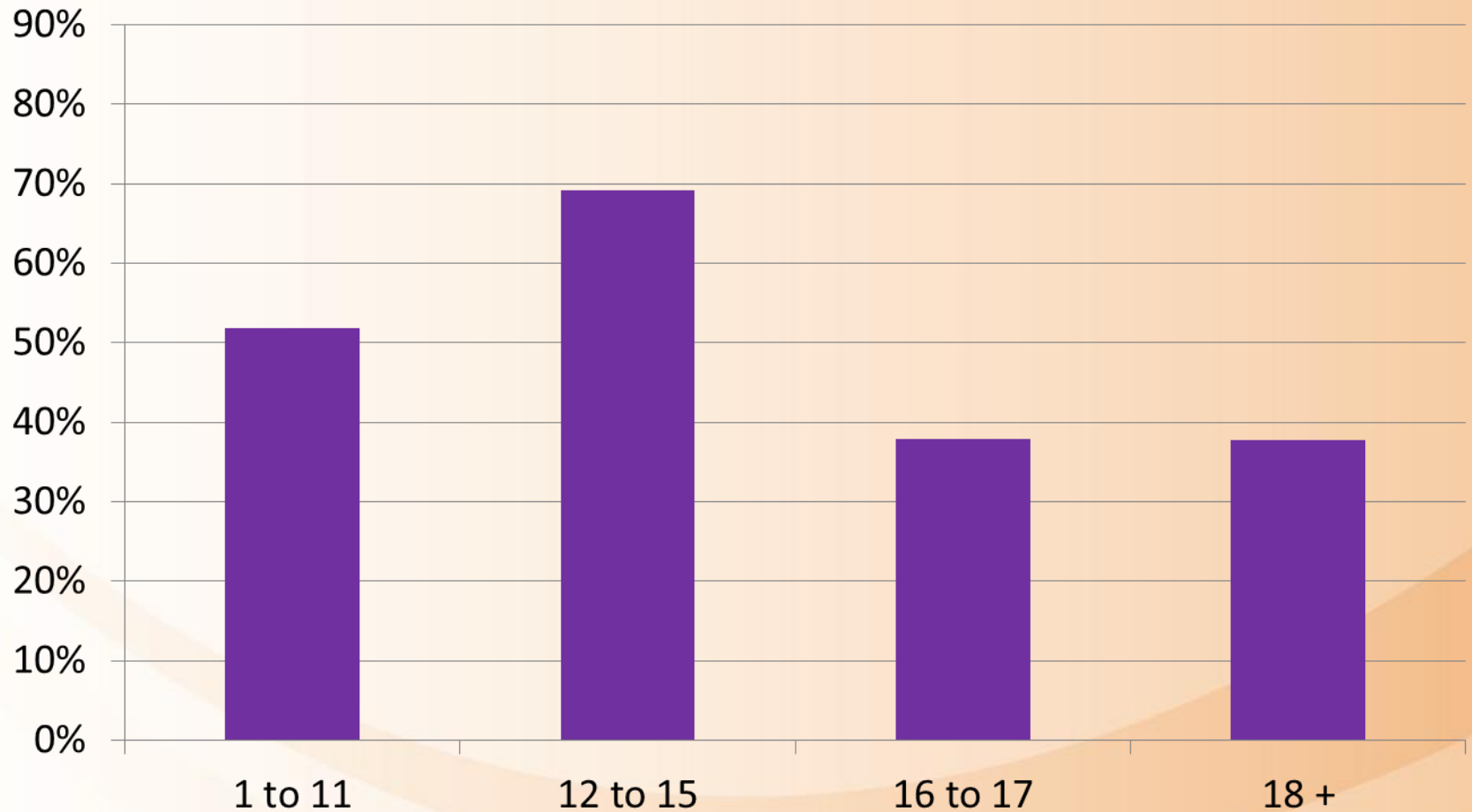


# Cases unfounded by police (not determined to be a crime)





# Arrests made in founded cases





# Timing of crime lab analysis and arrests

- N=123 arrests
- 2/3 of arrests occurred within 2 days of assault
- Only 11 arrests took place near or after crime lab analysis
  - 5 adolescents (14 or 15 years old)
  - 6 adult
- DNA was significantly more likely when arrest took place near or after crime lab analysis – but only for adults in sample
- Biological evidence leads to arrest in a small % of cases, but may have an important impact when arrest is not immediate





# Conclusions

- Cases with adolescents (even young adolescents) resemble adult cases more than child cases
- Risk for adolescents = risk for adults
  - Injury
  - Penetration, force, weapon
- Adolescents comparable to adults in rates of biological evidence, including DNA



## Conclusions (cont.)

- Police are less likely to find adolescent cases than child cases, i.e., determine a crime has been committed
  - Unfounding can mean police think action futile
  - Unfounding rates comparable in adult and adolescent cases, even under age of consent
- Arrests more likely under the age of consent
- Biological evidence is a factor in a small % of arrests and no arrests for children under age 12



# National Institute of Justice final report on the project

Cross, T.P., Alderden, M.A., Wagner, A., Sampson, L., Peters, B., Spencer, M. & Lounsbury, K. (2014). *Forensic evidence and criminal justice outcomes in a statewide sample of sexual assault cases*. Final Report. Award number 2011-WG-BX-0005, National Institute of Justice, Office of Justice Programs, U.S. Department of Justice.

Available from the National Criminal Justice Reference Service ([www.ncjrs.gov](http://www.ncjrs.gov)) at <https://www.ncjrs.gov/pdffiles1/nij/grants/248254.pdf>



# Contact info

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See our Centers website on sexual abuse:

[http://cfrc.illinois.edu/publications.php?dim=topic#SexualAbuse  
andAssault](http://cfrc.illinois.edu/publications.php?dim=topic#SexualAbuseandAssault)

I welcome any questions or requests for copies