

Health issues parents worry about: Plastic baby bottles, autism, HPV vaccine and more



Children's Hospital Boston

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It's not easy raising kids these days.

From Sudden Infant Death Syndrome, to autism and eating disorders, the world of parenting is growing more and more complicated. Every day, parents are flooded with child health information from various sources, some reliable and accurate, and some not.

That's why Children's Hospital Boston, a global leader in pediatric care and research offers you this booklet, "Health issues parents worry about: Plastic baby bottle, autism, HPV vaccine and more."

The booklet provides up-to-date information and advice from our experts on a variety of topics, including:

- **How to talk about sex with your teen**
- **The early warning signs of autism**
- **Eight tips to help your child sleep well**

An authoritative guide to the timeliest issues, this booklet provides realistic and supportive information about your child's health.



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Let's talk about sex: Practical advice on having "the talk" with your teen

"Parents shouldn't aim for one Big Talk, says **Mark Shuster, MD, PhD**, chief of General Pediatrics at Children's Hospital Boston. "Both the parent and child will be too nervous to think clearly, and they will want to run from the room as soon as they can. The goal is to develop an ongoing dialogue with your child. The best way to do that is to start early, giving your kids age-appropriate answers throughout their childhood so that they're used to coming to you with questions related to sex and bodies. If you don't, they'll still have questions, but they'll learn to go to their friends and, eventually, to the Internet—and who knows what they'll learn there."

In addition to initiating regular conversations about sex, responsibility, love and relationships, parents should make sure to discuss the physical changes of puberty so that their kids will know what to expect, says Schuster. Talking about pregnancy and disease prevention is important, too, as well as sexual ethics. "They need to know that no means no, and that when they say it, it should be respected—and vice versa," he says. "That's important for both boys and girls."

Tips for parents:

- It's OK to be honest and say, "I'm a little embarrassed to talk about these issues, and perhaps you are too, but it's important to do it, so we're going to."
- Some parents think they have to be the same gender as their child to talk about sex, but fathers can talk with daughters and mothers with sons.
- Parents are often afraid they won't know an answer to a child's question. You can tell your teenager, "I won't know all the answers, but we can look it up together." Then, if you don't know something, you can go to credible Web sites, like the National Institutes of Health (nih.gov), or speak with your doctor together.
- Many parents worry that their kids will ask them about their own sexual history. You don't have to describe what you have and haven't done. Instead, you could say something like, "How would you feel if I said I had had sex in high school, and how would you feel if I said I had hadn't? How does what I did then affect your decision now?" These types of questions help kids realize that it isn't about what their parents did; it's ultimately about making decisions for themselves.
- Find teaching moments in everyday life that give you a chance to talk to your child about sex. If there's a sex-related story on the evening news or a sexually charged joke on a sitcom that the family watches together—for example, a gag involving two characters who are fighting over the last condom—parents can start a conversation about safe sex and how well contraception works.



- When talking to children who have reached puberty, make sure you cover the conditions under which you believe sex is or isn't acceptable. Say that you expect their sexual behavior to be respectful and consensual. Of course, they also need to know about sexually transmitted diseases and unintended pregnancies, and about contraception—how it works and how it doesn't. And don't forget love, relationships and dating. (Now do you see why you can't cover it all in one Big Talk?)
- Give teens the opportunity to discuss what they would do in certain situations so you can see how they think. They need to learn how to make decisions, but they also need help with that learning process—so you should weigh in. A parent is not going to be in the back seat of the car when their teen is being propositioned in a sexual way.
- If you're at a stage in which your teenager will just not talk to you about any sensitive topic, you could find a favorite aunt or close family friend who can talk to him or her. You could also talk about important issues related to teen sex with another adult while your teen is within earshot.
- It's all right to admit mistakes you've made during any of these conversations. Don't be afraid to go back to your child a few days after a talk and say, "I didn't say that quite right; let me correct myself."

For more information and tips on talking to your teen about sex, read Schuster's book, *Everything You Never Wanted Your Kids to Know About Sex (But Were Afraid They'd Ask): The Secrets to Surviving Your Child's Sexual Development from Birth to the Teens*.

EXPERT SOURCE:



Mark Shuster, MD, PhD
Chief of General Pediatrics

Suspect steroids?

Warning signs and advice for parents

Parents should know that teenagers do have access to steroids. **Lyle Micheli, MD**, director of Sports Medicine at Children’s Hospital Boston, says there are some telltale signs of steroid use. These include:

- Changes in behavior, usually mood swings
- Rapid gain in muscle mass
- Acne
- Depression
- Rage and volatile temper

Dr. Micheli also says:

Anything you do in excess, even exercise, can be bad for you. The message parents should try to impart to their children is to work toward balance and make time for family, friends, work, play and exercise. The message should be about being the healthiest, not the strongest, most in shape, or most powerful.

Help teenagers set up realistic expectations for themselves and realize that many of the images they’re seeing in magazines have been “improved” with airbrushing. If the models can’t even look perfect enough, then, clearly, that’s not a realistic expectation for anyone else to have.

If you notice changes in your child’s behavior, be upfront and explain that you’re concerned about their safety and well-being and want them evaluated by a psychiatrist or addiction specialist. Do not rely on urine drug screens for a diagnosis, as steroids aren’t detected in standard urine screens.

If your child is working out and taking supplements (including herbal supplements, products obtained via the Internet or purchased over the counter), make sure his or her doctor is aware and knows the brand name, amount and frequency.

If your teen plays organized sports, be sure you know the coach well. Does he or she view sports as recreation, a means to build teamwork and stay healthy or merely as competition? Adults bear the responsibility of correcting mixed messages teens might be receiving from professional athletes who abuse anabolic steroids, suggesting that “bigger is better” and that achieving “success” is more important than how you obtain it.

If your child is using steroids, don’t encourage him or her to stop using them immediately. Steroids should always be tapered down gradually, taking increasingly smaller doses under medical supervision, which allows the body’s adrenal glands to return to their normal patterns of function and secretion. Abrupt discontinuation can be dangerous—and potentially fatal.



We have to make better alternatives for safe exercise available to kids. We need more programs for adolescents to work on strength training and conditioning. Many health clubs have age limits of 16 or 18, so we should all be proactive by making sure programs are widely available for kids through the YMCA or special programs at health clubs.

Treatment should be overseen by a professional, and often includes psychotherapy. This can give teens the emotional support they need to stop using steroids and can also help them find alternate ways to maintain and enhance their self-esteem.

EXPERT SOURCES:



Lyle J. Micheli, MD, director, Division of Sports Medicine; Alison Field, ScD, epidemiologist; Ximena Sanchez-Samper, MD, Adolescent Substance Abuse Program specialist.

Is it OK to buy alcohol for your teen?

John Knight, MD, director of Children's Center for Adolescent Substance Abuse Research, tackles this question.

Why do parents help adolescents purchase and drink alcohol?

There are two different kinds of parents who provide alcohol for teens—and these are very distinct groups, which require separate discussion. There are some parents who believe that it's okay for their teenage children to have a drink of alcohol at a family social or religious event—for example, at a wedding—or to have a glass of wine with a family dinner. There is no evidence that that kind of parental permission for teens to “taste” alcohol is harmful. In fact, one study showed that it may be protective in that it removes the “forbidden fruit” mystique of alcohol for young drinkers.

On the other hand, there are parents who provide alcohol for their teenagers and friends to drink at parties. That is enabling behavior. It's very dangerous, and it's illegal in many jurisdictions. About 25 percent of teenagers report that their parents provided alcohol for them to drink at a party with friends. These parents are sadly misguided, and they're placing their teens at great risk.

Why are parents agreeing to buy their kids alcohol?

I think there are some parents who are doing this because they want to seem “cool” to their own teenage children and to their friends. They think it's important that they become a “friend” to their teenagers. This is wrong. Teenagers already have lots of friends; they don't need one more. They have, however, only one set of parents, and parents are really important.

One of the things that parents need to do during the teenage years is to set reasonable limits to protect their teenage children. My belief in speaking with parents throughout my career is that most of those who provide alcohol to their teens to drink at parties think that they're protecting them. They are aware of the dangers of drinking and driving, so they will often say, “I will allow you and your friends to drink in our home, and I will take away all the car keys, and your friends will have to stay here overnight or have someone else give them a ride home.” It sounds good in theory, but in practice it doesn't work. I have a file full of news clippings in my office about tragedies that occurred when parents did that. In one instance, a woman provided alcohol for her teenage children and others, and took away their car keys. There was a lake behind her house, and three of the teens took a canoe and went out on the lake, and they drowned. In another instance, a teenager fell down a flight of stairs and broke her neck after drinking in a home. In another case, a child became intoxicated at one of these events, started walking home, passed out in the street and was run over by a vehicle and killed.

Teens can also die simply from alcohol overdose. They don't know what safe limits are and always try to push the envelope and drink more, especially when egged on by friends. Other teens pass out, throw up and choke to death on their own vomit. When you allow teens to drink,



you cannot prevent these tragedies. So some of these permissive parents are well-intentioned, but what they don't understand is that they are really increasing the risk for their children, despite their best efforts.

What do parents need to realize about the potentially harmful effects that alcohol can have on an adolescent emotionally, physically and socially?

There are a number of risks to drinking during the teenage years. Teenagers are inexperienced drinkers and they generally have low degrees of tolerance to alcohol, which means that they tend to consume large amounts during short periods of time to see what it feels like. They can also become dangerously intoxicated or develop what's known as alcohol poisoning—a medical emergency that will land them in hospital.

There are other downsides to alcohol. The leading causes of death among teenagers in the United States are accidents, homicides and suicides. All three of these causes of death can be linked directly or indirectly to the use of alcohol. A car accident or car crash is probably the most obvious example of what can happen when teenagers consume alcohol. There have also been a recent number of studies that have looked at the effects of lower age onset of drinking. So teenagers who start to drink at age 21 or older have less than a 10 percent risk of becoming alcoholics later in their life. Those who start drinking at age 14 or under have an almost 50 percent chance of becoming alcoholics later in life. That's a five-fold increase of the risk of alcoholism, depending on the age of their first drink.

How can teens effectively refuse alcohol from adults trying to be the “cool” parent?

Most teenagers are going to be exposed to the risk at some time during their high school career. They are going to be invited to another teen's home where alcohol will be provided. One thing that parents need to do with their own children is, if their teenage child is invited to a party, they need to call ahead and speak with the parents. They need to make sure that adults are going to be home at the time of the event and that they are not going to allow alcohol to be present—or any other drug.

Even when parents do this, there have been instances in which the host parents have said, “Sure, I'll be home, don't worry about it,” but they have not been there, and alcohol and/or drugs have been present. So parents need

to have conversations with their own teenage children, letting them know that they can call them any hour, day or night, to get safe transportation home from a party and that there will be no questions asked that evening; they get full immunity with that phone call. And the teenagers have to agree that, if they are ever in that situation, then they will call for a safe ride home rather than staying at the event or allowing someone else who may have been drinking to drive them home.

What messages do the media send to adolescents about alcohol?

I think the media needs to be more responsible about how they present drinking in movies and on television shows. Often, very heavy drinking is shown to be something that's funny—it's humorous. And I think what we seldom see are the negative effects of alcohol intoxication. It's not only associated with fatalities from car crashes and other accidents, homicides and suicides, but there are many other non-fatal but serious effects from drinking. Large doses of alcohol are bad for the developing brain. We also know that teen drinkers are vulnerable to risks, like sexual assault and date rape that can occur under intoxication.

Students who don't drink are still affected by students who drink heavily through what are called "secondary effects": vomit in the hallways, being unsafe, getting assaulted when they're walking from their dorm rooms. So alcohol intoxication is really not very funny; it tends to be a serious medical and social risk.

How can parents recognize that their teen may have a substance abuse problem?

Parents need to be aware of any negative changes that occur in their adolescent children. Examples are a decline in school performance, dropping out of extracurricular activities or sports, a change in friends from a group that seem to be well-socialized to a group of outsiders or kids who don't seem to be in the mainstream. And parents have to look for very subtle signs because, in general, parents are the last to know. Once parents become aware that there is a problem, there's a huge problem. If parents think there might be a problem, there almost certainly is a problem, and it's probably more than they imagined.

Teenagers spend a lot of time covering up their use of alcohol and other drugs because they don't want their parents to know. So parents need to be vigilant. They also need to talk with their teenagers on a regular basis about the dangers of heavy drinking and the use of drugs. Having one conversation is not enough; they need to have regular conversations. Most important, parents need to set a good example. They should never allow their teens to see them drunk or drive a car after drinking, and parents should never use drugs.

If a parent believes their child has a substance abuse problem, what are the best next steps?

They should seek immediate medical help. They can start with their pediatrician or family doctor, and they should be open about what their concerns are. Ask the child's regular doctor to have a confidential conversation with the teen and perform a screening for alcohol or other

drug use. This can be done with the CRAFFT screening test, which we developed here at Children's and has now become the national standard of care for adolescent substance abuse screening. Parents definitely need to seek outside assistance. Feeling that they can handle it themselves, within the family, often doesn't work.

Which social or economic groups tend to be at greater risk for alcohol abuse?

Alcohol use is really seen across the economic spectrum. It's seen in poor families and in wealthy families. It's seen across all races and ethnicities. There tends to be a myth that alcohol and other drug abuse is higher among children who grow up in poor urban families and among racial minorities. If anything, the opposite tends to be true. We tend to see the problem more in middle and upper-middle class white families who live in the suburbs.

How can parents help their children learn how to drink responsibly?

If parents are responsible drinkers themselves, there is no harm in allowing their teenage children to have a sip of alcohol or even one drink at a family event or at an appropriate social occasion, like a wedding. This may, in fact, teach children about drinking responsibly. If parents don't drink, they shouldn't start drinking just because they think it's going to help their children. They need to model responsible behavior themselves. That's the most important thing. Parents cannot drink irresponsibly. They can't be getting drunk and telling their children they shouldn't be drinking alcohol.

Do you think that the startling statistics about underage drinking are a result of the "baby boomers" having had a lower drinking age and therefore finding it acceptable to buy for their kids?

There may be some effect of that. Baby boomers tended to be more likely to use and abuse alcohol and also marijuana, and so they may have come into parenting with more permissive attitudes overall. But alcohol use seems to be remarkably stable across the decades. There were small rises and declines, but overall, it remains the number one substance abuse problem among America's teenagers.

What are the legal ramifications of buying alcohol for a minor?

If you provide alcohol to minors, you are breaking the law. You could be sued if there's an accident or injury that results from someone's child being intoxicated at your home. And depending on your state's laws, you can also be prosecuted criminally.

EXPERT SOURCE:



John R. Knight, MD, director, Center for Adolescent Substance Abuse Research

How to identify if your child has an eating disorder

Sara Forman, MD, director of Children’s Outpatient Eating Disorders Program, explains what an eating disorder is and how to help your child.

What are eating disorders?

Eating disorders are a group of illnesses that have a psychiatric component, as well as physical aspects. Eating disorders occur when an individual’s eating and nutrition becomes unhealthy or dysfunctional. They often start with weight loss, or the intention to lose weight, and take on a life of their own. Approximately 90 percent of eating disorders occur in women.

How many different types of eating disorders are there?

There are three classifications:

The first is anorexia nervosa, which is present when an individual:

- refuses to maintain weight within a normal range for height and age—more than 15 percent below normal body weight
- has an irrational fear of weight gain or becoming fat
- has severe body image disturbance
- no longer has a menstrual cycle (in women of the appropriate age) or has never gotten a period

The next type is bulimia nervosa, which is distinguished by binge eating with:

- a sense of loss of control
- behavior to offset the binge through purging (self-induced vomiting); laxative or diuretic abuse; or excessive exercise, fasting or strict diets
- dissatisfaction with body shape and weight

The final classification is eating disorder not otherwise specified, which includes patients with eating patterns and weight management habits that are clearly abnormal but don’t meet the criteria for anorexia nervosa or bulimia nervosa. This classification includes binge eating disorder, which is when an individual has out-of-control bingeing without purging.

What influences eating disorders?

Many things influence eating disorders. These are related to a combination of psychological, biological, family, genetic, environmental and social factors. For example, individuals with a history of eating disorders can also have anxiety, depression or obsessive compulsive disorder. There’s also a lot of societal pressure. Just look at the cover of most women’s magazines—they typically highlight stories about weight management, dieting or how to tighten specific muscle groups. Also, think about reality TV shows like “Extreme Makeover.”

What are some of the indicators for eating disorders?

It’s important to note that eating disorders are illnesses of denial and secrecy; they’re often very difficult to track

down. So family members and friends shouldn’t feel bad about not figuring out their loved one has a problem right away. That being said, there are some signs you can look for: unexplained weight loss, dizziness, fainting, fatigue, irritability or moodiness; going to the bathroom often, especially after meals; cutting food into tiny pieces and pushing it around the plate, etc. It’s really any major change in eating or exercise behavior.

How are eating disorders diagnosed?

A pediatrician or primary care physician can typically diagnose an eating disorder by obtaining a complete medical history from a patient and conducting a thorough physical exam. They will also most likely request a full lab assessment, as well as nutritional and psychiatric evaluations. It’s important to remember that the sooner an eating disorder is diagnosed, the sooner the individual can get help.

How are eating disorders treated at Children’s?

Children’s Eating Disorders Program treats both inpatients and outpatients—more than 200 new cases annually. As outpatients, individuals are seen by an Adolescent Medicine physician and a nutritionist. They also see a psychologist or social worker with whom their parents meet separately. Patients come in for follow-up visits as needed.

If patients become really sick—their condition gets worse and worse, causing unstable vital signs, for example—they are admitted to the hospital. Inpatients meet with the same group of caregivers as an outpatient would, while participating in a special meal plan with weight gain goals.

What are some of the medical complications that can occur as a result of eating disorders?

Several complications can occur during starvation or persistent purging, including cardiovascular issues, such as an abnormally slow heart rate or arrhythmias; gastrointestinal dysfunction, like constipation, severe heartburn or reflux; dermatologic problems, like hair loss; or bone loss leading to osteoporosis or even growth problems. These and other medical complications put each patient at serious risk.

What are some resources for patients and their families?

Locally, the Multi-service Eating Disorders Association (medainc.org) is a great resource, as is our clinic’s Web site at childrenshospital.org/MEAD. There’s also the National Eating Disorders Association (nationaleatingdisorders.org), as well as the National Association of Anorexia Nervosa and Associated Disorders (anad.org).

EXPERT SOURCE:



Sara F. Forman, MD, director, Outpatient Eating Disorders Program

Is it autism?

Tips for when to contact your doctor

For many new parents, watching their infant develop social and language skills can be a wondrous time. However, with the number of children diagnosed with autism rising, many parents have traded awe for worry and concern over their child's development.

Autism spectrum disorders (ASDs) are the fastest growing set of serious developmental disabilities in the United States. Autism is a spectrum of neurological disorders often characterized by impaired social interaction, language and behavior.

According to the Centers for Disease Control and Prevention, one of every 150 children will receive a diagnosis of the disorder by the time they are 8—a rate 10 times higher than it was in the 1980s.

While children are generally old diagnosed with autism between 24 and 36 months there are some signs of autism that parents can look for even within the first year of a child's development.

Charles A. Nelson, PhD, director of the Laboratories of Cognitive Neuroscience at Children's Hospital Boston, says some of these signs may include:

- Failure to establish reciprocal relationships. Many parents are devastated when they try to engage their baby—they hold their baby, they look at the child face-to-face—and the baby or child doesn't want to interact. The child is not connecting and she/he is not interested or more interested in objects than people.
- Repetitive movements and play behaviors, such as banging something repeatedly.
- An inability to orientate to their name, where repeated attempts to get a child's attention by calling their name are ignored.
- A need for "sameness." A child may become agitated or upset when an object or a routine suddenly moves or changes.
- Tendency for "negative temperament or affect." A child may not be colicky, but they are unhappy or difficult.
- Delays in language and gestural communication. Though subtle, in the first year, kids have already started to develop a gesturing system. For example, before saying the word "milk" or "drink," a child might cup her hand to her mouth to indicate what she wants. Autistic children tend to have a problem with this type of communication.



- Language is often ecologic; a child may repeat themselves a lot or use words that don't communicate their thoughts accurately.

What's most important for a parent to remember, says Nelson, is that autism is never diagnosed based on one or two symptoms but on the presence of a certain number of symptoms and their severity.

"There's a fine line between deciding if something is abnormal or just different," says Nelson. Development varies enormously from one child to another, and many of the early signs of autism, like being fussy and difficult to feed, are exhibited in typically developing kids. Some of the telltale behavioral indicators of autism, like not responding to one's name when called, aren't applicable until age 1. "The behavioral repertoire of a young infant is limited," says Nelson. "But that doesn't mean things aren't going on upstairs."

Parents whose child has been diagnosed or suspected of autism should share their concerns with their pediatrician, who in turn may refer them to a specialist or simply reassure them that all is well, says Nelson.

EXPERT SOURCE:



Charles Nelson, PhD, research director, Developmental Medicine Center



Safe sleep: tips for avoiding Sudden Infant Death Syndrome

New parents have a lot of worries. Is their baby eating enough? Is she developing appropriately? Is she sleeping well? But the one that keeps them up at night is the fear of Sudden Infant Death Syndrome, or SIDS.

Defined as the sudden death of an infant under the age of 1 year with no logical explanation, SIDS claims the lives of 2,300 babies annually and is the leading cause of infant death in the United States. Overall, babies 2 to 3 months of age are at the highest risk, regardless of gender, but SIDS is more likely to occur in males who are 1 to 4 months old than in females of the same age.

Despite its obvious prevalence, doctors and researchers remain baffled by its cause. Thirty years of research, however, has shown some babies are more at risk than others, so the American Academy of Pediatrics (AAP) issued guidelines to reduce the incidence of SIDS.

In an effort to keep parents informed and help them sleep at night, **Judith Palfrey, MD**, Division of General Pediatrics at Children's, takes a closer look at these guidelines to shed some light on measures parents can take to decrease their baby's risk of SIDS.

- **Prenatal care:** SIDS tends to occur more often when mothers have little to no prenatal care. Frequent and consistent medical visits from the start to completion of pregnancy decreases the risk of a low birth weight or premature baby, both of which carry a high risk for SIDS.

Mothers should also avoid smoking, alcohol and drugs during pregnancy, and maintain a proper diet.

- **Back-sleep position:** Placing the baby on his back reduces the incidence of SIDS more than any other sleep position, including side-sleep, which was previously recommended to prevent possible choking. No conclusive evidence exists that back-sleep increases the chance of choking. While the baby should never be placed on her stomach to sleep, parents should encourage some "tummy time."

- **Proper bedding:** A firm mattress and sleep surface is important in decreasing the risk of SIDS. Pillows, comforters, blankets and stuffed animals should not be placed in a baby’s crib. A firm mattress with a sheet is highly recommended.
- **Temperature control:** Babies should be kept warm, but should not be overdressed for sleep. The temperature in a baby’s room should feel comfortable to a lightly clothed adult. Overheating may induce deep sleep, which is harder for a baby to wake up from if air restrictions occur.
- **Avoid bed sharing:** Although many mothers find bed sharing to be convenient and beneficial for breast feeding and enhancing the mother-infant bond, it can be hazardous. Soft surfaces and chances of overheating increase because adult beds do not conform to safety standards for babies. Instead of bed sharing, the AAP recommends room-sharing, where the baby’s crib is located in the same room, but parents and baby do not share the same bed.

- **Pacifier use:** The latest AAP recommendations support the use of a pacifier at sleep and nap time to reduce the risk of SIDS. The pacifier should not be forced, coated with any sweet substance or reinserted after the baby falls asleep. Mothers concerned that the pacifier will interfere with breast feeding should introduce the pacifier after one month or once breast feeding has been established. Giving the pacifier at bed or nap time will help the baby identify it with sleep and not hunger, which can aid in reducing nipple confusion.

SIDS deaths have dropped by 50 percent since the AAP introduced the “Back to Sleep” campaign in 1992, proof that following these simple guidelines is imperative in guarding against the incidence of SIDS.

EXPERT SOURCE:



Judith S. Palfrey, MD, director, International Pediatric Center; President, American Academy of Pediatrics



Dr. Ferber's eight tips to help your child sleep well

Richard A. Ferber, MD, director of the Center for Pediatric Sleep Disorders at Children's and world-renowned sleep physician, describes the normal sleep patterns of children and how parents can help their children get the amount of sleep they need.

What is a normal amount of sleep?

The normal amount of sleep varies depending on the age of your child and, to some extent, from child to child. Typical amounts are listed in the following table. (After the variability of the first weeks of life, most children's sleep times fall within about one hour of those listed.)



Age	Total Hours of Sleep (typical)	Nighttime Sleep	Daytime Sleep
Full-term newborn	16	Varied	Varied
3 months	13	8 1/2	4 1/2
6 months	12 1/2	9 1/4	3 1/4
1 year	11 3/4	9 3/4	2
2 years	11 1/2	9 3/4	1 1/2
3 years	11 1/4	10 1/4	1
6 years	10 1/2	10 1/2	0
10 years	10	10	0

Helpful hints for healthy sleep habits:

- After the first 3 months, children should be on a fairly regular schedule (bedtime, naptimes and mealtimes)
- Nighttime feedings are usually no longer necessary after 4 to 6 months.
- By 5 months or so, most full-term healthy infants should be sleeping through the night (or with just one remaining waking). If this is not happening, possible causes should be explored. Discuss your concerns with your doctor.
- After the early months, it is good practice for a child to fall asleep at bedtime under the same circumstances that will be present later in the night at normal middle-of-the-night wakings; he/she should not fall asleep one way at bedtime—being held and rocked, for example—only to wake later to find everything has changed.
- A regular bedtime routine appropriate for the child's age (such as singing a song or reading a story) should be part of every bedtime.
- Transitional objects (favorite toys, such as a teddy bear or doll) are helpful, starting at about age 1, but exactly which object the child ends up choosing is up to him or her.
- It is never good practice for a child to fall asleep lying in bed or in the crib with a bottle; such patterns can lead to dental disease, and dependence on the bottle (or pacifier) as an aid to fall asleep can lead to increased nighttime wakings.
- The television should never be used in place of a parent for the bedtime routine. Television at either end of the nighttime sleep period can interfere with good sleep; thus, children should not fall asleep watching television at night, and should not be allowed to watch television as their first activity upon waking.

EXPERT SOURCE:



Richard A. Ferber, MD, director, Center for Pediatric Sleep Disorders

Can television help your infant learn?

Educational television is supposed to be a good thing, right? Not necessarily, if children are under the age of 2, says **Marie Evans Schmidt, PhD**, of Children's Hospital Boston's Center on Media and Child Health. According to guidelines released by the American Academy of Pediatrics (AAP) in 1999, and recently updated, babies shouldn't be exposed to TV or videos, since they're not beneficial—and might be detrimental to infant development.

"Interactions with real people and real objects are vital to babies' growth and development," Schmidt explains. "Infants benefit more from direct sensory interactions than from passive television viewing." Parents can help their children explore by encouraging them to touch, pick up and mouth child-safe objects. By responding to the sounds babies make, and engaging in basic back-and-forth conversational turn-taking, parents can also aid language development and bond with their babies.

The AAP is concerned that parents will use television as a babysitter instead of interacting with their child and building a relationship with her. Many parents, however, say television provides much-needed relief from constantly watching their children. "I'm a parent, and I understand how difficult it can be to get things done with small children," says Schmidt. "Parents need to know that babies can entertain themselves when placed in a safe, stimulating environment. They don't need to be constantly entertained."

That means turning the television off and placing your baby in a protected space, where she can occupy herself, whether by looking around or picking up and exploring her toys. Alternatively, your baby might find ways of soothing herself to sleep, as a fussy baby might actually be over-stimulated and in need of a nap or quiet time. Schmidt also recommends that parents make use of infant carriers that allow them to get things done while "wearing" their baby.

While more research needs to be done on the effects of television on babies, some studies show a correlation between early media viewing and obesity later in life. "It encourages a sedentary lifestyle," Schmidt says. Having a television in a baby's room is also a predictor of later obesity, and a surprising 25 percent of children under age 2 have a television in their rooms.

Studies have shown that 68 percent of households leave a television on constantly, regardless of whether anyone is watching. Schmidt's own research has focused on the effect this has on children. When put in a room with a parent and a television, which was on for a half-hour, then off for a half-hour, 1-, 2- and 3-year-old children were less focused in their play while the television was turned on. "Even if he isn't watching, it's impacting how he plays," she says.

And what about the educational DVDs flooding the market for babies? "Studies need to look into this further," Schmidt says. "But there is no scientific proof to support the claims that baby videos make babies smarter." While older kids can improve their language skills by watching educational TV, the same might not be true for infants. In fact, studies suggest that infants who watch some of these educational programs have poorer language skills. "For a child under age 2, TV is a less effective learning tool than talking with a real person," she says.

While more research certainly needs to be done, it seems clear that educational television is no substitute for interaction with parents and the environment for children under the age of 2. "The message needs to get out," Schmidt says. "Many parents think educational TV and DVDs are good for babies, yet there is no evidence to support this. Instead, studies suggest TV viewing has no benefit to babies, and in fact might put them at risk for obesity, sleep disturbances and attention problems. For this reason, parents should limit babies' TV and DVD exposure as much as possible."

EXPERT SOURCE:

Marie Evans Schmidt, PhD, Center on Media and Child Health



Sound advice on hearing loss protection

Without a doubt, we live in a noisy world. Noise from traffic, construction and airports disrupts our sleep, work and play, and has been linked to stress-related health problems. If sufficiently loud and prolonged, some of the noises we encounter can cause permanent hearing loss. Whether the noise comes from a construction site or from listening to your MP3 player, you or your child could be at risk for noise-induced hearing loss.

How loud is too loud?

When thinking about “How loud is too loud?” it’s important to understand that hearing is damaged by how **loud** and how **long** you listen. So, the higher you turn up the volume, the shorter the time it takes to do damage.

Permanent hearing loss can occur as a result of exposure to sound levels of 85 decibels (dBA) or greater for a prolonged period of time. At arm’s length, an alarm clock, a ringing telephone and a blender are around 85 dBA.

How long is too long?

It takes a pretty long time (eight hours) to find yourself at risk if the level is 85 dBA, but just a slight increase (for instance, to 88 dBA) cuts the allowable time in half—down to four hours. Another small increase of 3 more dBA, and the safe listening time is cut in half again. So with sounds a bit louder than 85 dBA, you should only stay in earshot of the noise for a few minutes.

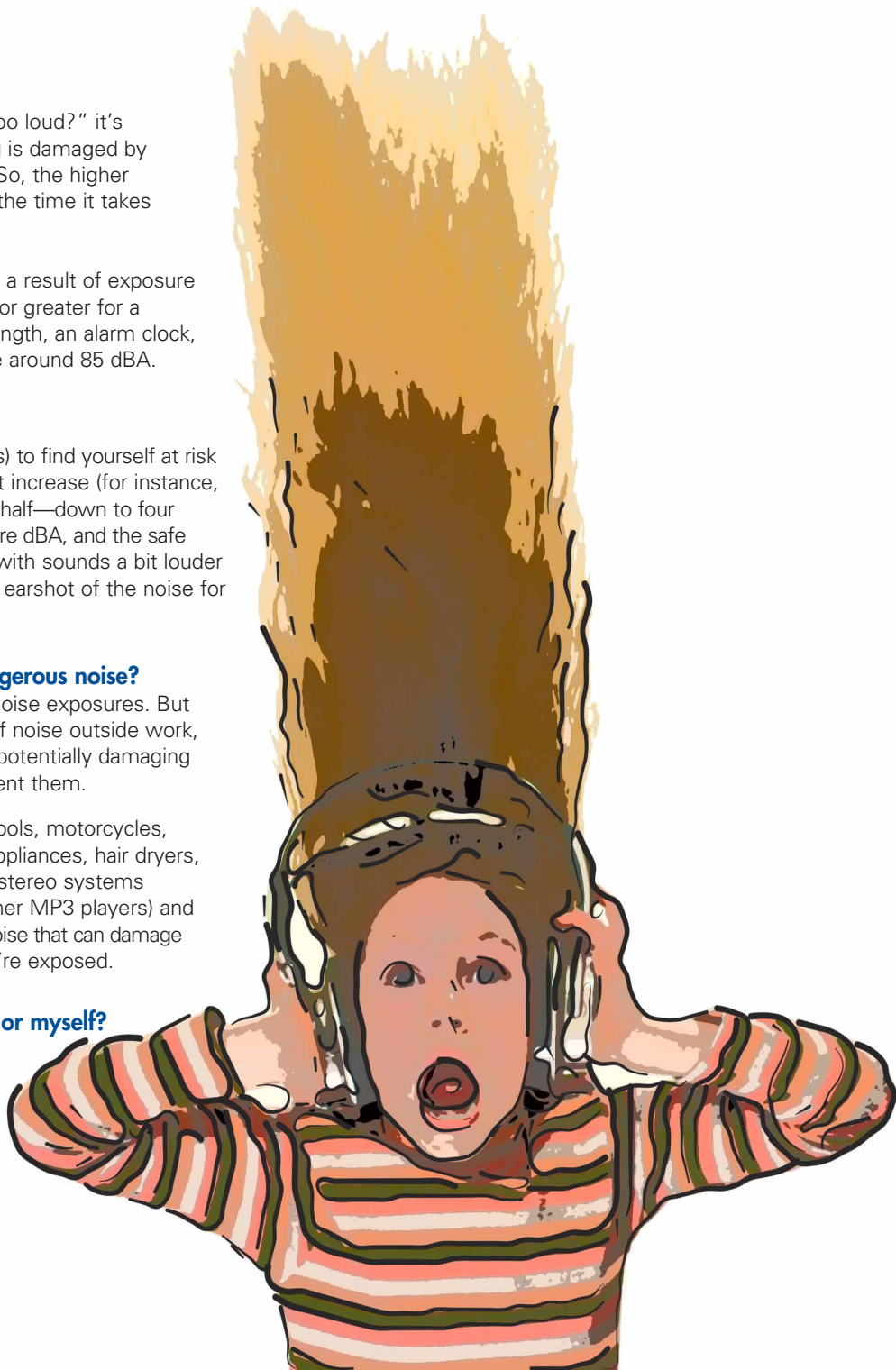
What are common sources of dangerous noise?

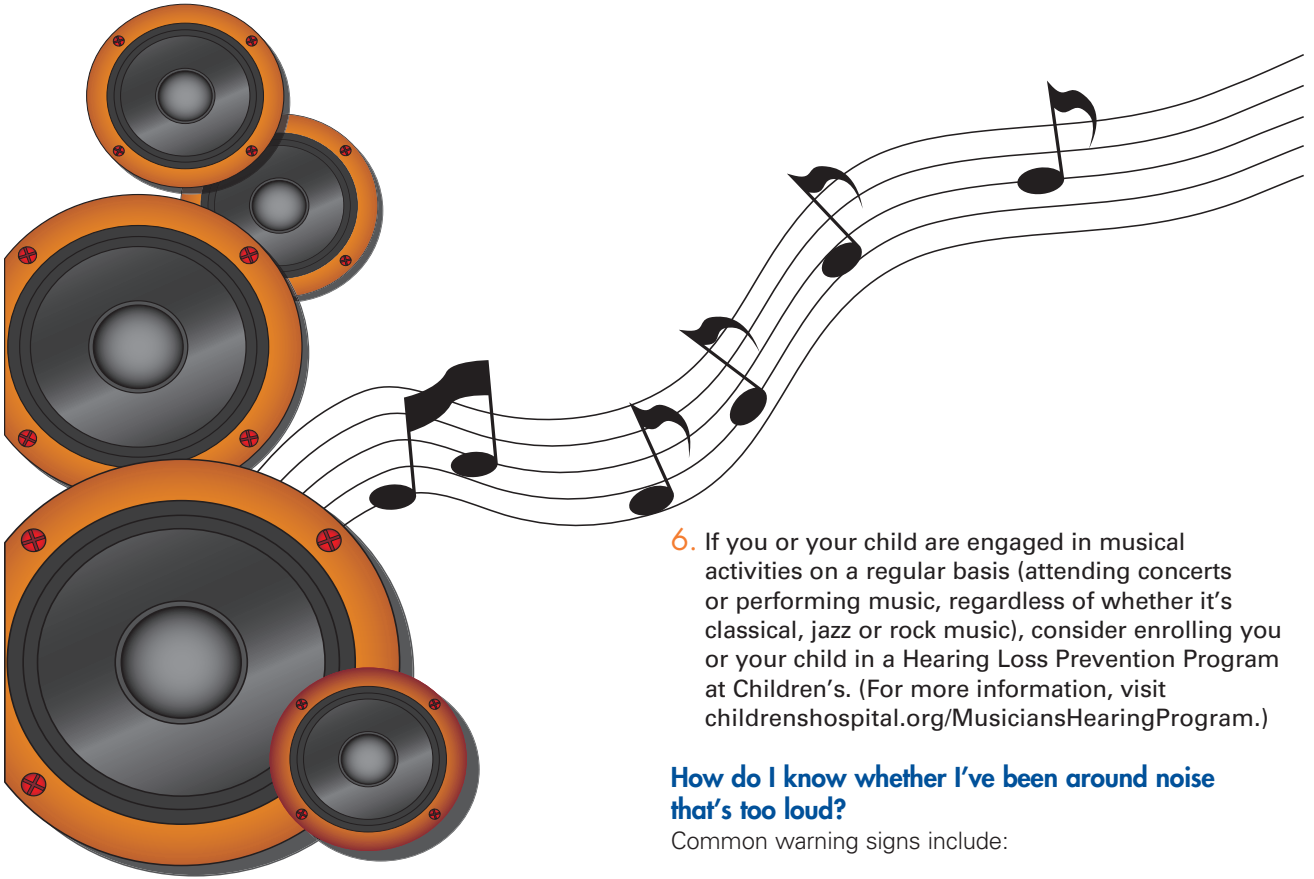
At work, the government regulates noise exposures. But there are many dangerous sources of noise outside work, and it’s up to you to learn about the potentially damaging effects and what you can do to prevent them.

Lawnmowers, leaf blowers, power tools, motorcycles, snowmobiles, firearms, household appliances, hair dryers, some sound-emitting toys, personal stereo systems (including headphones, iPods and other MP3 players) and music concerts are some sources of noise that can damage hearing, depending on how long you’re exposed.

What can I do to protect my child or myself?

1. If it’s so noisy that you have to raise your voice to be heard more than three feet away, then the noise is too loud. Remove yourself from the situation or wear earplugs if you can’t leave.





2. To use MP3 players safely:

- Use earphones that block out background noise, so you don't have to turn the sound up as loud to hear it.
- Limit the level to "7" (that is, if "10" is the highest level).
- Limit listening time to one-and-a-half hours or less.

3. Parents might believe, "If I can hear it across the room, then I know their headphones are too loud!" But it turns out that this isn't correct. Being able to hear the music from a child's headphones might mean it's too loud, but not being able to hear the music from their headphones doesn't mean it's safe, either.

4. Don't let children hold toys that make loud sounds close to their ears.

5. If attending loud-noise events (concerts, fireworks displays, car races, etc.) or operating a lawn mower or snow blower, use earplugs or special sound-blocking earmuffs. You can buy these at hardware stores or drugstores. (Cotton in the ears does not work!)

6. If you or your child are engaged in musical activities on a regular basis (attending concerts or performing music, regardless of whether it's classical, jazz or rock music), consider enrolling you or your child in a Hearing Loss Prevention Program at Children's. (For more information, visit childrenshospital.org/MusiciansHearingProgram.)

How do I know whether I've been around noise that's too loud?

Common warning signs include:

- Ringing, buzzing or hissing sounds in the ears during or after being around the noise or music.
- Muffled or distorted hearing.
- Trouble understanding conversation, especially if you are in a crowd of people talking.
- A feeling of "fullness" in the ears or head.
- Pain is usually not the first sign of noise over-exposure.

These symptoms tend to be temporary, but if you're around loud noise often, they might become permanent.

If you experience any of these symptoms, see an audiologist or your primary care physician immediately.

Is there a cure for noise-induced hearing loss?

Noise-induced hearing loss is the second most common cause of hearing loss, falling only behind age-related hearing loss. Because of the noises in today's world, hearing loss is appearing much earlier in life than would have been expected 30 years ago. We also know that 5.2 million children and teenagers have early signs of noise-induced hearing loss.

There is no "cure" for noise-induced hearing loss. Once hearing is gone, it will not come back. Prevention is the key, so use your ears responsibly!

EXPERT SOURCE:



Brian J. Fligor, ScD, CCC-A, director of the Diagnostic Audiology Program at Children's Hospital Boston

BPA and baby bottle safety: what every parent needs to know

Claire McCarthy, MD, primary care physician and medical director of Children’s Hospital Boston’s Martha Eliot Health Center, sheds light on baby bottle safety.



Bisphenol-A (BPA) is a chemical used in the plastic liners of cans to prevent spoilage of canned foods, and in a variety of other plastic products to make them clear and shatterproof—which makes it particularly attractive for making baby bottles. Recently, the Massachusetts Department of Public Health recommended that pregnant and breastfeeding women, and children ages 2 and younger, limit their exposure to BPA. What does this mean for you?

For years, scientists have been concerned about possible health effects of BPA. Studies have shown a possible effect on the brain (one study showed behavioral changes), prostate and thyroid gland. Most of these studies have been done on rodents, so it’s hard to know how dangerous BPA is for humans.

The Centers for Disease Control (CDC) has found that most of us have traces of Bisphenol-A in our bodies, mostly from food and beverage containers. Levels are particularly high in infants, and this worries doctors for two reasons. First of all, because they are still developing. Anything that interferes with development is particularly risky for them. Second, because they are so young, any dangerous chemical has years and years to cause trouble.

Some countries, such as Canada and the European Union, have banned BPA use in baby bottles or other products used by infants and small children. The United States has taken a more cautious approach, but many states are issuing warnings.

Here’s what you can do to protect yourself and your baby:

- Avoid products, especially baby bottles that have the recycling number 7 (usually inside a triangle) on them. While you’re at it, watch out for 3 and 6, which contain phthalates, another possible toxin. Numbers 1, 2, 4 and 5 are better.
- If you have products with a 3, 6 or 7, do not pour hot liquids in them, and wash them by hand with soap and water rather than putting them in the dishwasher (the heat releases more chemicals).
- Consider using glass baby bottles (with caution, obviously).
- If you are using infant formula, buy the powdered kind rather than the canned liquid, as there is less chance of BPA exposure. However, if your baby is on a special formula, do not make a change without talking to your doctor!
- Limit your intake of canned foods (not all are contaminated with BPA, but it’s not easy to know which are). Eat fresh or frozen foods instead.
- Try to limit your use of plastics in general, especially when heating up foods. Use more stainless steel, glass and ceramic and try covering food with waxed paper.

If you’ve already used bottles or other things made with BPA, don’t panic! We don’t know for sure what the risks are. For more information on how to keep you and your family safe from environmental toxins, visit the the **CDC’s Web site** and read the Environmental Protection Agency’s information on children’s health.

EXPERT SOURCE:



Claire McCarthy, MD, pediatrician and medical director, Martha Eliot Health Center

The case for immunization: know the facts

Joanne Cox, MD, Children's Primary Care Center, weighs in on the importance of immunization.

Q: Recent media coverage has caused parents to voice concern about immunizing their children. Why is that? Has the number of children immunized decreased?

A: Nationally, childhood immunization levels have not decreased. Parents who don't immunize often have misconceptions about the dangers of vaccines and their link to autism. However, there is no sound scientific evidence linking childhood immunizations to autism, although that issue has received abundant coverage in the press.

Q: Why is it important to immunize children?

A: Immunizations will protect children from potentially deadly diseases such as measles, chickenpox and whooping cough. Prior to immunizations, thousands of children died each year from complications of these diseases. If child immunization rates decrease, these diseases will increase in frequency.

Q: What's your opinion of the latest CDC guidelines, which recommend children up to the age of 18 get the influenza vaccine?

A: It's a great idea. The flu makes children and adults very ill, causing significant loss of school time and work time. For children who have chronic diseases, like asthma, it can be fatal. I think that the larger percentage of people in the population that get vaccinated, the safer it is for everybody. We highly recommend it.

Q: Why do you think the CDC has increased the cut-off age?

A: I think they want to have a larger percentage of the population immunized to decrease the rates of flu overall. Having more people vaccinated helps protect the elderly and the very young—the two groups that are at the highest risk for severe side effects from the flu. I think it's only a matter of time before they extend that recommendation to all people.



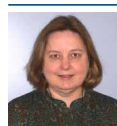
Q: Why is it so important for children, even those who are older and healthier, to receive the flu vaccine?

A: Well, it's important that they don't catch the flu and that they don't transmit it to other people. If they are healthy, and don't have asthma, they're not necessarily going to be seriously harmed by the flu, but they can spread it. They live in families and go to school in big groups. Children are a big pool of influenza virus, so to speak.

Q: Will flu shots be harder to come by with the increase in children receiving flu shots?

A: We are anticipating a good supply of vaccine this year, and I think that's one reason for the increase in recommendations.

EXPERT SOURCE:



Joanne Cox, MD, associate chief, Division of General Pediatrics and Medical Director, Children's Hospital Primary Care Center

Why young girls need the HPV vaccine

In 2006, the U.S. Food and Drug Administration approved Gardasil®, the first vaccine to help prevent cervical cancer and other conditions caused by particular types of genital human papillomavirus (HPV). HPV is the most common cause of new sexually transmitted diseases.

According to the first national estimate of use, 25 percent of teenage girls received at least one dose of the Gardasil vaccine in 2007, with 20 million doses distributed in the United States. The HPV vaccine has continued to make news as parents weigh the benefits, high cost, claims of adverse reactions and unease about vaccinating their kids against sexually transmitted disease. We talk to **Lydia A. Shrier, MD, MPH**, specialist, Division of Adolescent/Young Adult Medicine, about these concerns and Gardasil's potential.

What is HPV and how prevalent is it in the United States?

It is a group of more than 100 different types of viruses, more than 30 of which are sexually transmitted. Low-risk types of HPV can lead to benign, but bothersome, genital warts or abnormal changes in the cervix but generally don't progress to serious disease. However, high-risk types can lead to cervical cancer and, rarely, cancers of the vulva, vagina, anus or penis. There is no cure for HPV, and a person can have more than one type. The vast majority of sexually active people, by the end of their lives, will have been exposed to the virus. Most people who have acquired HPV infection don't know that they have it because they don't have any symptoms. Pap smear screening is where we detect abnormalities that lead to cervical cancer.

How effective is Gardasil at protecting women from HPV?

Gardasil is very effective in preventing acquisition of infection from four types of HPV; the two types that cause more than 70 percent of cervical cancer, and the two types that cause 90 percent of cases of genital warts.

Currently, I'm recommending Gardasil for all of my teenage patients, 100 percent. Every year in the United States, there are over 11,000 new cases of cervical cancer and more than 3,800 deaths from cervical cancer. With the vaccine, we have the opportunity to offer protection to young women before they've been exposed to HPV.

Why do you think it hasn't been more widely accepted and used?

There are lots of reasons. It's new. Some parents think they can wait until their daughters are older, because they don't think their daughter is going to be sexually active anytime soon. Some parents might be concerned that there are adverse reactions to the vaccine. Uptake of a new preventive behavior by both physicians and patients always takes time.



Is there a high rate of adverse reactions to Gardasil?

The rate of adverse effects is not any higher than other vaccines. Proportionally, there are actually fewer serious adverse events with the HPV vaccine than with other vaccines. As with any vaccine, new or otherwise, there's a reporting system of physical symptoms after receiving the shot. Those are reviewed and investigated to see whether there is any possibility of causality. Just because someone gets sick after the shot doesn't mean the shot caused them to be sick. This vaccine is not a live vaccine;

it does not give you a little case of HPV. To date, the Centers for Disease Control and Prevention (CDC) has not found a causal relationship that would warrant any change in the recommendations.

Why do you believe it's so important for girls to get the vaccine?

It's very exciting to have a vaccine that has a potential to prevent cases of cervical cancer. Our ability to prevent cases before the availability of the HPV vaccine focused on counseling around sexual contact to limit exposure and, once exposure occurred, Pap smear screening to detect precancerous abnormalities. Those things still need to happen and are very important, but now we have a third prong to our approach.

What do you say to the parent who is worried that Gardasil hasn't been studied for long enough?

It has been studied for years, and the safety profile is very good. I tell my patient families that my understanding of the data gives me the confidence to recommend the vaccine.

Studies have shown that the vaccine works best in women who have not been exposed to HPV—does this mean that it is not worth getting if you are already sexually active?

It's important to try to immunize women early, before they have been exposed, to maximize the efficacy of the vaccine in preventing HPV infection. However, we absolutely still vaccinate sexually active young women. We don't know if these young women have acquired any or all of the types of HPV targeted by the vaccine; the vaccine will be effective against any of the four types they haven't acquired.

There have also been questions raised about how long the protection lasts. How long are women protected, and will they need a booster shot to remain protected?

The five-year data show women are still protected. There isn't any evidence to suggest waning immunity. The idea behind the vaccine is to buy some time. You want to vaccinate young women who haven't been exposed and protect them during the time in their life when they are most likely to be having new sexual contacts.



Why is it important for women to have regular gynecologic exams?

There are precancerous stages of cervical abnormalities that can be treated before cancer develops. The only way we can pick up these abnormalities is with a Pap smear. We need to communicate to women that there's still a risk of getting cervical cancer, with or without the vaccine. Because of the internal location of the cervix, you don't necessarily know you have cancer, or abnormalities that could lead to cancer, unless you get a Pap smear.

EXPERT SOURCE:



Lydia A. Shrier, MD, MPH, Adolescent/Young Adult Medicine Specialist



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