



## Developmental Milestones

### *Emotional development*

1. As children grow and develop, they think and feel differently about the world—and hemophilia
2. “Normal” development is different for each child
3. Infants
  - during infancy, babies learn to trust the world—when you attend to a crying baby, you are teaching him that the world is a friendly place that hears and responds to him
  - crying is one of the ways that babies communicate
  - spontaneous bleeds in infants are rare but if they occur, they cause discomfort—when this happens, the baby will be fussy, cry, and avoid using the limb
4. Preschool children
  - during the preschool years, children are egocentric and possess “magical thinking”—they think that everything happens because of them
  - children may ignore symptoms of a bleed thinking that if they wish hard enough, the bleed will go away
  - parents should provide easy to understand information about hemophilia and remind the child that factor treatments stop the bleeding and help make him feel better
5. School age children
  - school age children are capable of thinking logically and understanding cause and effect
  - at this age, children will be able to report that they have a bleed and understand that certain activities are more likely than others to cause a bleed
  - if parents respond to bleeds with anger, fear, and frustration, the child may hide the bleed to protect the parents
6. Adolescents
  - adolescents are capable of taking more responsibility for their own health care by self-infusing and going to doctor’s appointments alone
  - most teenagers go through a risk-taking stage during which they think nothing bad can happen to them
  - teenage years are the time when children try to figure out who they are and what they want—the opinions of friends are very important
7. Speech and language milestones
  - Speech and language are tools that humans use to communicate or share thoughts, ideas, and emotions
  - The most intensive period of speech and language development is during the first 3 years of life
  - The child’s skills will develop best in a world that is rich with sounds, sights, and exposure to the speech and language of others

Age	Milestone
Birth to 5 months	<ul style="list-style-type: none"> <li>• Reacts to loud sounds</li> <li>• Turns head towards a sound source</li> <li>• Watches faces when they speak</li> <li>• Vocalizes pleasure and displeasure sounds (laughs, giggles, cries, fusses)</li> <li>• Makes noise when talked to</li> </ul>
6 to 11 months	<ul style="list-style-type: none"> <li>• Understand “no-no”</li> <li>• Babbles (says ‘ba-ba-ba’ or “ma-ma-ma”)</li> <li>• Tries to communicate by actions or gestures</li> <li>• Tries to repeat sounds</li> </ul>
12 to 17 months	<ul style="list-style-type: none"> <li>• Pays attention to a book or toy for about 2 minutes</li> <li>• Follows simple directions accompanied by gestures</li> <li>• Points to objects, pictures, and family members</li> <li>• Says 2 or 3 words to label a person or object</li> <li>• Tries to imitate simple words</li> </ul>
18 to 23 months	<ul style="list-style-type: none"> <li>• Enjoys being read to</li> <li>• Follows simple commands with gestures</li> <li>• Points to simple body parts</li> <li>• Understands simple verbs like “eat” and “sleep”</li> <li>• Correctly pronounces most vowels and n, m, p, h, especially in the beginning of syllables and short words. Begins to use other speech sounds</li> <li>• Says about 8 to 10 words, although pronunciation may be unclear</li> <li>• Asks for common foods by name</li> <li>• Makes animal sound like “moo”</li> <li>• Starts to combine words such as “more milk”</li> <li>• Begins to use pronouns like “mine”</li> </ul>
2 to 3 years	<ul style="list-style-type: none"> <li>• Knows about 50 words at 24 months</li> <li>• Knows some spatial concepts like “in” and “out”</li> <li>• Knows pronouns such as “you”, “me”, and “her”</li> <li>• Knows descriptive words such as “big” and “happy”</li> <li>• Says about 40 words at 24 months</li> <li>• Speech becomes more accurate but may still leave off endings</li> <li>• Answers simple questions</li> <li>• Begins to use more pronouns such as “you’ and “I”</li> <li>• Speaks in 2 to 3 word phrases</li> <li>• Uses question inflection to ask for something (“my ball?”)</li> <li>• Begins to use plurals such as “shoes”, or “sock” and regular past tense verbs, such as “jumped”</li> </ul>
3 to 4 years	<ul style="list-style-type: none"> <li>• Groups objects such as foods, and clothes</li> <li>• Identifies colors</li> <li>• Uses most speech sounds but may distort difficult sounds such as l, r, s, sh, ch, etc</li> <li>• Uses consonants in the beginning, middle and end of words. Some more difficult words may be distorted</li> <li>• Strangers are able to understand most of what is said</li> <li>• Able to describe the use of objects such as “fork”, “car’ etc.</li> <li>• Has fun with language. Enjoys poems and recognizes language absurdities such as “Is that and elephant on your head?”</li> <li>• Expresses ideas and feelings rather than just talking about the world around them</li> <li>• Uses verbs that end in “ing” such as walking and talking</li> <li>• Answers simple questions such as “What do you do when you are hungry?”</li> <li>• Repeats sentences</li> </ul>

Age	Milestone
4 to 5 years	<ul style="list-style-type: none"> <li>• Understands spatial concepts such as “behind” and “next to”</li> <li>• Understands complex questions</li> <li>• Speech is understandable but mistakes pronouncing long difficult, or complex words</li> <li>• Says about 200 to 300 different words</li> <li>• Uses irregular past tense verbs such as “ran” and “fell”</li> <li>• Describes how to do things like paintings a picture</li> <li>• Lists items that belong in a category such as animals and vehicles</li> <li>• Answers “why” questions</li> </ul>
5 years	<ul style="list-style-type: none"> <li>• Understands more than 2000 words</li> <li>• Understands time sequences</li> <li>• Carries out a series of 3 directions</li> <li>• Understands rhyming</li> <li>• Engages in conversation</li> <li>• Sentences can be 8 or more words long</li> <li>• Uses compound and complex sentences</li> <li>• Describes objects</li> <li>• Uses imagination to create stories</li> </ul>

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### *Behavioral milestones*

Age	Milestone
Birth	<ul style="list-style-type: none"> <li>• Sleeps much of the time</li> <li>• Sucks</li> <li>• Clears airway</li> <li>• Responds to discomforts and intrusions by crying</li> </ul>
4 weeks	<ul style="list-style-type: none"> <li>• Brings hands toward eyes and mouth</li> <li>• Moves head from side to side when lying on stomach</li> <li>• Follows an object moved in an arch about 15 cm above face to the midline</li> <li>• Responds to a noise in some way, such as startling, crying, or quieting</li> <li>• May turn toward familiar sounds and voices</li> </ul>
6 weeks	<ul style="list-style-type: none"> <li>• Sees objects in the line of vision</li> <li>• Begins to smile when spoken to</li> <li>• Lies flat on abdomen</li> <li>• Head lags when pulled to a sitting position</li> </ul>
3 months	<ul style="list-style-type: none"> <li>• Holds head steady when sitting</li> <li>• Raises head 45° when lying on stomach</li> <li>• Opens and shuts hands</li> <li>• Pushes down when feet are placed on a flat surface</li> <li>• Swings at and reaches for dangling toys</li> <li>• Follows an object moved in an arch above face from one side to the other</li> <li>• Watches faces intently</li> <li>• Smiles at sound of caretaker's voice</li> <li>• Vocalizes sounds</li> </ul>

<b>Age</b>	<b>Milestone</b>
5 to 6 months	<ul style="list-style-type: none"> <li>• Holds head steady when upright</li> <li>• Sits with support</li> <li>• Rolls over, usually from stomach to back</li> <li>• Supports himself in a standing position</li> <li>• Reaches for objects</li> <li>• Recognizes people at a distance</li> <li>• Listens intently to human voices</li> <li>• Smiles spontaneously</li> <li>• Squeals in delight and babbles to toys</li> </ul>
9 months	<ul style="list-style-type: none"> <li>• Sits well</li> <li>• Crawls or creeps on hands and knees</li> <li>• Pulls self up to standing position</li> <li>• Says “ma-ma” and “da-da” appropriately</li> <li>• Plays pat-a-cake, waves good-bye</li> </ul>
12 months	<ul style="list-style-type: none"> <li>• Walks by holding furniture or hands</li> <li>• May walk 1 or 2 steps without support</li> <li>• Drinks from a cup</li> <li>• Helps dress self</li> </ul>
2 years	<ul style="list-style-type: none"> <li>• Runs well</li> <li>• Climbs up and down stairs</li> <li>• Turns single page books</li> <li>• Puts on simple clothing</li> <li>• Verbalizes toilet needs</li> </ul>
3 years	<ul style="list-style-type: none"> <li>• Rides a tricycle</li> <li>• Dresses well except for buttons and laces</li> <li>• Counts to 10 and uses plurals</li> <li>• Questions constantly</li> <li>• Feeds self well</li> <li>• About ½ of children are able to take care of toilet needs</li> </ul>
4 years	<ul style="list-style-type: none"> <li>• Alternates feet going up and down stairs</li> <li>• Throws a ball overhand</li> <li>• Hops on one foot</li> <li>• Copies a cross</li> <li>• Washes hands and face</li> </ul>
5 years	<ul style="list-style-type: none"> <li>• Skips</li> <li>• Catches a bounced ball</li> <li>• Copies a triangle</li> <li>• Knows 4 colors</li> <li>• Dresses and undresses without help</li> </ul>