

Lecture Title: Pediatric Anticipatory Guidance

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OBJECTIVES: After studying this lecture you should be able to:

1. Define anticipatory guidance
2. Review appropriate anticipatory guidance by age group

REFERENCES:

1. CDC's Positive Parenting Tips: <https://www.cdc.gov/ncbddd/childdevelopment/positiveparenting/>
2. CDC's Lead Poisoning Prevention: <https://www.cdc.gov/nceh/lead/default.htm>
3. CDC's Oral Health Basics: <https://www.cdc.gov/oralhealth/basics/childrens-oral-health/index.html>
4. AAP's Healthy Children: <https://www.healthychildren.org/English/ages-stages/toddler/toilet-training/Pages/default.aspx>
5. CDC's Secondhand Smoke Recommendations: <https://www.cdc.gov/tobacco/secondhand-smoke/about>

Pediatric Anticipatory Guidance and Screening

Sara Ritchie, MD



Objectives

Define anticipatory guidance

Review appropriate anticipatory guidance
by age group



Outline: Anticipatory Guidance

- Infants
- Toddlers
- Preschoolers
- Middle Childhood
- All Ages Miscellaneous



Outline: Anticipatory Guidance

- **Infants**
- Toddlers
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- All Ages Miscellaneous



Anticipatory Guidance: Infants

Provided at each well check

- 2, 4, 6, 9, & 12 months

Areas of focus

- Healthy Bodies
- Safety
- Positive Parenting
- Developmental Milestone Surveillance

Screening

- Caregiver depression
- Social determinants of health

what to expect.

Baby Sleep Schedules Chart

BABY'S AGE	NUMBER OF NAPS	NAP DURATION	DAYTIME SLEEP HOURS	NIGHTTIME SLEEP HOURS	NIGHTTIME HOURS IN A STRETCH	TOTAL SLEEP HOURS PER DAY
Birth to ~6 weeks	Varies	30 mins-4 hrs	Varies	Varies	Possibly 4 hrs	14-17 hrs
2 months	3-5	30 mins-3 hrs	7-9 hrs	8-9 hrs	Possibly 6 hrs	14-17 hrs
3 months	3-4	30 mins-2 hrs	4-8 hrs	8-10 hrs	6 hrs, sometimes	14-16 hrs
4 months	2-3	1-2 hrs	3-6 hrs	9-10 hrs	6-8 hrs, sometimes	12-16 hrs
5-6 months	2-3	1-2 hrs	3-4 hrs	10-11 hrs	10-11 hrs, sometimes	12-16 hrs
7-8 months	2	1-2 hrs	3-4 hrs	10-12 hrs	10-12 hrs, maybe	12-16 hrs
9 months	2	1-2 hrs	3-4 hrs	10-12 hrs	10-12 hrs, often	12-16 hrs
10-12 months	2	1-2 hrs	3-4 hrs	10-12 hrs	10-12 hrs, usually	12-16 hrs

Tap to enlarge

Drinks

- Breastmilk meets all needs in the first 6 months

Food

- Ramp up solid foods between 6-12 months
- Encourage new tastes but without force

Activity

- Tummy time!
- Avoid swings, strollers, bouncer seats, and exercise saucers for too long

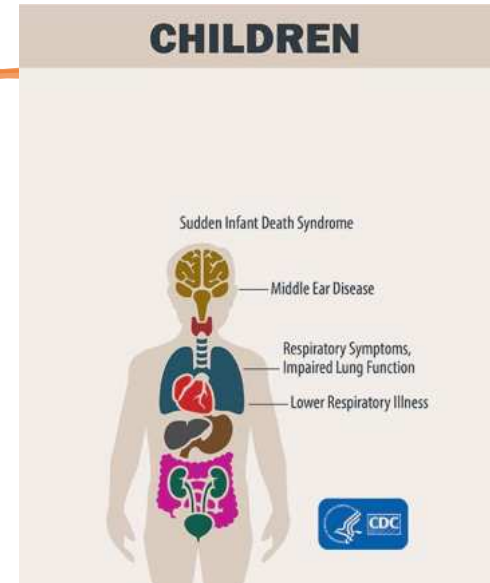
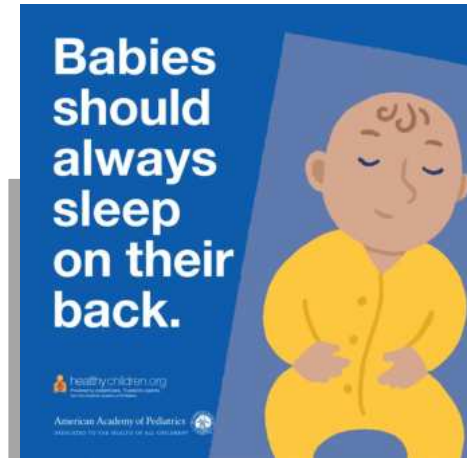
Screen Time

- <18 months – no screen media other than video chatting

Sleep Recommendations

- 4-12 months = 12-16 hours including naps

Infancy: Safety



TEMP (°F)	Approx TIME for 1st Deg Burn	Approx TIME for 3rd Deg Burn
100	Safe for bathing	Safe for bathing
120	8 min	10 min
125	2 min	4 min
130	17 sec	30 sec
140	3 sec	5 sec
155	Instant	1 sec
160	Instant	0.5 sec
180	Instant	Instant



Infancy: Positive Parenting

- Talk to your baby
- Answer your baby's sounds
- Read to your baby; Early literacy support
- Sing to your baby
- Praise your baby and give lots of loving attention
- Spend time cuddling and holding your baby
- Take care of yourself physically, mentally, and emotionally!



Here's how you can create positive childhood experiences for your baby!

-  **Comfort them** when they cry. Try swaddling, rocking, or walking with your baby.
-  **Talk to them** and repeat the sounds they make. Your voice will soothe your baby.
-  **Cuddle and hold** your baby often. This will help them feel secure.

Visit [healthychildren.org/ACEs](https://www.healthychildren.org/ACEs)

American Academy of Pediatrics  [healthychildren.org](https://www.healthychildren.org)

Outline: Anticipatory Guidance

- Infants
- **Toddlers**
- Preschoolers
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Anticipatory Guidance: Toddlers (1-3 years)

Provided at each well check

- 15, 18, 24, 30, & 36 months

Areas of focus

- Healthy Bodies
- Safety
- Positive Parenting
- Developmental Milestone Surveillance

Screening

- Validated milestone screening tool
- Validated autism screening tool
- Lead/Anemia screening
- Oral health screening
- Social determinants of health

IS YOUR CHILD GETTING ENOUGH Zzzz's?

Your little ones need a good night's rest to be healthy.
Here's how to make sure they're getting it.



Drinks

- Avoid sugary drinks; stick with just water and plain milk (or breastmilk)

Food

- Toddlers need less food because they don't grow as fast. They may become picky and erratic eaters.
- Offer a selection of healthy foods and let them choose.
- Encourage sitting while eating and chewing thoroughly

Activity

- Allow plenty of activity and free play

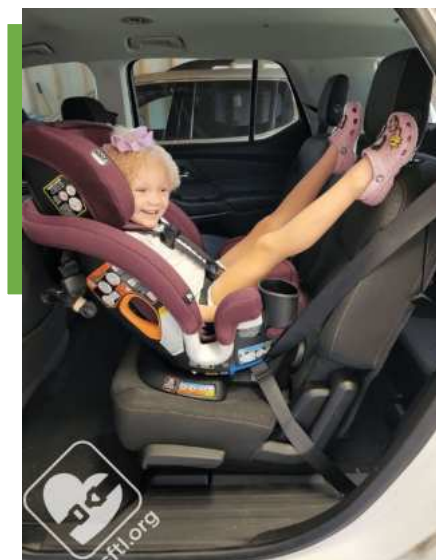
Screen Time

- Limit screen time; avoid screens in the bedroom
- No more than 1 hour per day of quality programming

Sleep recommendations

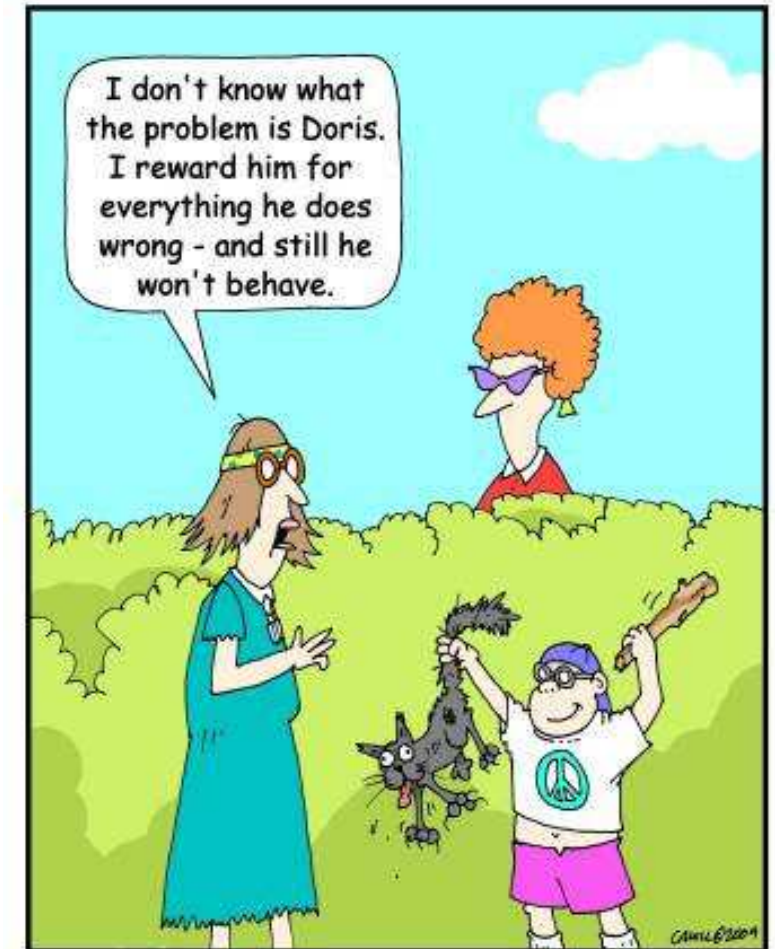
- 1-3 years = 11-14 hours including naps

Toddlers: Safety



Toddlers: Positive Parenting

- Read to your toddler daily; Early literacy support
 - Work on naming objects/body parts
- Encourage pretend play
- Play matching games, shape sorting, and simple puzzles
- Sing simple songs
- Encourage exploring and trying new things
- Allow independence with dressing and feeding
- Reward wanted behaviors more than you punish unwanted behaviors; use brief time-outs



Toilet training

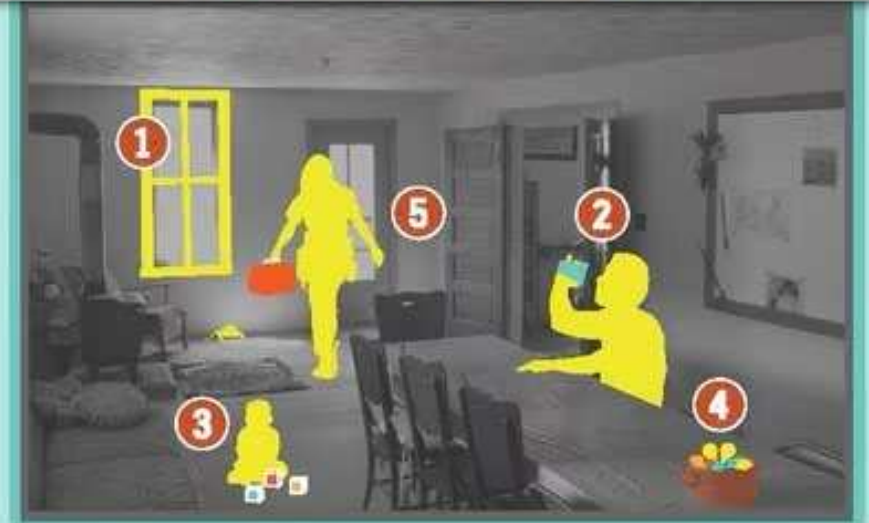
- Usually exhibiting readiness anytime from 18 months to 3 years of age
 - 2.5-3 years of age most children are developmentally ready
 - Communicate wet or soiled diaper
 - Able to undress lower body
- Ideally feet are touching the ground
 - Toddler potty
 - Squatty potty
 - Seat inserts
- Typically daytime trained by 4 years of age



Lead Exposure

- Lead is a naturally occurring metal
 - Common exposures:
 - Eating lead paint chips
 - Ingesting contaminated food or water
 - Breathing in lead dust
 - Greatest risk of lead exposure: low-income households, housing built before 1978, and children younger than 6 years due to their hand-to-mouth behavior (imported toys and dirt)
 - Higher risk professions: battery manufacturing, older home renovation
- Even low levels of lead in blood are associated with developmental delays, difficulty learning, and behavioral issues.
 - Tested at 12 and 24 months
 - >3.5 micrograms per deciliter is considered elevated; >=45 micrograms per deciliter – consult medical toxicologist
 - Chelation therapy (oral succimer)

Lead can be found throughout a child's environment.



Homes built before 1978 (when lead-based paints were banned) probably contain lead-based paint.



Lead can be found in some products such as toys and toy jewelry.



When the paint peels and cracks, it makes lead dust. Children can be poisoned when they swallow or breathe in lead dust.



Lead is sometimes in candies imported from other countries or traditional home remedies.



Certain water pipes may contain lead.



Certain jobs and hobbies involve working with lead-based products, like stain glass work, and may cause parents to bring lead into the home.

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Anticipatory Guidance: Preschoolers (3-5 years)

Provided at each well check

- Annually

Areas of focus

- Healthy Bodies
- Safety
- Positive Parenting
- Developmental Milestones

Screening

- Academic performance
- Oral health screening
- Social determinants of health

IS YOUR CHILD GETTING ENOUGH Zzzz's?

Your little ones need a good night's rest to be healthy.
Here's how to make sure they're getting it.



Food

- Eat meals with your child whenever possible. Limit added sugars and salt.

Activity

- Provide age-appropriate play equipment; allow free play
- Balls, plastic bats

Screen Time

- Avoid screens in the bedroom
- No more than 1 hour per day of quality programming

Sleep recommendations

- 3-5 years = 10-13 hours including naps

Preschoolers: Safety



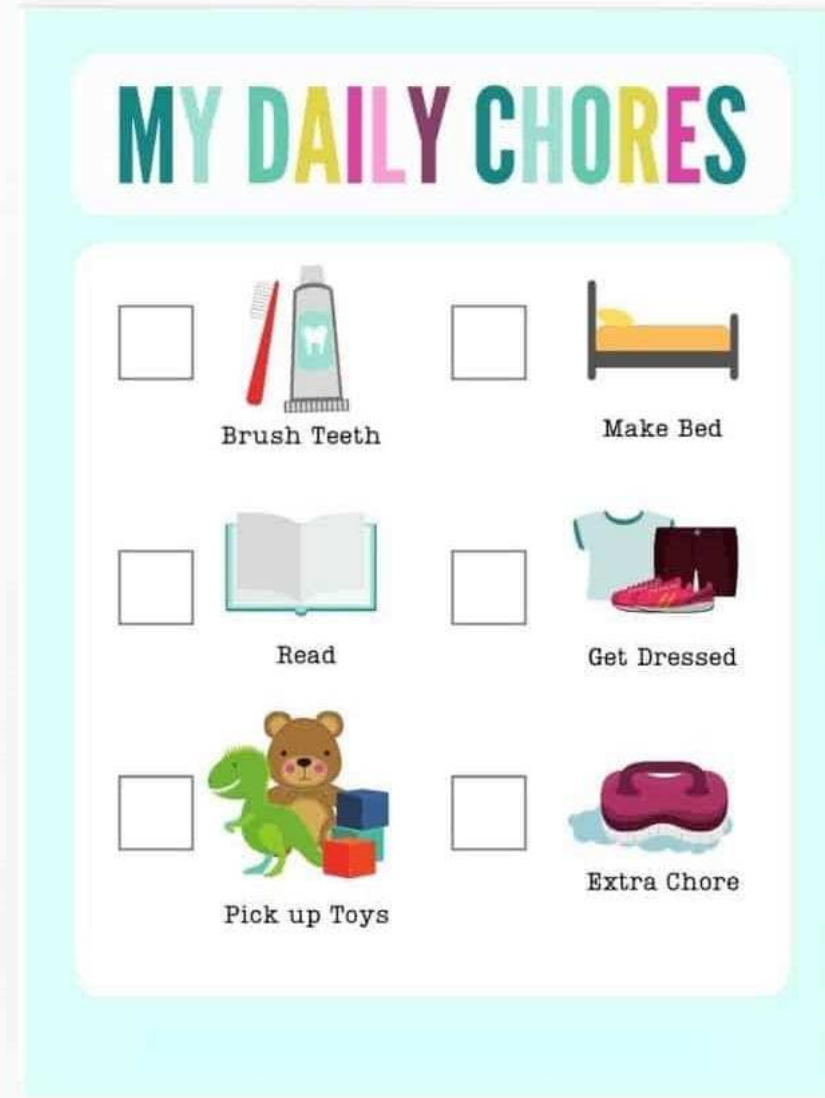
STAY WITHIN
ARM'S REACH.

The best way to
supervise children
swimming in the pool
is to be at their side.



Preschoolers: Positive Parenting

- Continue to read to your child; go to the library
- Let your child help with simple chores
- Encourage play with other children
- Be clear and consistent with discipline.
- Speak to your child in complete sentences and avoid baby talk. Correct words and phrases as needed.
- Help your child through the steps of solving a problem.
- Give limited number of simple choices



Discipline Strategies



Age appropriateness and consistency are key!



Time out

1 min per year of age



Natural consequences

Not wearing gloves on a cold day – having cold hands

Teasing neighborhood children – being avoided by neighborhood children



Logical consequences

Leaving bike out – bike put up for several days

Refusing to brush teeth – no more candy/sweets until regular brushing resumes

No eating dinner – no dessert



Positive reinforcement

Star chart

Outline: Anticipatory Guidance

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Anticipatory Guidance: Middle Childhood (6-11 years)

Provided at each well check

- Annually

Areas of focus

- Healthy Bodies
- Safety
- Positive Parenting
- Developmental Milestones

Screening

- Academic performance
- Oral health screening
- Social determinants of health

IS YOUR CHILD GETTING ENOUGH Zzzz's?

Your little ones need a good night's rest to be healthy.
Here's how to make sure they're getting it.



Food

- Eat meals with your child whenever possible. Limit added sugars and salt.

Activity

- Goal of 1 hour or more of physical activity each day
- Mix up aerobic activity, muscle strengthening, and bone strengthening
- Be a role model by eating healthy and having an active lifestyle yourself

Screen Time

- Avoid screens in the bedroom
- No more than 2 hours per day of quality programming
- Develop a media use plan for the family

Body Development

- Anticipate puberty

Sleep recommendations

- 6-12 years = 9-12 hours overnight

Middle Childhood: Safety



95% of parents think they know what their kid is doing online.

17% of children said their parents have no idea what they do online.



Keep kids away from guns.

Store firearms:

- Unloaded.
- Separate from ammunition.
- Locked.
- Out of reach and sight.

STRONG LIFE

Children's



Middle Childhood: Positive Parenting

- Show affection. Recognize accomplishments.
- Help develop sense of responsibility: household tasks
- Teach respecting others, setting goals
- Continue reading to your child or allowing your child to read to you
- Praise good behavior
- Support new challenges, joining groups/volunteering



Puberty

Normal puberty in girls

- Onset 8-13 years of age (Average ~11.5)
- Common signs of puberty in girls
 - Height changes
 - Acne development
 - Breast development
 - Body hair growth (genital, axillae, legs)
 - Vaginal discharge
 - Periods

Normal puberty in boys

- Onset 9-14 years of age (Average ~13)
- Common signs of puberty in boys
 - Height changes
 - Growth of testicles, scrotum, penis
 - Body hair growth
 - Wet dreams, involuntary erections
 - Voice change
 - Gynecomastia (resolves in 1-2 years)

Rating (Tanner stages) of secondary sexual characteristics

Development of external genitalia

Stage 1: Prepubertal

Stage 2: Enlargement of testes and scrotum; scrotal skin reddens and changes in texture

Stage 3: Enlargement of penis (length at first); further growth of testes

Stage 4: Increased size of penis with growth in breadth and development of glans; testes and scrotum

Stage 5: Adult genitalia

Girls – Breast development

Stage 1: Prepubertal

Stage 2: Breast bud stage with elevation of breast and papilla; enlargement of areola

Stage 3: Further enlargement of breast and areola; no separation of their contour

Stage 4: Areola and papilla form a secondary mound above level of breast

Stage 5: Mature stage: Projection of papilla only, related to recession of areola

Boys and girls – Pubic hair

Stage 1: Prepubertal (the pubic area may have vellus hair, similar to that of forearms)

Stage 2: Sparse growth of long, slightly pigmented hair, straight or curled, at base of penis or along labia

Stage 3: Darker, coarser, and more curled hair, spreading sparsely over junction of pubes

Stage 4: Hair adult in type, but covering smaller area than in adult; no spread to medial surface of thigh

Stage 5: Adult in type and quantity, with horizontal upper border

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Oral Health

- Teething usually begins with the lower central incisors between 6 and 10 months of age and ends with the molars at 2–3 years of age
 - More than half of children aged 6-8 have had a cavity in at least one of their baby (primary) teeth
 - More than half of adolescents aged 12-19 have had a cavity in at least once of their permanent teeth
 - Children aged 5-19 years from low-income families are twice as likely to have cavities
- Fluoride varnish can prevent about 1/3rd of cavities in the primary (baby) teeth
- Visit a dentist by your baby's first birthday and every 6 months thereafter; start brushing as soon as teeth emerge
 - Fluorinated toothbrush – rice size smear until 3 years of age, pea size thereafter
 - Floss teeth that are touching/crowded
- Drink tap water that contains fluoride



SCHEDULE OF BABY TEETH ERUPTION

(primary teeth, baby teeth, deciduous teeth, or milk teeth)



Upper Teeth	Erupt	Shed
Central incisor	8-12 mos.	6-7 yrs.
Lateral incisor	9-13 mos.	7-8 yrs.
Canine (cuspid)	16-22 mos.	10-12 yrs.
First molar	13-19 mos.	9-11 yrs.
Second molar	25-33 mos.	10-12 yrs.







Secondhand Smoke Exposure

Children exposed to secondhand smoke are at an increased risk for:

Sudden infant death syndrome (SIDS)

Acute respiratory infections

Middle ear disease

More frequent and severe asthma

Respiratory symptoms

Slowed lung growth



There is no safe level of exposure to secondhand smoke



Eliminating smoking is the only way to fully protect people from secondhand smoke exposure (including e-cigarettes)

Gun Safety



A teal-colored poster with the text "BE SMART" in large white letters. The letter "I" in "SMART" is replaced by a white silhouette of a person. Below the main text, there are five columns of text, each starting with a bolded word: "Secure", "Model", "Ask", "Recognize", and "Tell". Each column contains a short instruction. At the bottom, there is a line of text directing to a website.

BE
SMART

Secure
all guns
in your home
and vehicles

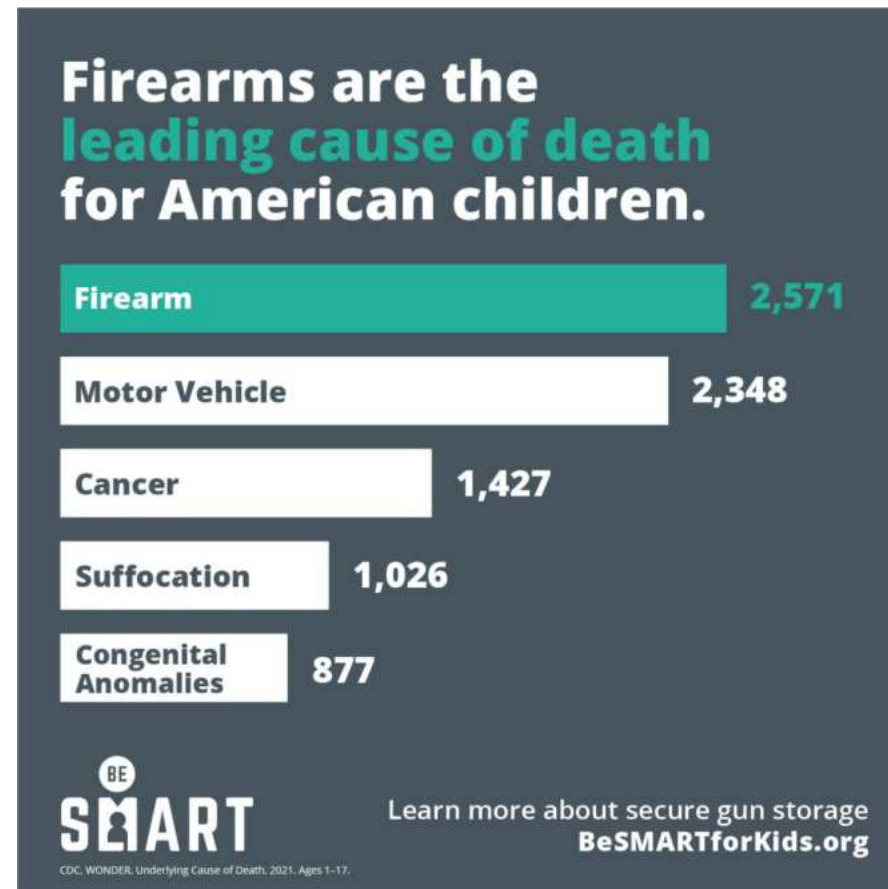
Model
responsible
behavior
around guns

Ask
about the
presence of
unsecured guns
in other homes

Recognize
the role
of guns
in suicide

Tell
your
peers to
be SMART

For more information on what you can do to keep kids safe, visit
BeSmartForKids.org



Questions/Feedback?

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