



# Risk of luteal phase pregnancy with modified intrauterine device insertion eligibility

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## Background

The intrauterine device (IUD) is a highly effective, long-acting and reversible form of contraception. Additionally, the initiation of the device only requires a 1-time act, eliminating adherence or user dependence. Modifying insertion guidelines may remove barriers to accessing sexual and reproductive care but may increase the risk of luteal phase pregnancies.

## Modified insertion Guidelines?

### Pros:

- Immediate initiation provides protection sooner
- Removes barriers to patient's
- Decreases risk of unintended pregnancy with other methods

### Cons:

- May increase risk of luteal phase pregnancy
- Patient history may be unreliable
- Risk of wasting device
- Risk of patients not returning

**Objective:** To determine rates of luteal phase pregnancy (LPP) in adolescents and young adults (AYA) initiating intrauterine devices (IUDs) using modified insertion guidelines.



## Standard Guidelines for insertion of intrauterine devices:

Negative pregnancy test **AND** insertion within 7 days of menses onset

**OR**

Switching from a hormonal form of contraception

## Methods

Assessed 3,535 randomly-selected IUD insertions from a retrospective cohort of AYA receiving IUDs with modified insertion guidelines.

11-24 years old, negative pregnancy test, patient at BC4U, an adolescent-specific Title X clinic in Aurora, Colorado.

Providers inserted according to standard guidelines or modified guidelines.

Modified guidelines included:

Patient reported abstinence or 100% condom use

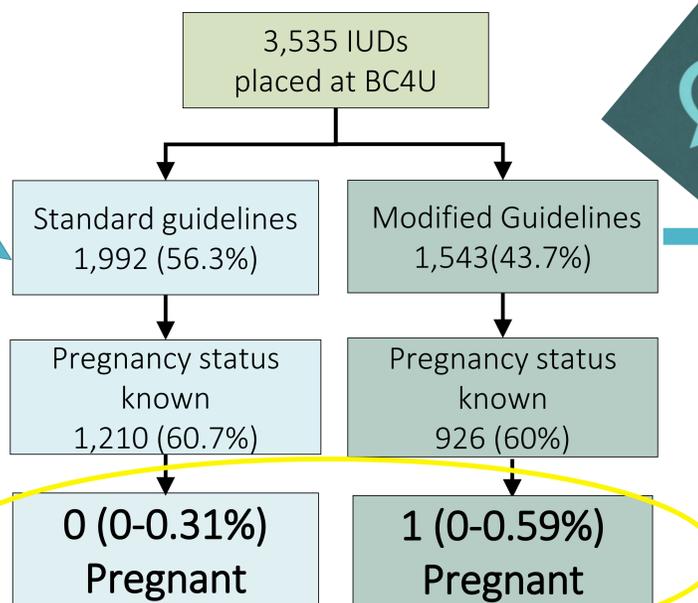
- Since LMP
- Since discontinuation of contraceptive method

Two groups: AYA **within standard guidelines** and AYA **outside standard guidelines with modified guidelines**

Primary outcome: No evidence of pregnancy following IUD placement.

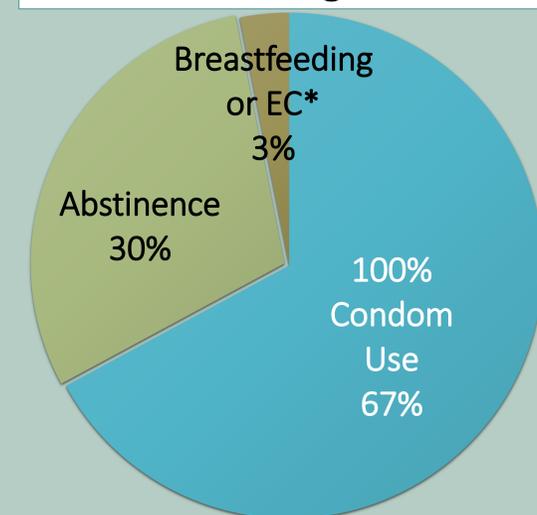
## Results

- 843 (42.3%) within 7 days of menses
- 1,445 72.5% switching from a hormonal method
- 296 (14.8%) met both criteria



	Standard Guidelines n=1,992	Modified Guidelines n=1,543	P-Value
Age (Median Range)	21 (11-24.9)	20 (11-24)	0.009
Race/Ethnicity			0.05
Non-Hispanic White	53.4%	48.7%	
Non-Hispanic Black	5.9%	6.2%	
Non-Hispanic Asian	2.3%	2.2%	
Hispanic or Latino	26.4%	30.6%	
Non-Hispanic Other	11.9%	12.3%	
Days Since LMP (Median Range)	6 (0-35)	17 (8-35)	<0.001

## Reasons providers followed modified guidelines



\*EC = emergency contraception

## Discussion

- AYAs are at a higher risk for unintended pregnancies and may not have the resources to return to the clinic.
- Adopting a more liberal approach will allow providers to provide better care.
- The modified insertion guidelines do not result in a higher rate of luteal phase pregnancies.
- Even in an AYA population which is known to have complex reproductive behaviors and unclear medical history.

## References

Nelson AL, Massoudi N. New developments in intrauterine device use: focus on the US. Open Access J Contracept. 2016 Sep 13;7:127-141. doi: 10.2147/OAJC.S85755. PMID: 29386944; PMCID: PMC5683151.

## Acknowledgements

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