

Foundations of Adolescent Health in Indian Country

An Introduction to the Adolescent Health ECHO & Preventive Care

A Warm Welcome

This series addresses priority topics in adolescent health with a focus on sexual and reproductive health, while recognizing that no single course can reflect all the knowledge, traditions, and experiences in our communities.

A Warm Welcome

We welcome participants to bring forward additional topics, stories, and teachings that can enrich the learning for everyone.

A Warm Welcome

We will discuss how historical and ongoing factors — including colonization, systemic racism, gender discrimination, and poverty — shape health outcomes, while also lifting up resilience, cultural strengths, and sovereignty.

A Warm Welcome

We recognize that age, power dynamics, and intersecting identities can impact access to care for youth, and that these experiences may look different across communities and regions.

A Warm Welcome

While some topics may be politically charged in the current climate, our conversations will be guided by evidence, cultural humility, and the lived experiences of Indigenous peoples.

A Warm Welcome

All voices are valued. We commit to respectful, professional, and culturally safe dialogue (even when perspectives differ) so that our space remains supportive and inclusive.

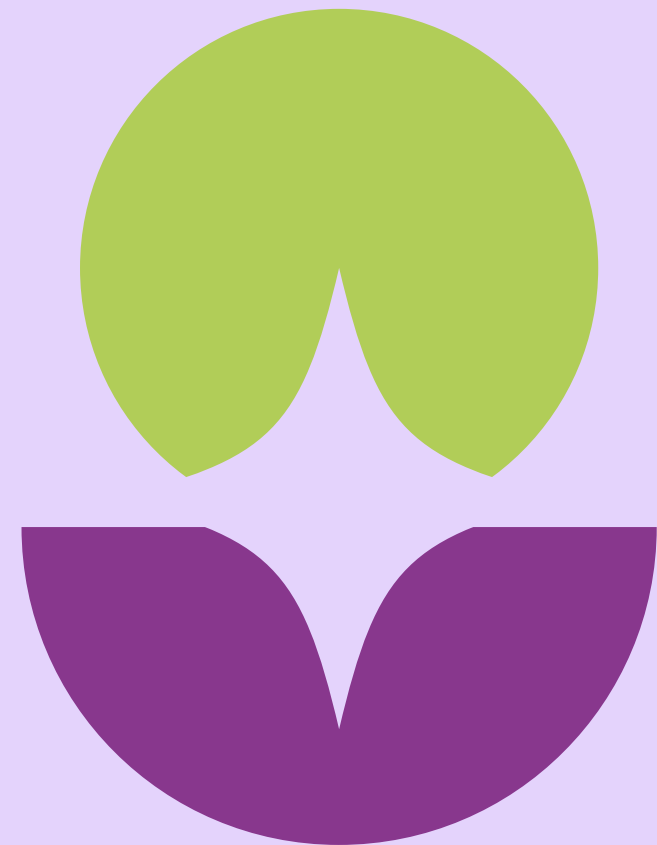
Introductions



Alessandra Angelino, MD, MPH, FAAP, FSAHM
she/her
Medical Director, Lead Faculty



Leah Spatafore, MD, FAAP
she/they
Lead Faculty



Upcoming team additions

Tribal youth delegates

Young adult representatives

Adolescent medicine
specialists- content experts

Community experts

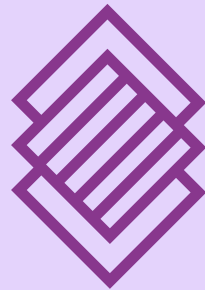


Overall ECHO objectives



1. Describe the structure, goals, and scope of the Adolescent Health ECHO, including priority topic areas, learning formats, and available resources.
2. Identify core principles of adolescent-centered care in Indian Country.
3. Apply evidence-based strategies for Indigenous adolescents to improve health.

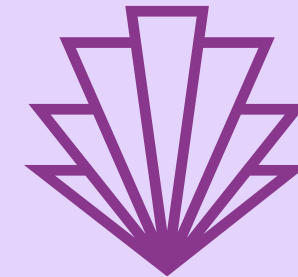
Why an Adolescent Health ECHO?



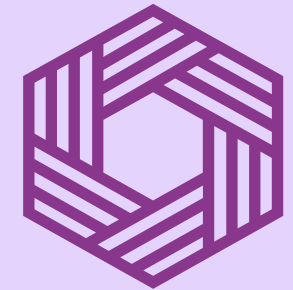
Adolescence is a distinct developmental stage



Indigenous adolescents hold significant strengths

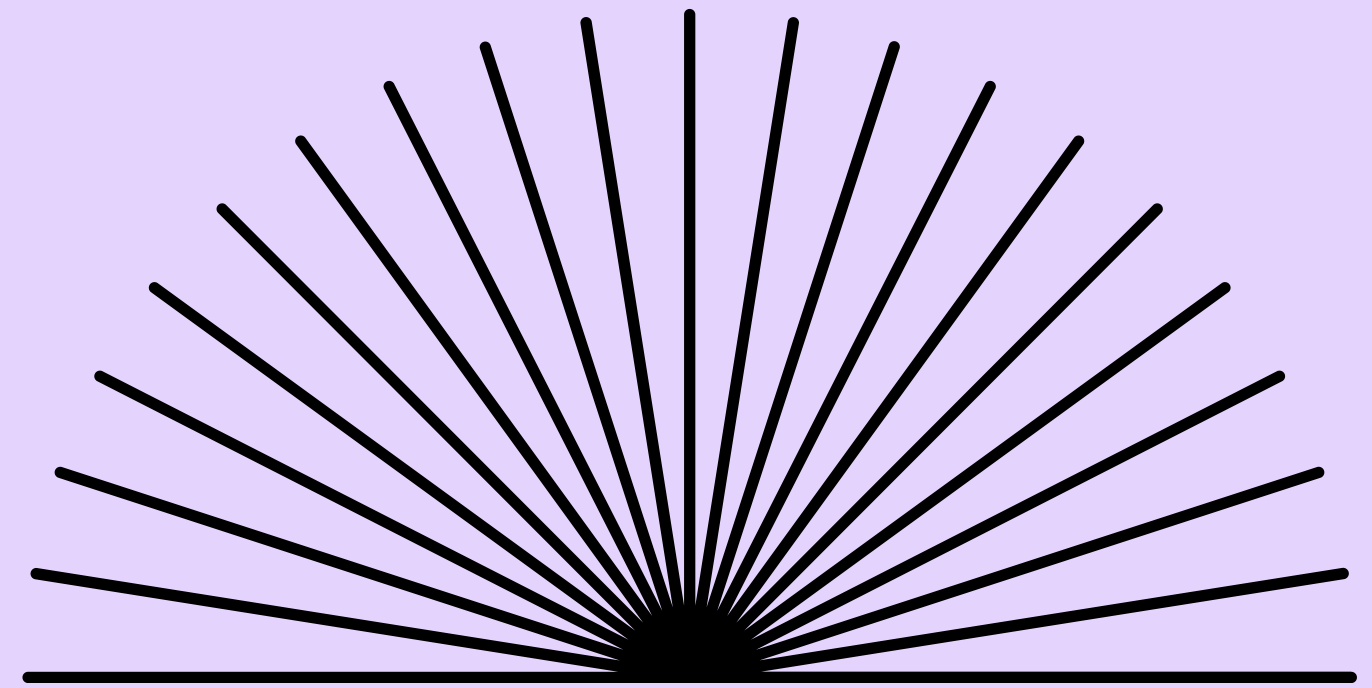
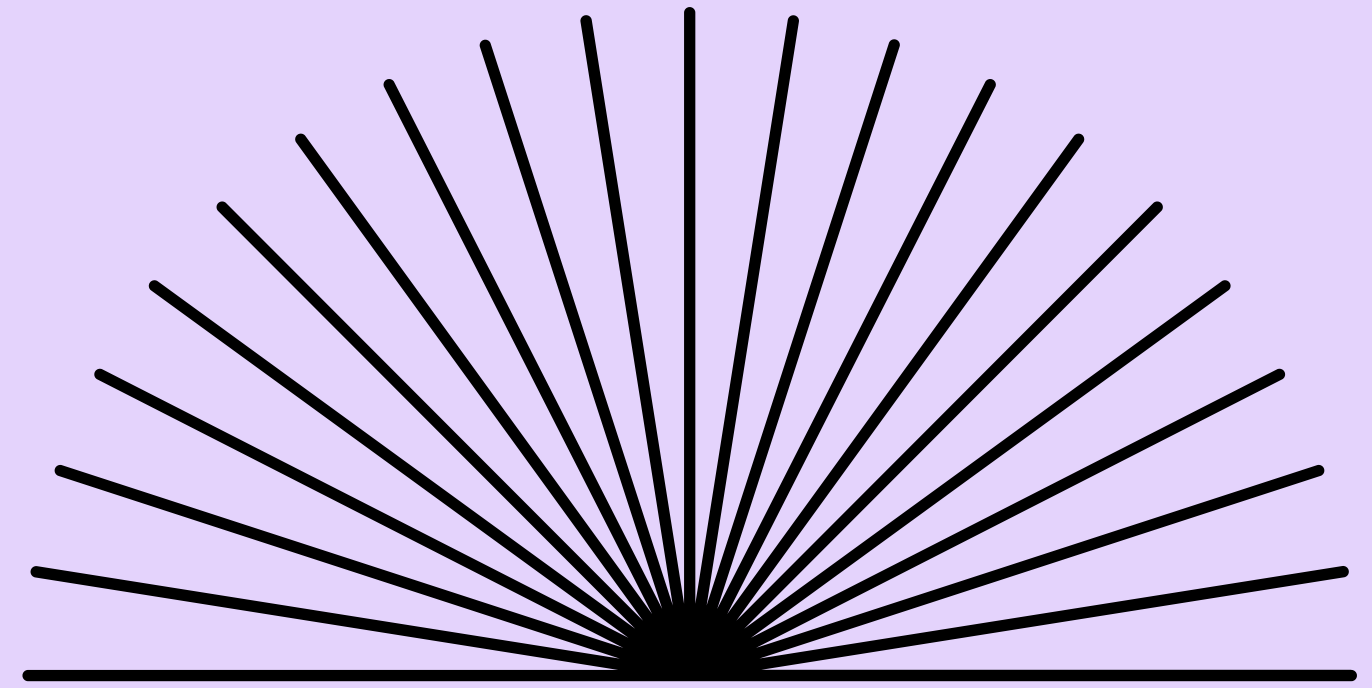


Many clinicians provide adolescent care without formal adolescent training



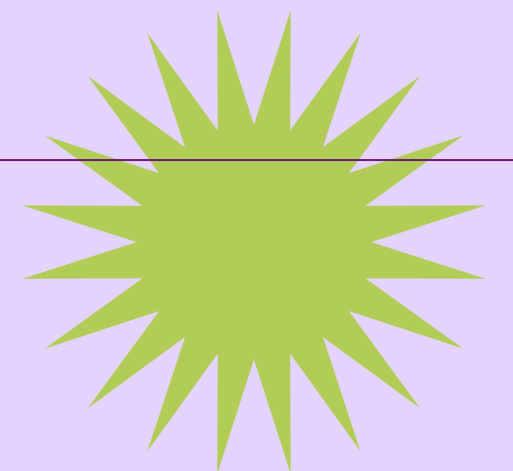
Opportunity to learn from and support future generations

**Plus...ECHO
participant
feedback,
community
requests, &
site visit
needs**

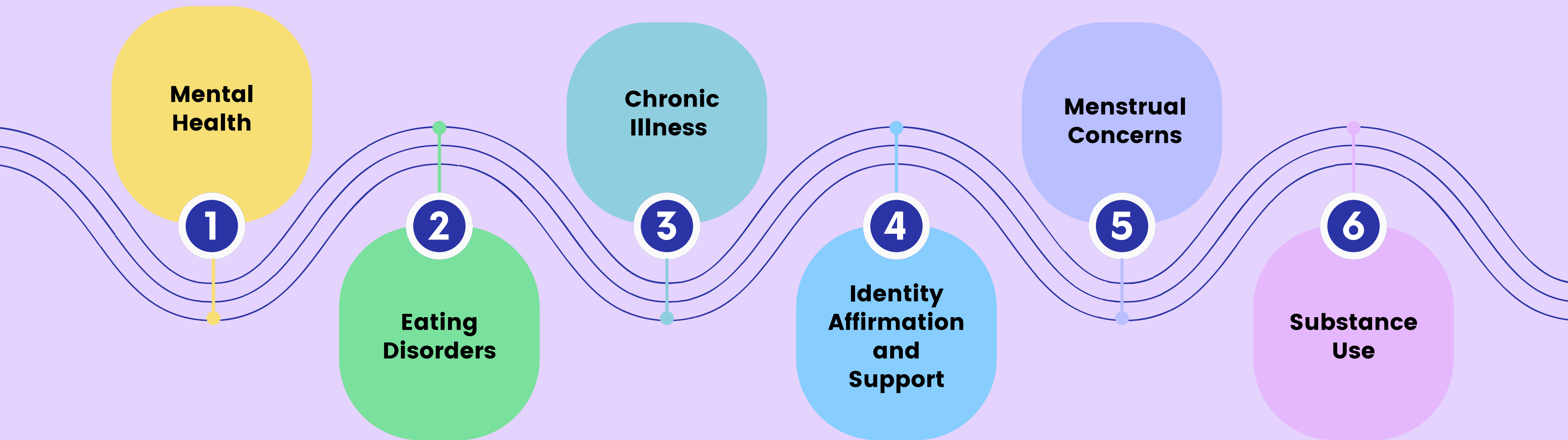


Typical ECHO Format

1	Introductions (5 min)
2	Ask for sign-in
3	Didactic with Indigenous lens (15-20min)
4	Case Presentation & Recommendations (15 min)
5	Policy action pointers and application (10-15 mins)



The Path Forward



Topics selected by ECHO participants and community members

Takeaways from each session



✓ Lecture

✓ One page “cheat sheet”

✓ One page policy overview

✓ Resources



Examples

Preventive Adolescent Health Care

Scope & Purpose

This summary consolidates core principles of preventive adolescent health care for use in clinical practice and policy-informed care delivery. It integrates foundations of preventive care, screening, immunizations, and anticipatory guidance into a single reference.

A. Foundations of Preventive Adolescent Care

- Preventive care in adolescence emphasizes developmentally appropriate, strengths-based, and trauma-informed approaches.
- Confidentiality is central to effective care; limits should be clearly explained at every visit.
- Annual well visits serve as the anchor for prevention, relationship building, and longitudinal assessment.
- Adolescence includes youth and young adults from 12 to 26 years old.

What Clinicians Often Miss — Clinical

- Failure to restate confidentiality limits at each visit reduces disclosure.
- Overreliance on caregiver report may obscure risk behaviors or hinder relationship building.

Care Gaps or opportunities — School & Indigenous Systems

- School Based Health Centers, Tribal clinics, and Urban Indian Health programs often function as continuity anchors for youth with limited access to primary care.
- Documentation practices may vary in SBHC and I/T/U settings. It is important that documentation reflect confidentiality.

B. Preventive Screening & Risk Assessment

- Universal screening promotes equity but must be paired with follow-up.
- Validated tools (PHQ-A, GAD-7, CRAFFT 2.1+, HEADSSS) require interpretation within developmental context.
- Positive screens warrant same-day triage and prioritization, not reflex referral.

What Clinicians Often Miss — Clinical

- Treating screening scores as diagnoses rather than indicators of risk.
- Dismissing false negative screens in youth with high contextual risk.
- Failing to dig deeper into a positive score- is it really ADHD, or is it anxiety?

Care Gaps or opportunities — School & Indigenous Systems

- School counselors and nurses may implement supports faster than external referrals when provided with clear clinician guidance.
- Limited specialty access

C. Immunizations & Preventive Services

- Adolescent immunization protects both individual and community health.
- HPV vaccination is cancer prevention and should be framed as such.
- Catch-up immunization is common during adolescence and should be addressed at every visit.

Adolescent Preventive Care & Wellness

Regular, youth-friendly preventive care builds healthy trajectories; focus on access, confidentiality, literacy, and culturally responsive anticipatory guidance.

Policy Levers

- Finance: Ensure coverage of guideline-based well care & vaccines; parity for telehealth & transportation.
- Data: Require adolescent-specific, disaggregated reporting for equity monitoring.
- Consent/Confidentiality: State & Tribal policies enabling adolescent-appropriate services.
- School-Based Care: Expand Tribal or partner SBHC footprints.

Systems / Processes

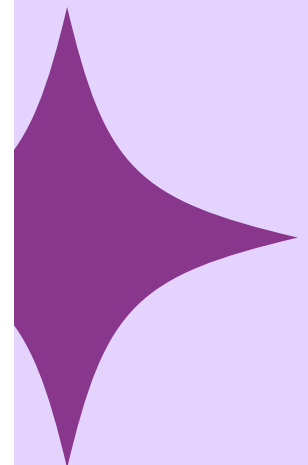
- Integrated primary care with mental/behavioral health and social supports.
- Adolescent-friendly practices (developmental tailoring, transitions planning).
- Extended hours, flexible visit modes (in-person, telehealth, mobile).
- Workforce training in Indigenous adolescent development and health literacy.

Indicators & Outcomes

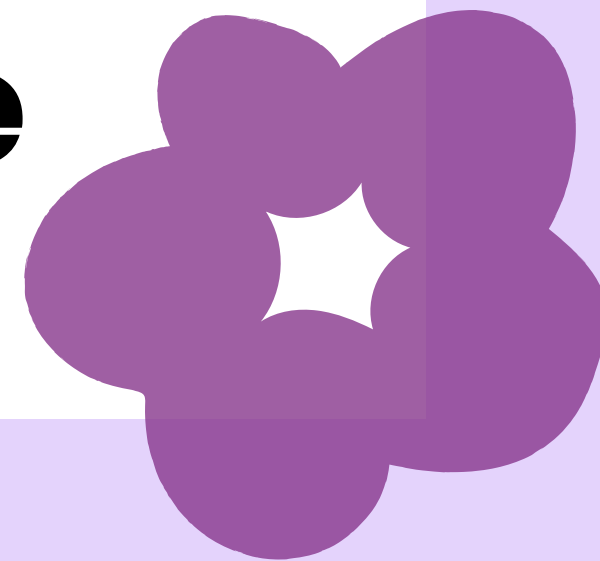
- Annual well visit; dental visit; HPV and other vaccine completion.
- Has a personal provider; reduced ER utilization for ambulatory-sensitive needs.
- Confidential time documented; telehealth utilization; missed-visit rates.
- Equity gaps narrowed across priority subgroups.

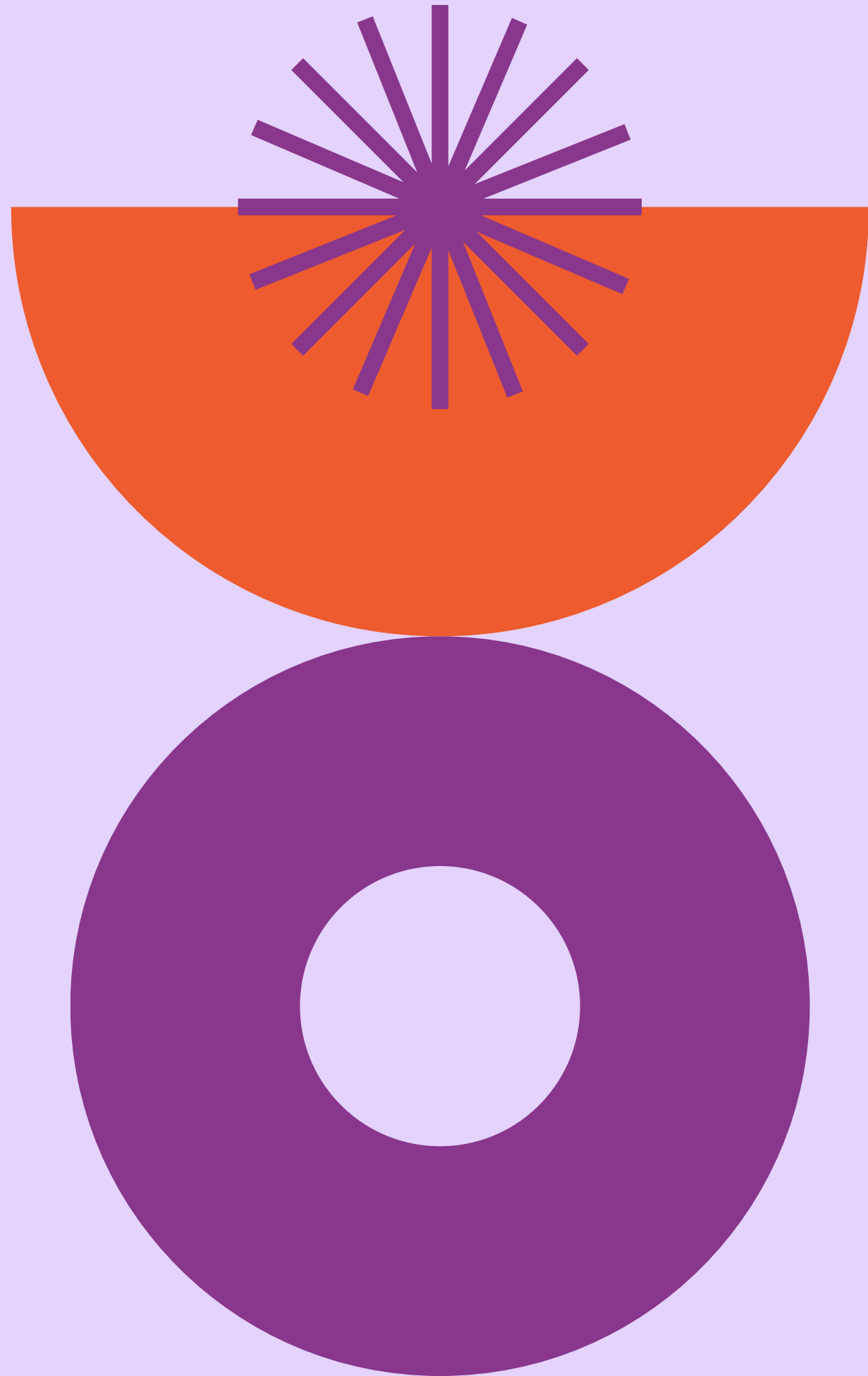
ECHO Action Pointers

- Adopt a preventive-care checklist with cultural prompts.
- Bundle sports physicals with vaccines and confidential time.
- Add transportation & text reminders; pilot teen-only clinic hours.
- Create transition plans at 16–17 linked to adult care options.



**Feel free to reach
out with any
questions,
concerns, or
desire for future
sessions!**





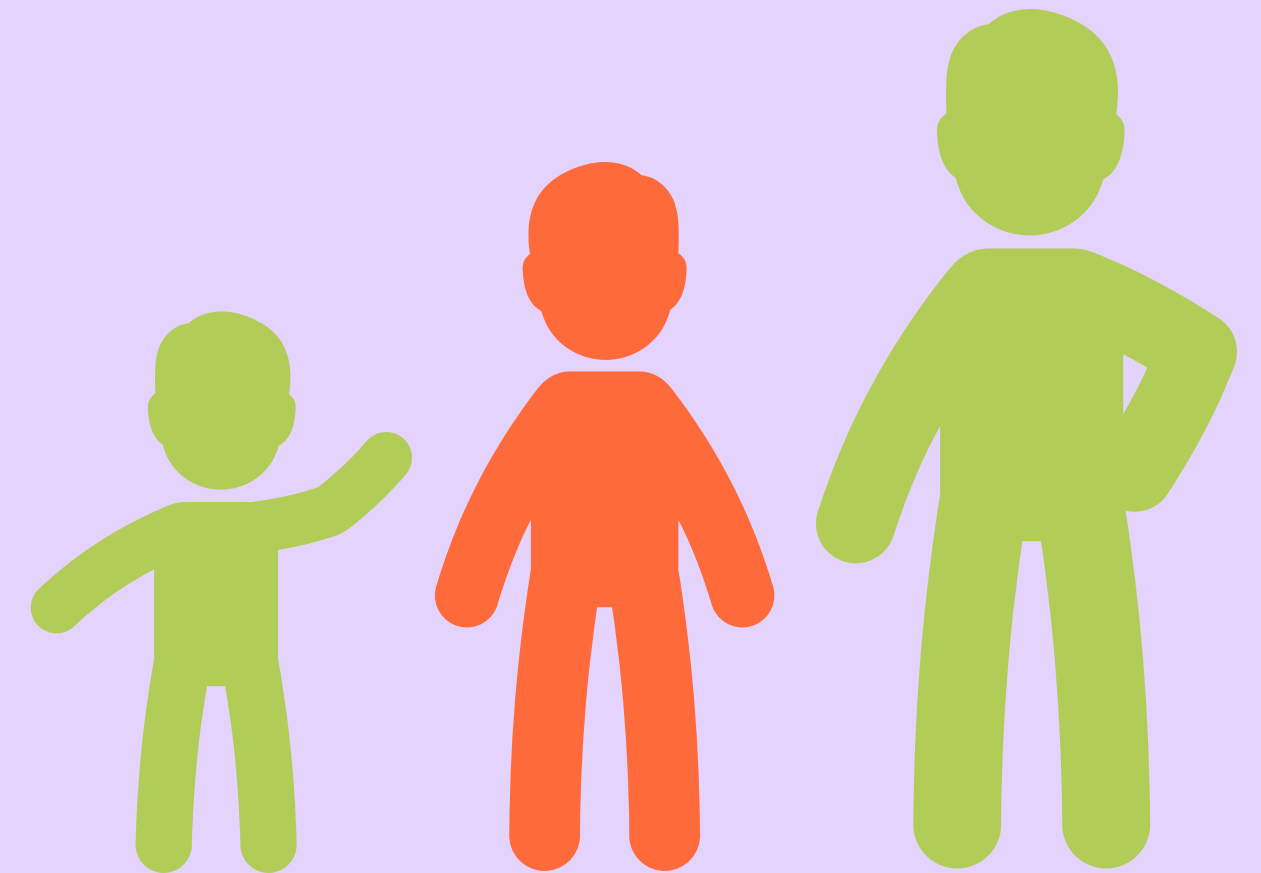
Adolescent Development in Context

Objectives



1. Describe the hormonal, physical, and neurodevelopmental processes of adolescence.
2. Identify key psychosocial, cultural, and structural factors shaping adolescent health behavior.
3. Acknowledge cultural contexts to promote AI/AN adolescent wellbeing.

**Adolescence=
10 to 26 years
old**



Puberty overview

TABLE 1. Sexual Maturity Rating in Boys and Girls

BREAST DEVELOPMENT	
Prepubertal	No breast buds
Stage 2	Subareolar breast bud
Stage 3	Elevation of the breast contour and enlargement of the areola
Stage 4	Areola forms a secondary mound above the contour of the breast
Stage 5	Mature female breast with dependent breast contour, recession of areola

PUBIC HAIR DEVELOPMENT	
Prepubertal	Prepubertal, may be some vellus hair
Stage 2	Sparse, fine, straight pubic hairs, typically at base of penis or along labia
Stage 3	Long, dark, curly pubic hairs limited to mons pubis
Stage 4	Pubic hair is adult in quality, not yet spread to thighs
Stage 5	Pubic hair has distribution of inverted triangle with spread to thighs
	In boys, there is a stage 6 for pubic hair when pubic hair rises up the midline

TESTICULAR/PENILE DEVELOPMENT	
Prepubertal	Prepubertal
Stage 2	Enlargement of the testes and scrotum, on

Puberty

- Biological transition: puberty, growth, reproductive capability
- Developmental tasks: identity formation, independence, relationships
- Brain-body disconnect: cognitive development lags behind physical maturity
- Wide range of normal, so sequence matters more than age



AFAB Tanner Staging- Breast

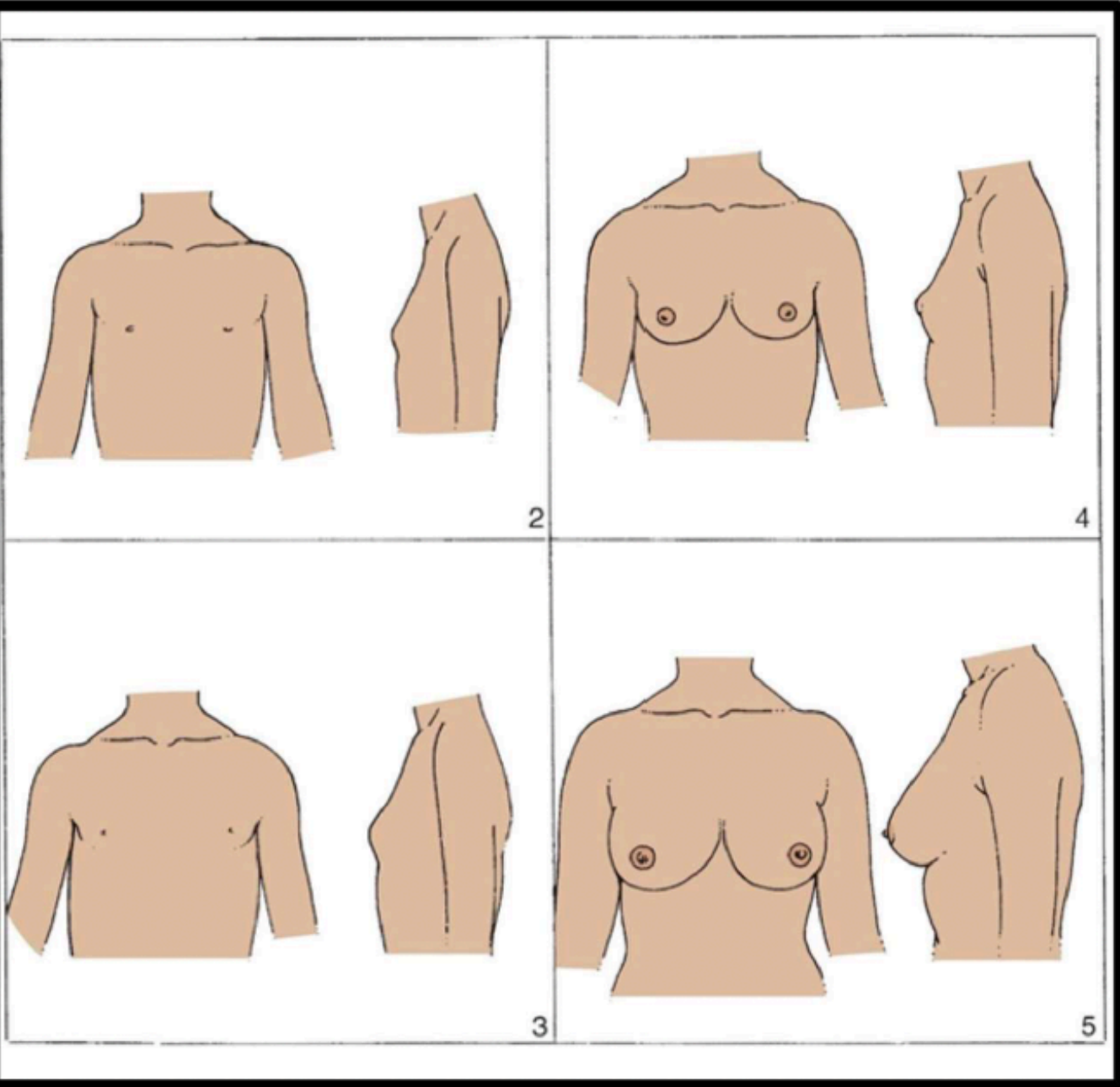
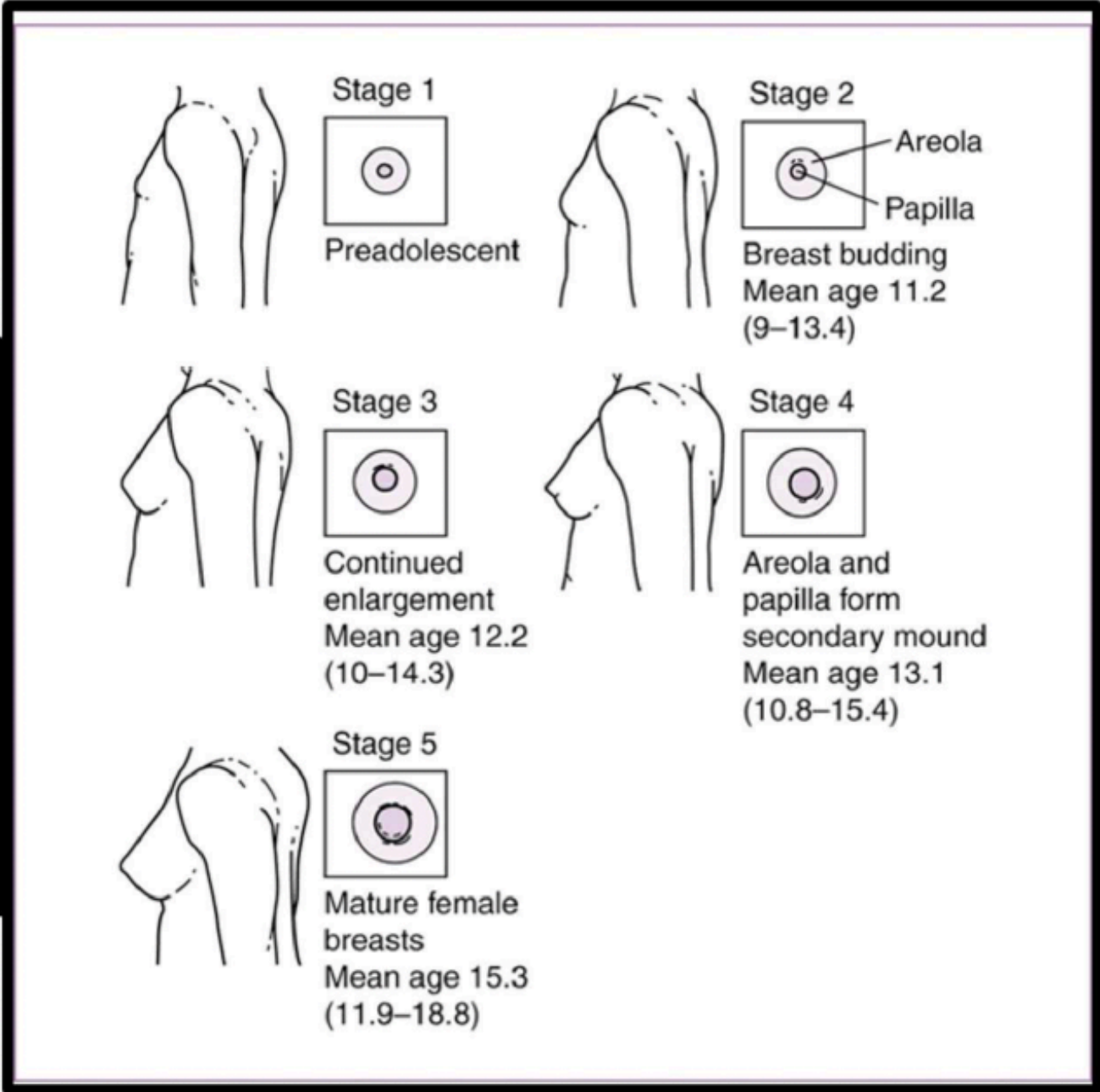


Figure 2.4 Female breast development. SMR 1, not shown: Prepubertal; elevations of papilla only. SMR 2: Breast buds appear; areola is slightly widened and projects as small mound. SMR 3: Enlargement of the entire breast with protrusion of the papilla or of the nipple. SMR 4: Enlargement of the breast and projection of areola and papilla as a secondary mound. SMR 5: Adult configuration of the breast with protrusion of the nipple; areola no longer projects separately from remainder of breast.



AFAB Tanner Staging- Pubic Hair

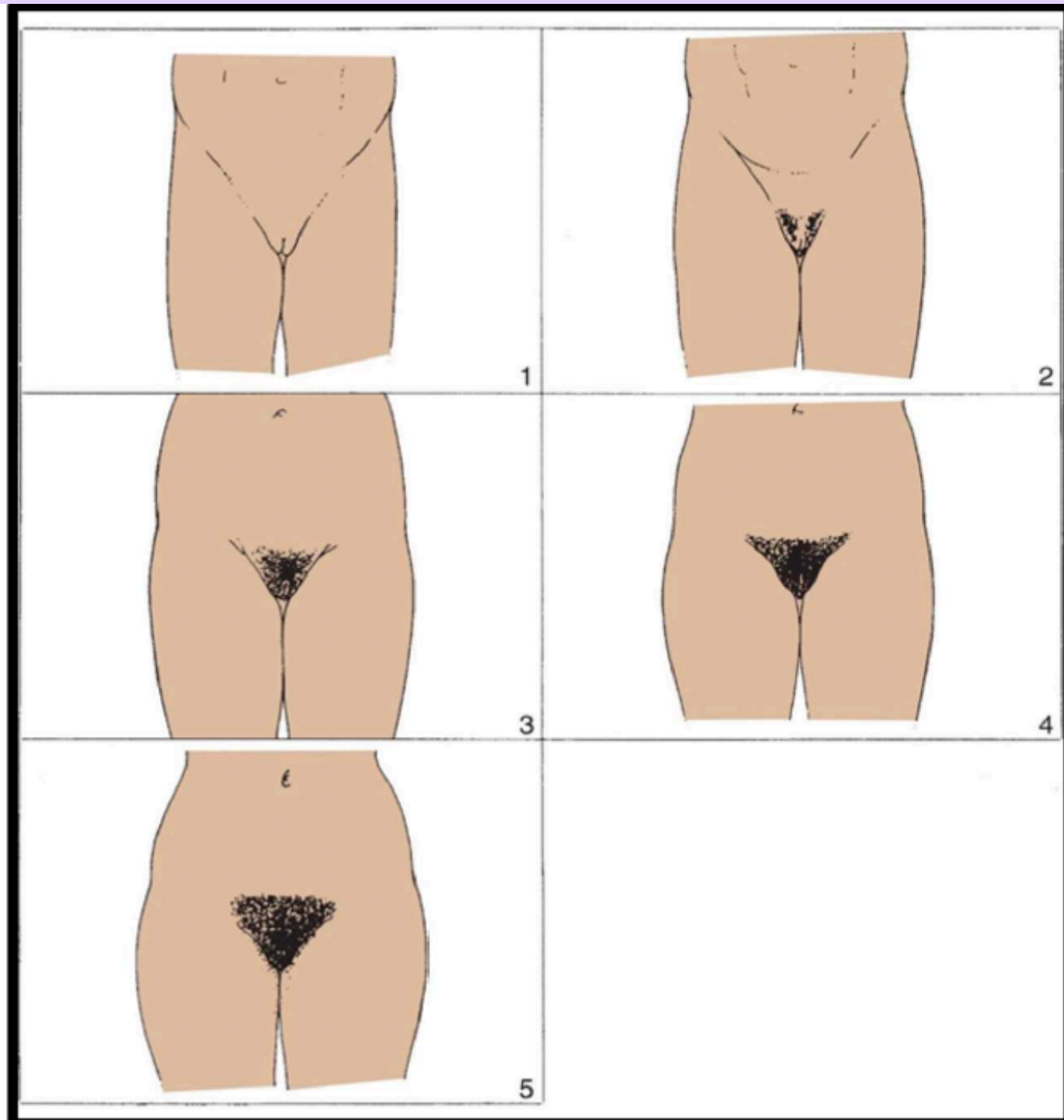


Figure 2.3 Female pubic hair development. SMR 1: Prepubertal; no pubic hair. SMR 2: Straight hair is extending along the labia and, between ratings 2 and 3, begins on the pubis. SMR 3: Pubic hair has increased in quantity, is darker, and is present in the typical female triangle but in smaller quantity. SMR 4: Pubic hair has increased in quantity, is darker, and is more dense, curled, and adult in distribution but less abundant. SMR 5: Abundant, adult-type pattern; hair may extend onto the medial aspect of the thighs.

(From Daniel WA, Balsbeck BZ. A physician's guide to sexual

AMAB Tanner Staging- genitalia and pubic hair

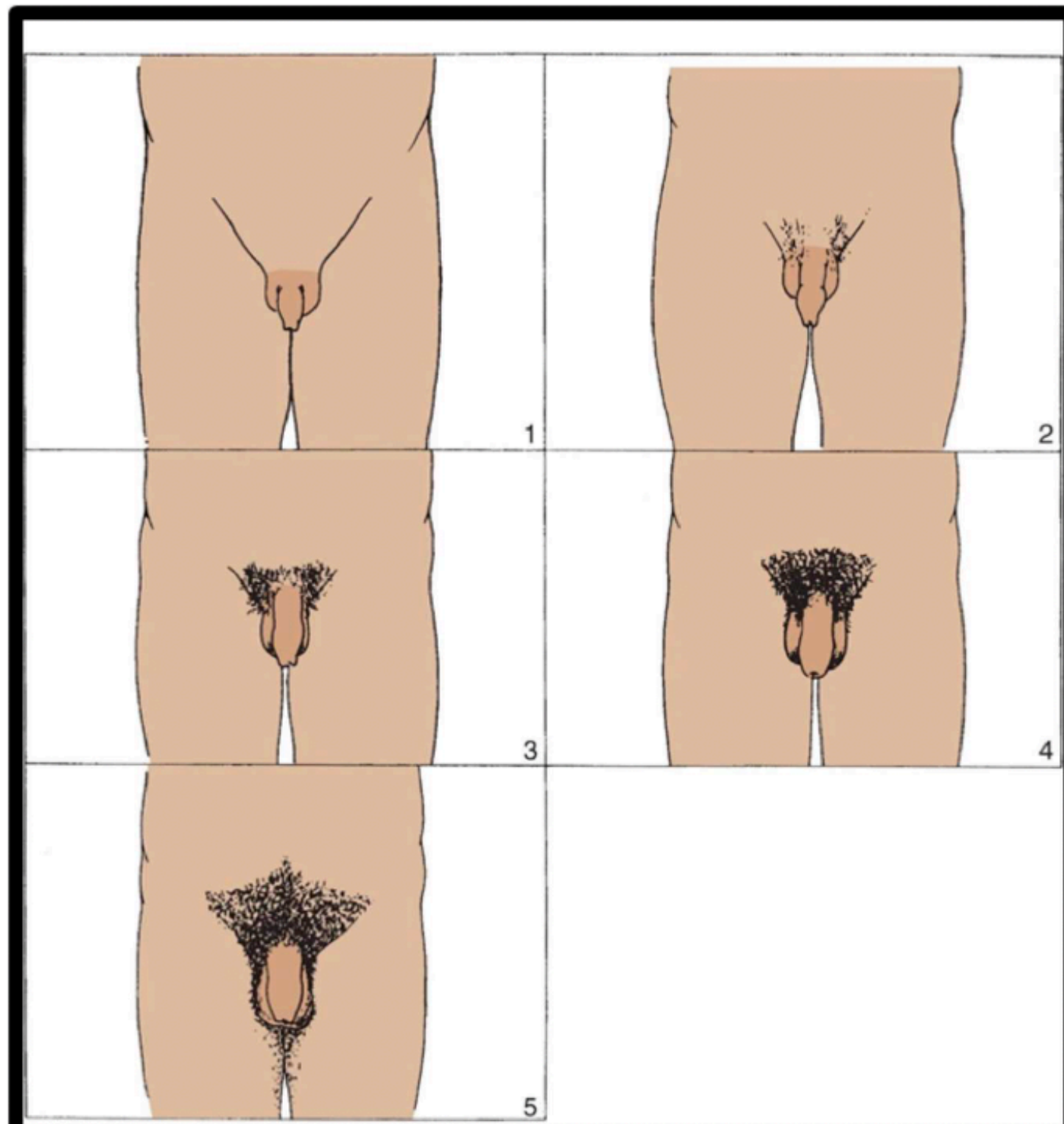
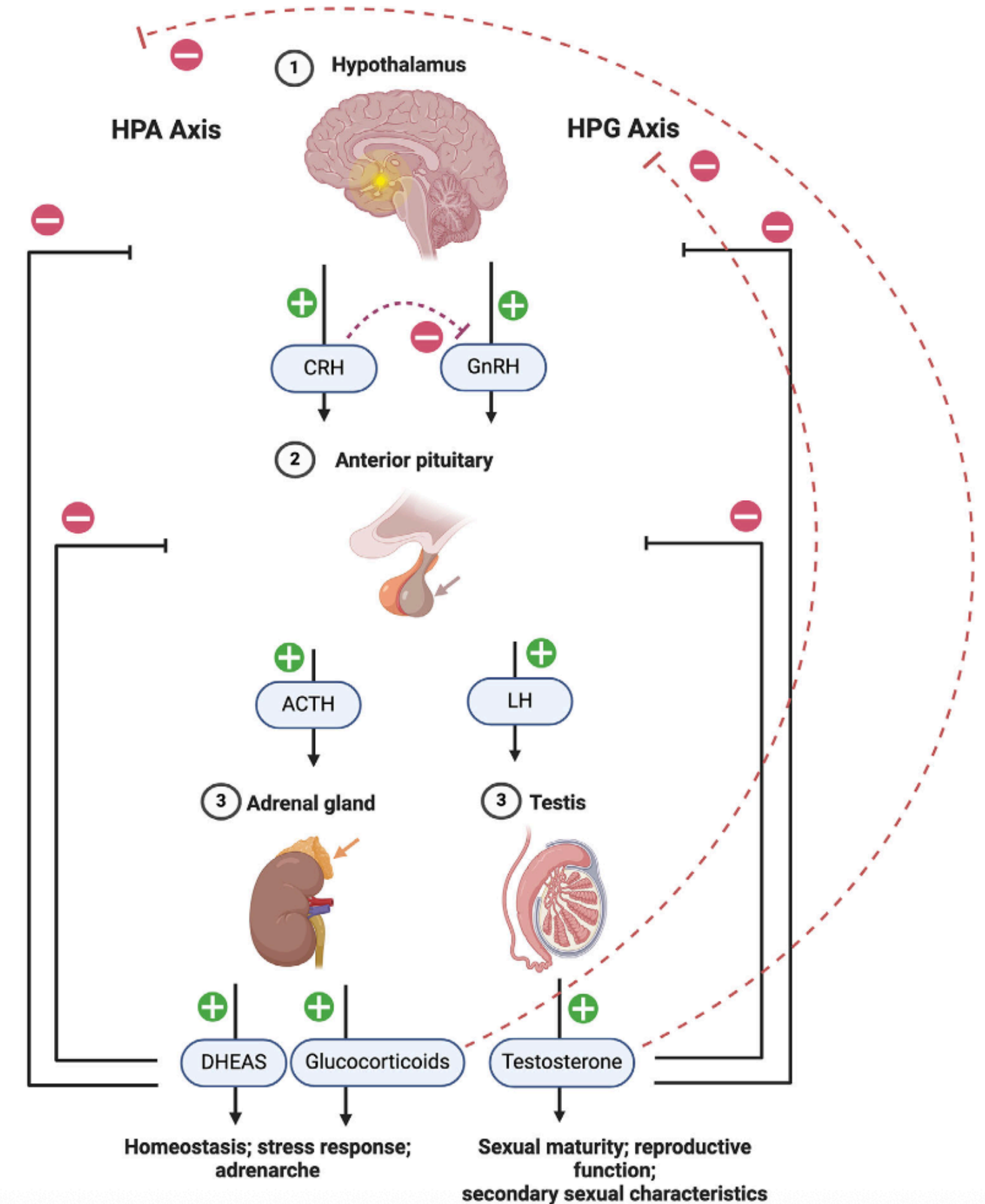


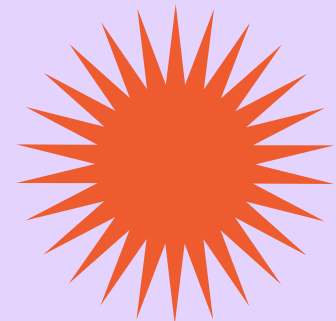
Figure 2.5 Male genital and pubic hair development. Ratings for pubic hair and for genital development can differ in a typical boy at any given time, because pubic hair and genitalia do not necessarily develop at the same rate. SMR 1: Prepubertal; no pubic hair. Genitalia unchanged from early childhood. SMR 2: Light, downy hair develops laterally and later becomes dark. Penis and testes may be slightly larger; scrotum becomes more textured. SMR 3: Pubic hair has extended across the pubis. Testes and scrotum are further enlarged; penis is larger,

Hormonal and brain changes

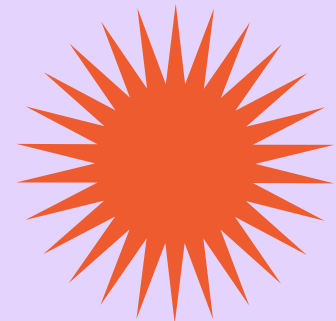
- HPG and HPA axes
- Limbic system vs. prefrontal cortex ('hot' vs. 'cold' reasoning)
- Risk-taking, emotional intensity, and social sensitivity



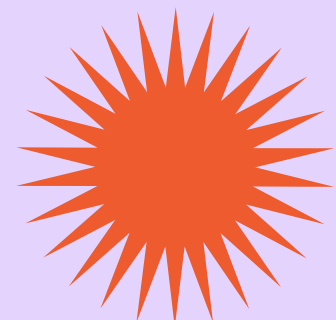
Cultural Considerations in Development



AI/AN concepts of coming of age, responsibility, and connection to ancestors



Ceremonies

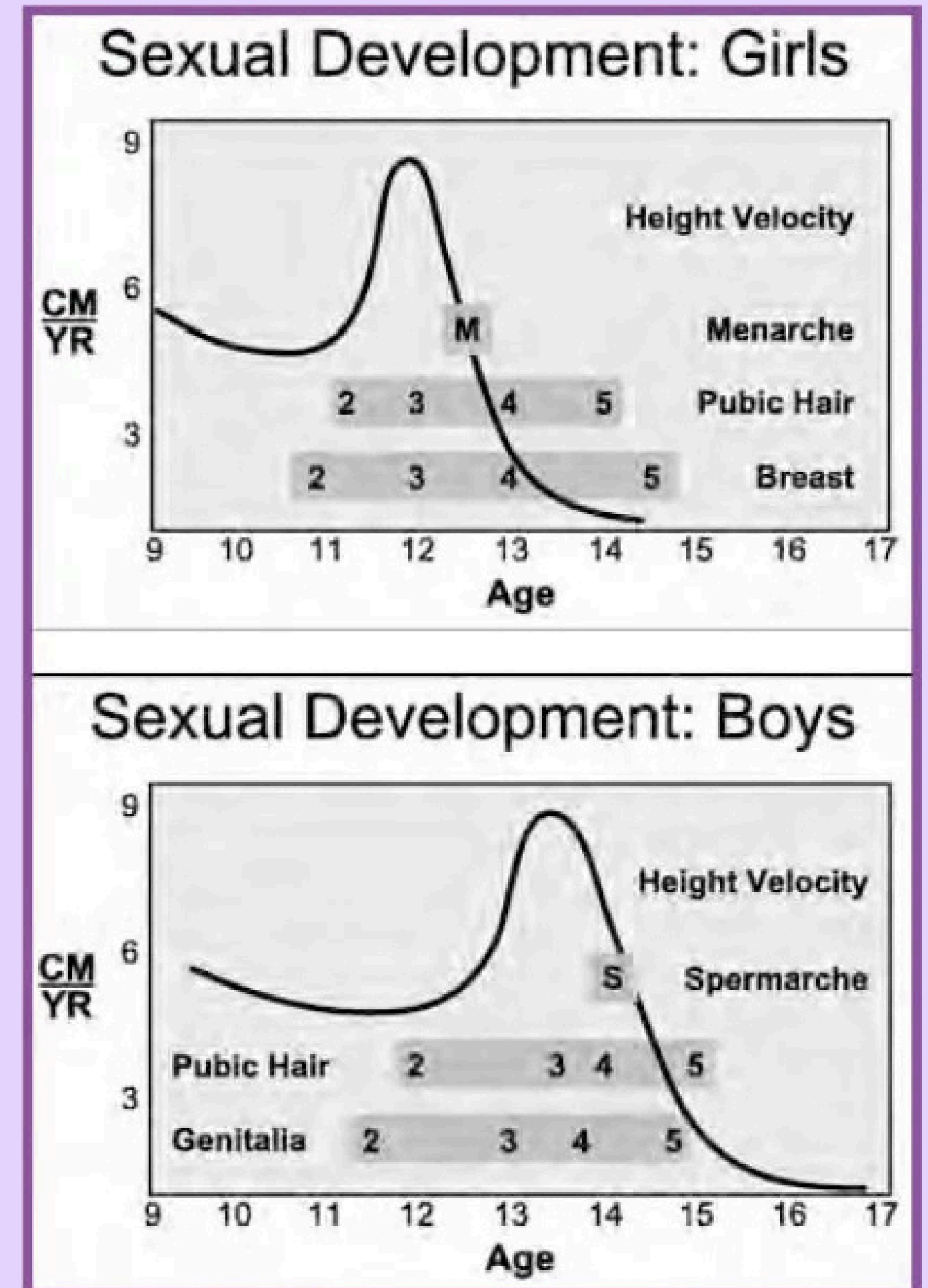


Cultural protective factors: identity, language, land, and kinship



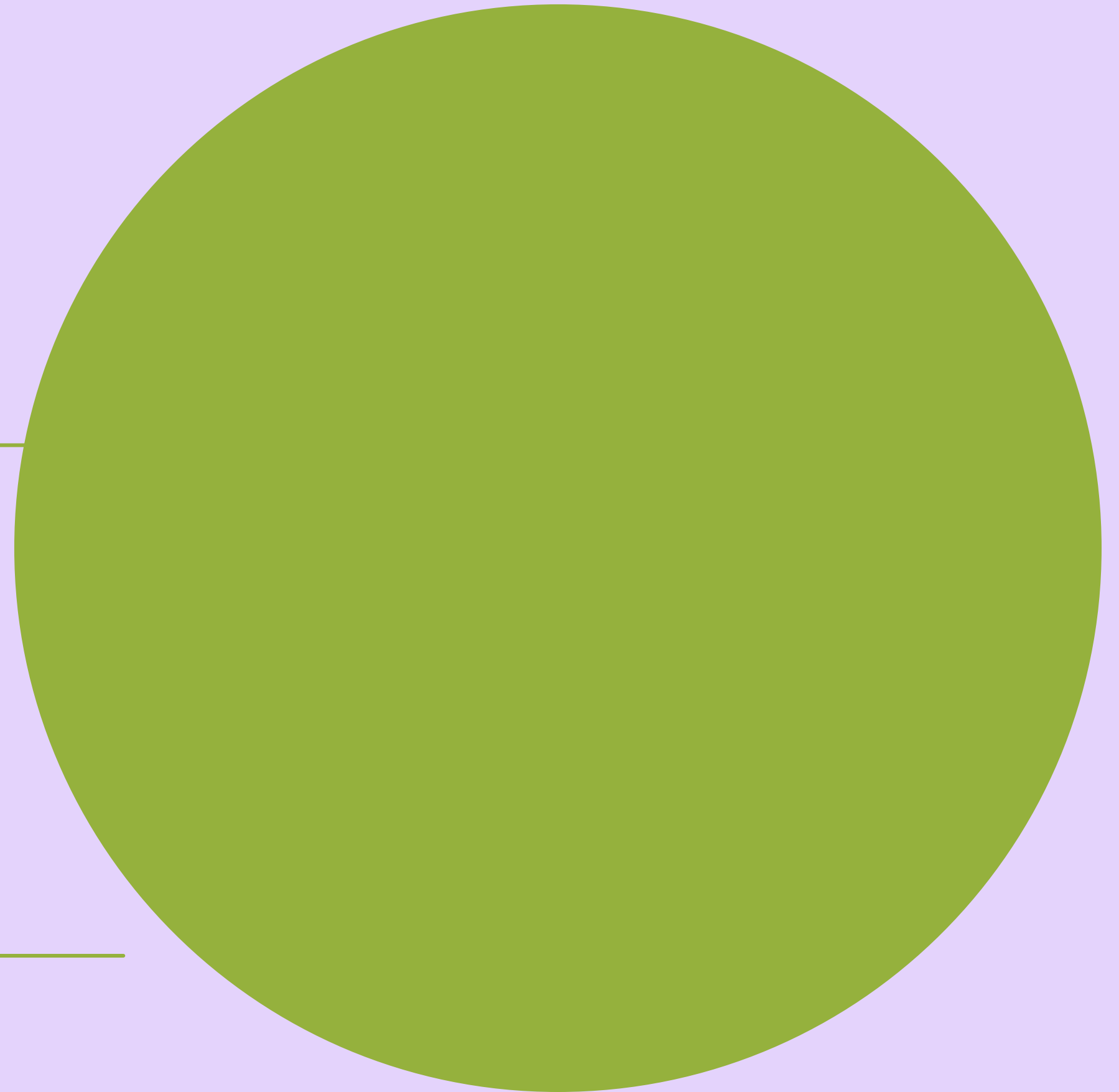
Pubertal timing

Early vs. late maturation outcomes by sex assigned at birth



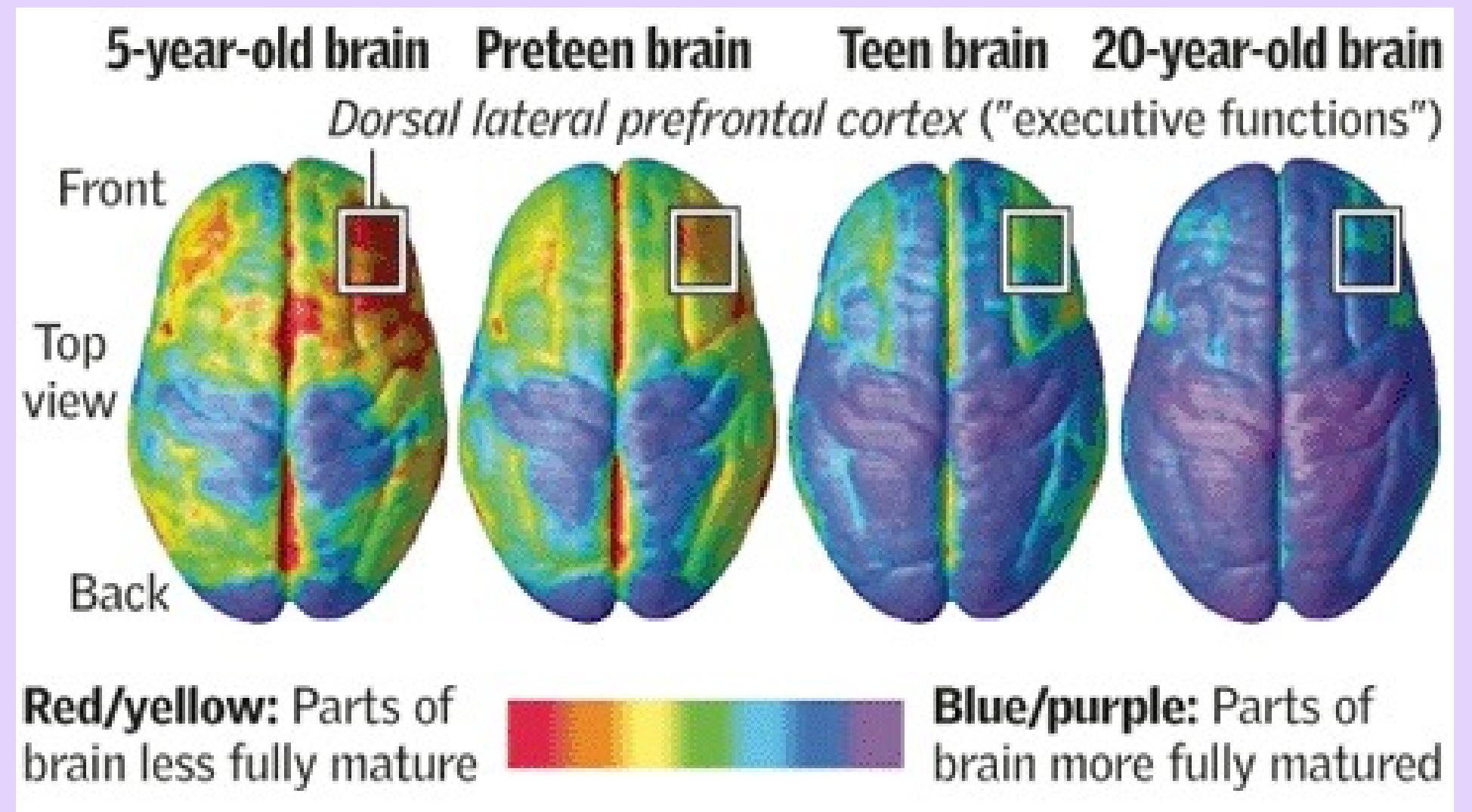
Psychosocial Impacts

-
- Body image and self-esteem
 - Impact of historical trauma, discrimination, and marginalization
 - Role in MMIWG2S crisis
-



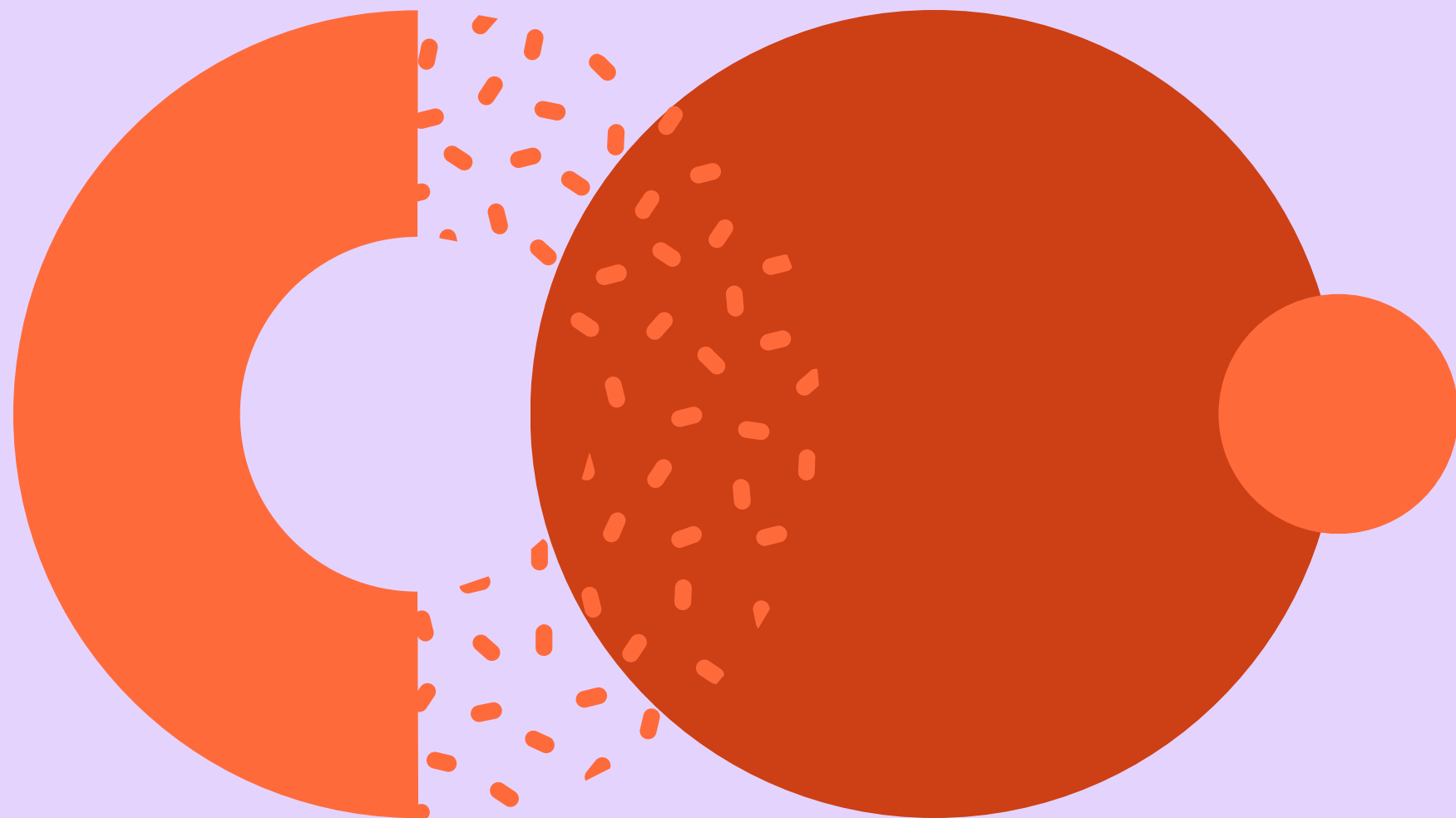
Neurodevelopment and behavior

- Delayed gratification vs. impulsivity
- Concrete to abstract thinking
- Influence of peer norms and adult modeling
- Neural plasticity
- Identity formation



Health impacts

Mental health

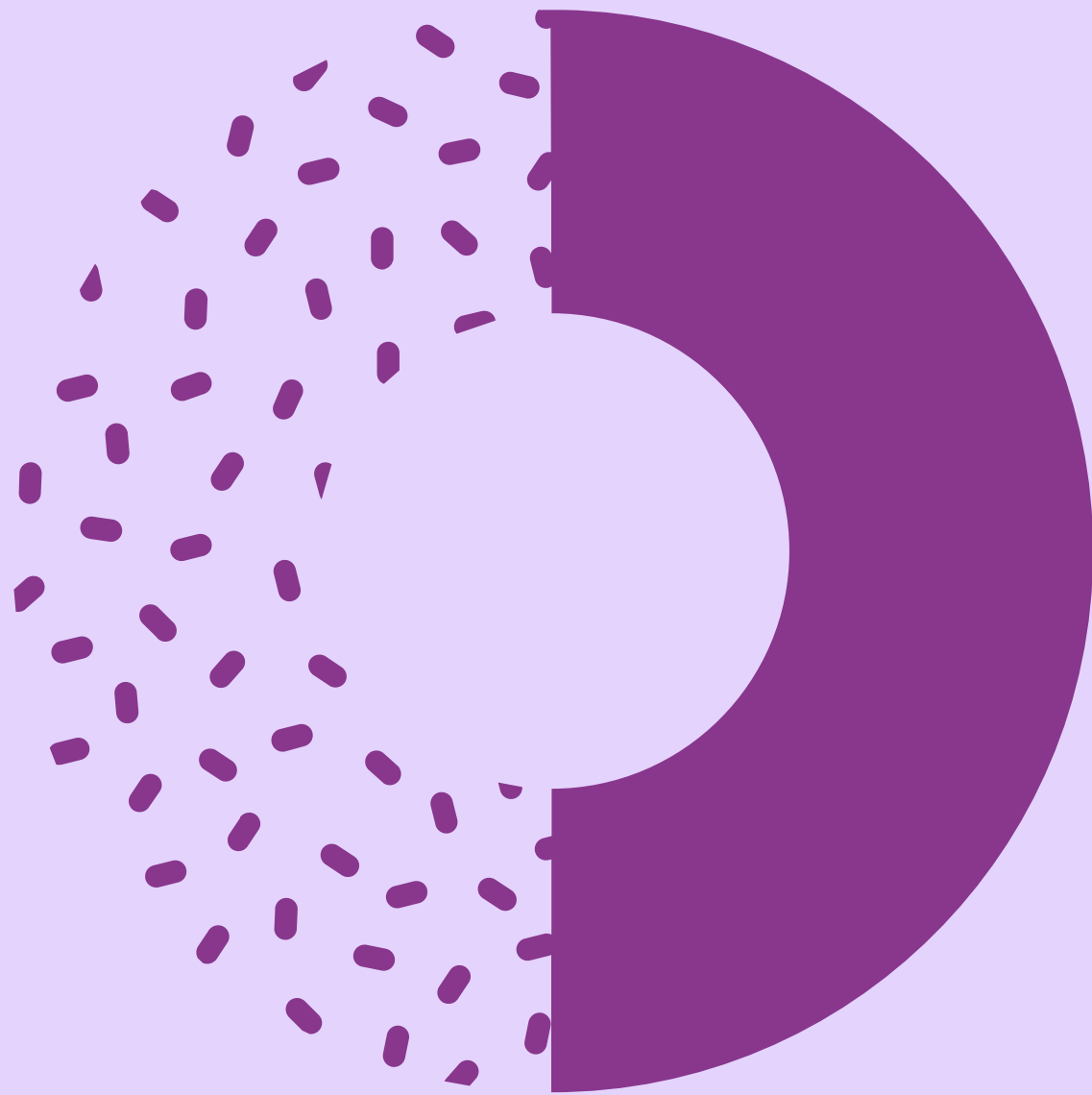


High rates of depression, suicide ideation, and trauma in AI/AN youth

Barriers to accessing care

Importance of culturally grounded, community-based mental health approaches

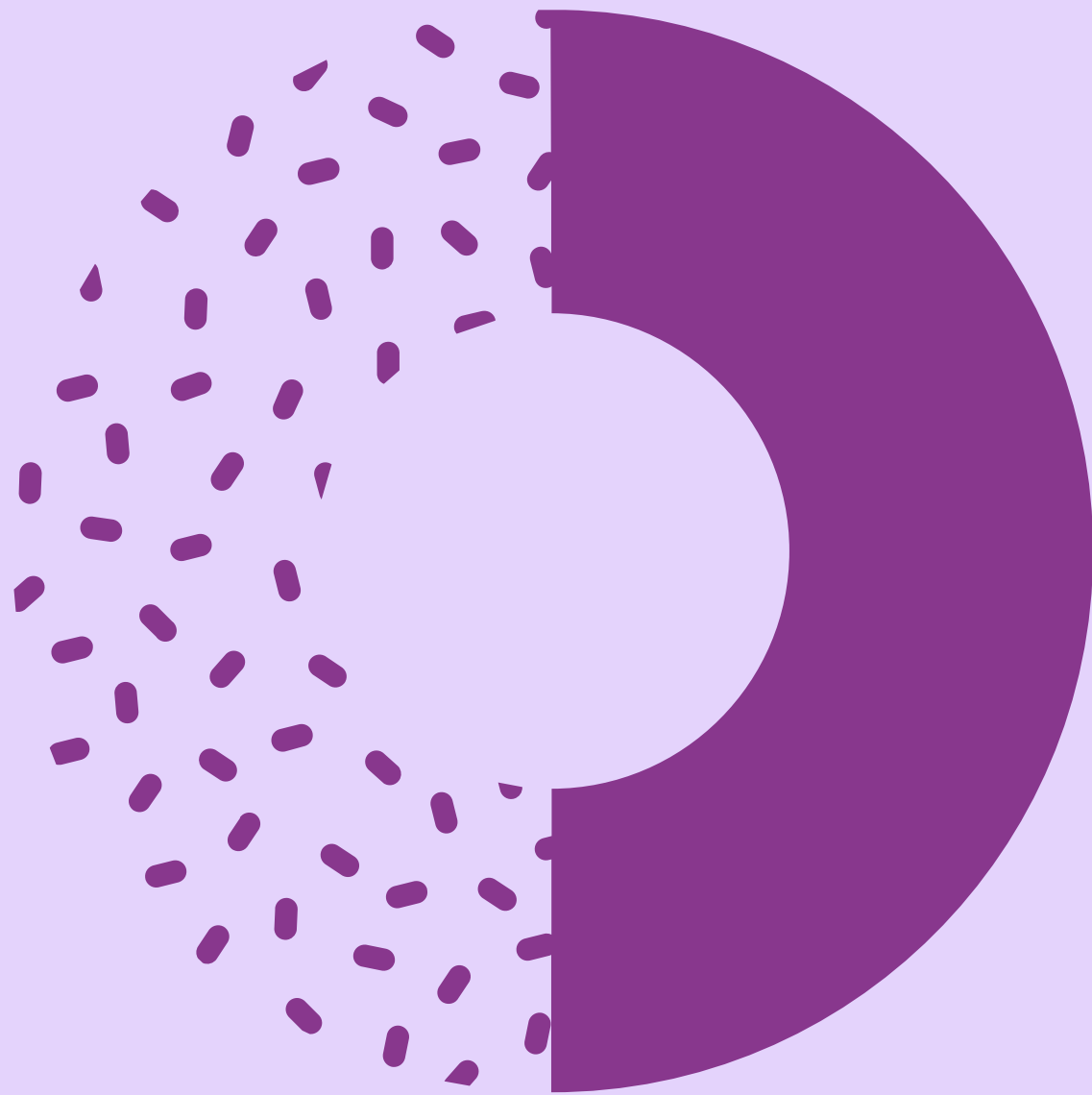
Health & risk taking



Substance use

- Cannabis and alcohol use: effects on learning, risk perception, and judgment
- Substance use as coping for structural harm (e.g., colonization, family separation)
- Role of culture in prevention

Health & risk taking

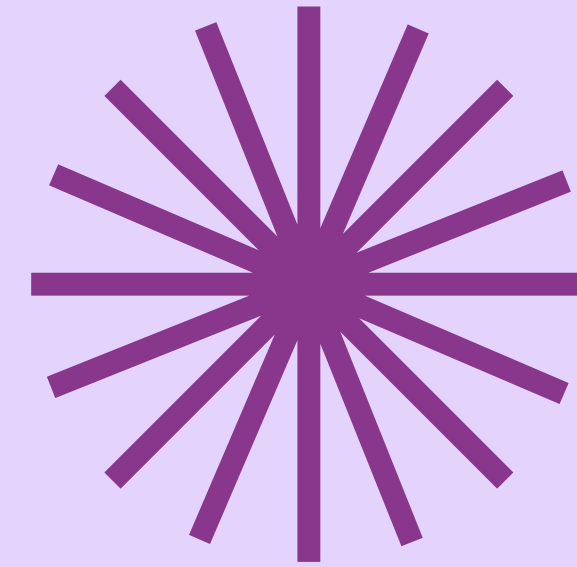


Sexual and reproductive health

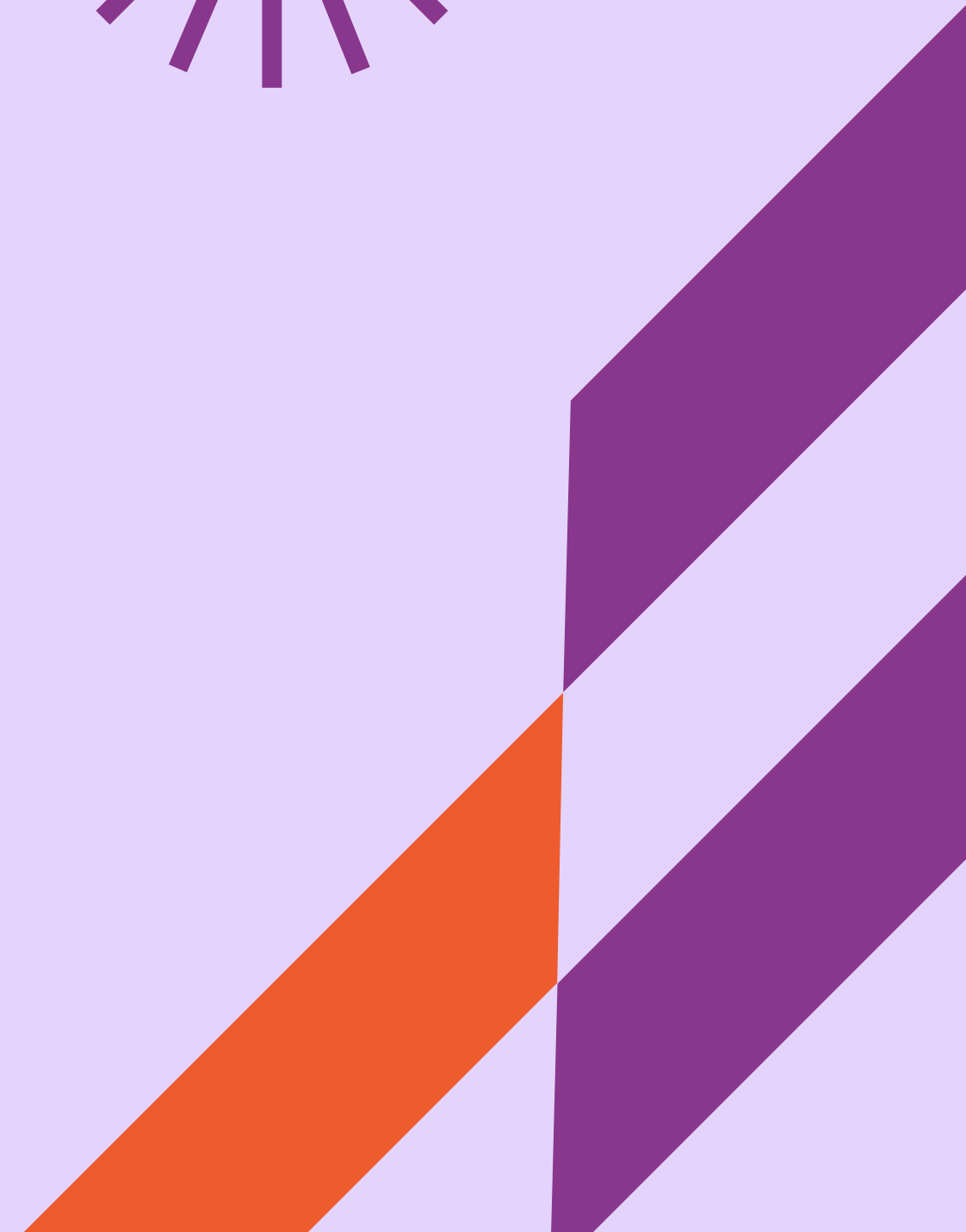
- Risks within relationship
- Pleasure vs risk
- Use of contraception
- Access to education and contraception
- Role of family and community in decisions

Considerations for AI/AN adolescents and young adults

Social determinants and health inequity



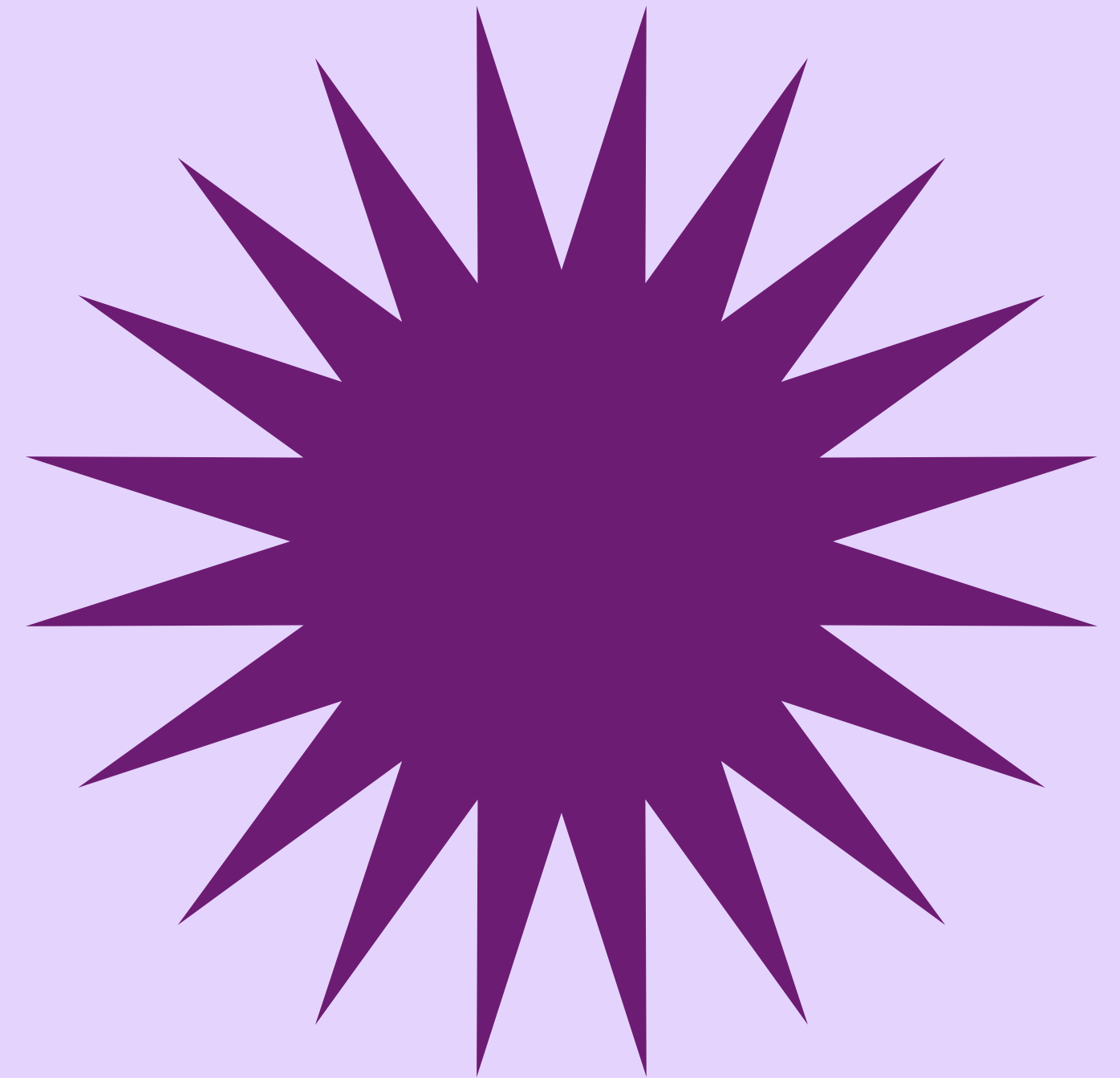
- Racism, poverty, rurality, and historical trauma
- Resilience factors: cultural revitalization, mentorship, community healing
- Policy environment: bans on gender-affirming care, lack of youth services



**Trajectory towards a
strengths-based
preventive approach**

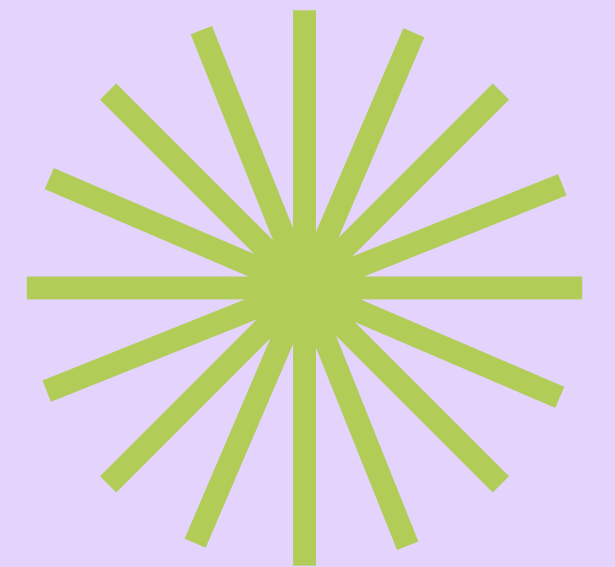
Guiding Principles

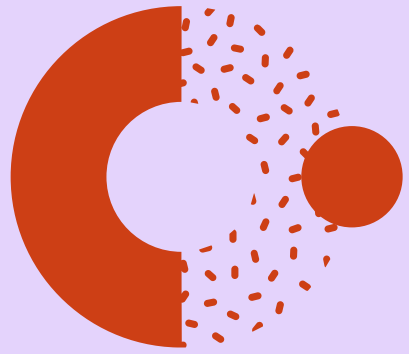
- Respect autonomy and meet adolescents where they are
 - Promote culturally grounded resources, practices, and safe spaces
 - Embrace empowerment, reject fear-based messaging
-



Preventive Strategies

- Relationship building
- Screening
- Anticipatory guidance
- Immunizations

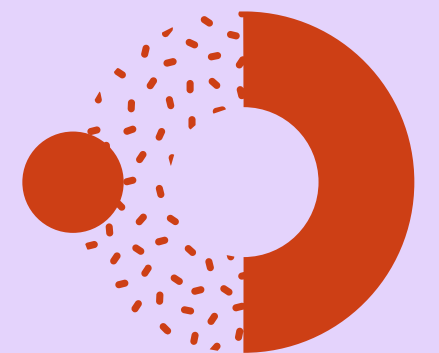
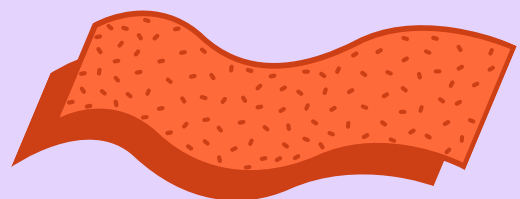




Conclusions

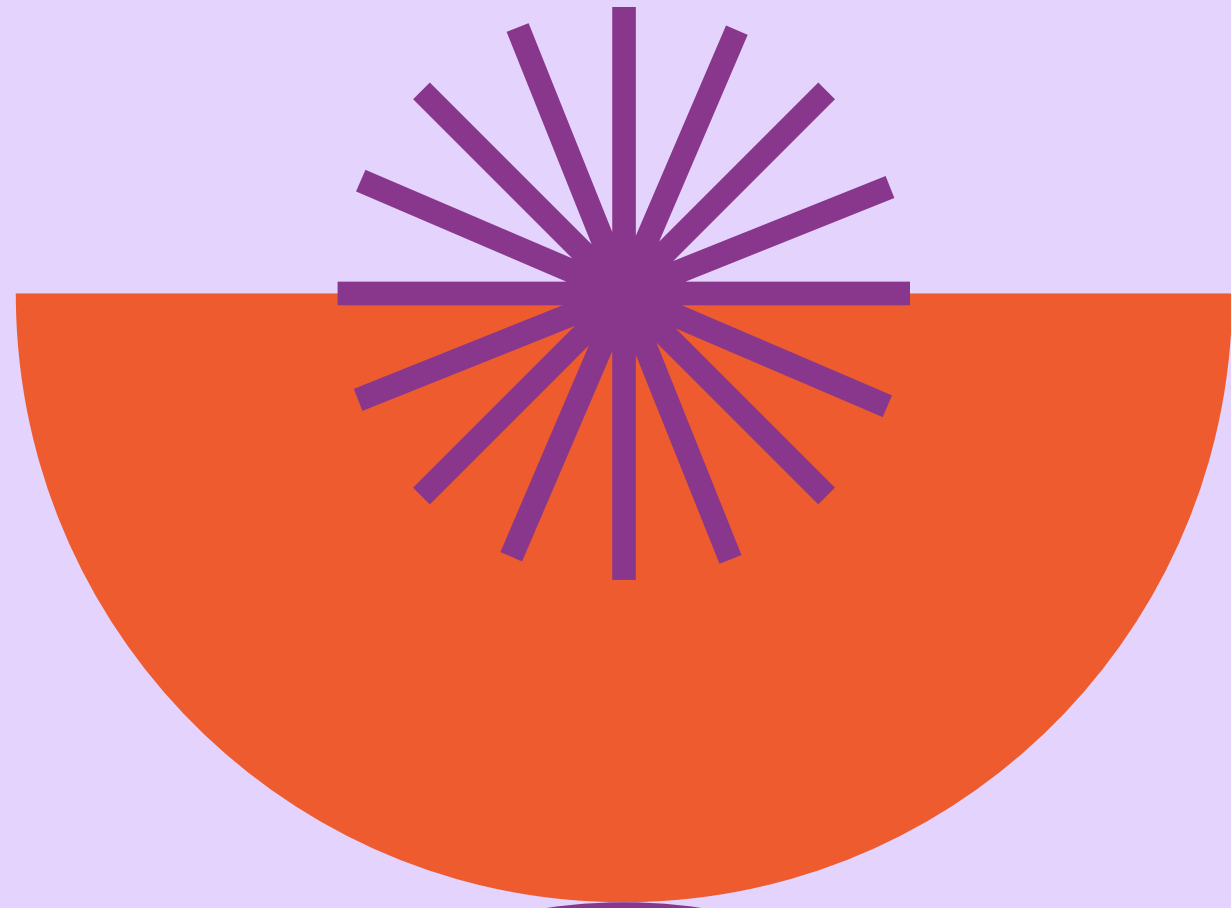


1. Adolescents are wired for growth, risk, and potential
2. AI/AN adolescents thrive with culturally congruent support systems
3. Our role: partner, advocate, and hold space for transformation



Selected references

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Thank you!

Any questions or comments?