

GUIDE





MILESTONES & RED FLAGS CHART

A Comprehensive Interdisciplinary Developmental Milestones and Red Flags Chart throughout the 0-7 Continuum of Life

Abstract

The developmental milestones and red flags compiled in the chart are meant to give parents and professionals a general idea of the main acquisitions and changes expected to occur in a determined period of life and also the deviations from the norm that could impact a healthy development.

TABLE OF CONTENTS

INTRO	DUCTION	2
Neuro	physiological Development:	2
?	Reflexes (Birth-12 months):	2
?	Muscle Tone (Birth-24 months):	3
?	Visual Development (Birth-24 months):	3
?	Hearing (Birth-24 months):	3
Senso	riperceptive Development:	3
?	Tactile Sensitivity (Birth-36 months):	3
?	Gustative experiences (Birth-36 months):	3
?	Proprioception (12-36 months):	3
Psycho	omotricity Development:	3
?	Gross Motor Skills (Birth-36 months):	4
?	Fine Motor Skills (6-36 months):	4
?	Postural Control (6-36 months):	4
Comm	nunication Development:	4
?	Prelinguistic Communication (Birth-12 months):	4
?	Language Development (12-36 months):	4
?	Pragmatic Skills (12-36 months):	4
?	Articulation and Phonological Development (3-7 years):	4
Cogni	tive Development:	5
?	Object Permanence (6-24 months):	5
?	Symbolic Play (12-36 months):	5
?	Problem-Solving Skills (12-36 months):	5
?	Conceptual Understanding (3-7 years):	5
Socioe	emotional Development:	5
?	Attachment (Birth-12 months):	5
?	Emotion Regulation (6-36 months):	5
?	Socialization (12-36 months):	6
?	Empathy and Perspective Taking (3-7 years):	6
Three-	-Month Intervals:	6
Red Fl	ags and Intervention:	6

INTRODUCTION

The first seven years of a child's life are crucial for the establishment of fundamental skills and behaviors that form the foundation for future growth and development. Monitoring developmental milestones during this period is essential to ensure that a child is progressing appropriately in various domains. A comprehensive developmental milestones and red flags chart, organized by 23 scales across neurophysiological, sensoriperceptive, psychomotricity, communication, cognition, and socioemotional areas, provides a systematic framework for understanding and assessing a child's developmental trajectory.

As each child develops at her own pace and with her own characteristics, it is impossible to determine when that child will/has acquired an expected skill. At *C.H.I.L.D. Protocol*, we believe that a 3-month interval is a fair amount of time to cover some theoretically and clinically expected differences in the developmental process and where the child really is. By repeating some of the expected actions/behaviors over 3 months we also capture the layers of the skills (e.g.: the child tries, performs, and masters). However, keep in mind, if the number of NOs responses exceeds the threshold of 40% of the questions answered, we strongly recommend a visit to the child's primary provider.

Developmental milestones serve as crucial indicators of a child's growth and well-being, offering insights into their physical, cognitive, emotional, and social development. Understanding these milestones and recognizing potential red flags is essential for early identification and intervention in cases where a child may be experiencing developmental delays or deviations from the norm. This comprehensive chart is organized by six key areas of development: neurophysiological, sensoriperceptive, psychomotricity, communication, cognition, and socioemotional. Each area is divided into 23 scales covering the period from birth to 7 years of age, with a focus on capturing the main acquisitions, changes, and potential deficiencies or deviations from typical development.

Neurophysiological Development:

The neurophysiological domain encompasses the maturation and functioning of the nervous system. Across the first seven years, the chart delineates milestones related to motor control, reflex integration, and neurological regulation. From primitive reflexes in infancy to refined motor skills in later years, the chart details the expected progression of neurophysiological abilities. Red flags in this area may manifest as delays in motor coordination, abnormal reflex persistence, or signs of neurological dysfunction.

Reflexes (Birth-12 months): At birth, reflexes such as sucking, rooting, and grasping are present. Over the first year, these reflexes gradually diminish as voluntary control develops. Red flags may include persistent primitive reflexes beyond expected timelines.

- Muscle Tone (Birth-24 months):
 Infants typically exhibit variations in muscle tone, transitioning from hypertonia to normal tone. Persistent hypotonia or hypertonia beyond expected periods may indicate neurological issues.
- Visual Development (Birth-24 months):
 Newborns have limited visual acuity, but by 6 months, they should demonstrate improved eye coordination and tracking. Red flags include lack of visual tracking or significant asymmetry in eye movements.
- Hearing (Birth-24 months):
 Babies should startle to loud noises and respond to familiar voices by 3 months. Lack of response to sound or failure to develop language skills may indicate hearing impairment.

Sensoriperceptive Development:

Sensoriperceptive development involves the integration of sensory inputs to form a coherent understanding of the environment. The chart addresses sensory milestones such as visual tracking, auditory discrimination, and tactile responsiveness. Deviations may be observed in cases of sensory processing disorders, where a child may exhibit hypersensitivity or hyposensitivity to certain stimuli, impacting their ability to engage with the world.

- Tactile Sensitivity (Birth-36 months):
 Infants explore their environment through touch, gradually refining tactile discrimination. Red flags may include aversion to touch or extreme sensitivity to tactile stimuli.
- Gustative experiences (Birth-36 months):
 Babies experience tastes, explore objects orally, and develop feeding skills. Oral sensorymotor skills and feeding delays in milestones or persistent oral aversions warrant attention.
- Proprioception (12-36 months):
 Toddlers develop awareness of their body's position and movements. Challenges in balance, coordination, or spatial orientation may suggest sensory processing issues.

Psychomotricity Development:

Psychomotricity focuses on the integration of cognitive and motor skills. The chart delineates milestones in fine and gross motor coordination, balance, and spatial awareness. Red flags may manifest as delays in achieving motor milestones, poor coordination, or difficulties in activities requiring precision and control.

- Gross Motor Skills (Birth-36 months): Infants progress from reflexive movements to purposeful gross motor actions like rolling, sitting, crawling, and walking. Persistent delays or asymmetries in motor milestones may signal motor disorders.
- Fine Motor Skills (6-36 months):
 Babies refine their hand-eye coordination and grasp patterns, leading to activities like pincer grasp and object manipulation. Difficulties in precision tasks or delayed fine motor milestones may indicate developmental delays.
- Postural Control (6-36 months):
 As toddlers gain strength and balance, they achieve greater stability in sitting and standing positions. Persistent difficulties in maintaining posture or delayed progression in postural control may suggest neuromuscular issues.

Communication Development:

Communication milestones encompass the evolution of language and expressive abilities. From babbling in infancy to complex language acquisition in later years, the chart provides a roadmap for language development. Red flags may be identified through delays in speech and language milestones, limited vocabulary, or signs of language disorders.

- Prelinguistic Communication (Birth-12 months):
 Babies communicate through cries, gestures, and vocalizations, gradually transitioning to babbling. Lack of vocalizations or limited communicative gestures may indicate speech or language delays.
- Language Development (12-36 months):
 Toddlers acquire vocabulary, combine words, and demonstrate understanding of basic grammar rules. Absence of meaningful words or significant language regression may signal developmental language disorder.
- Pragmatic Skills (12-36 months):
 Children develop social communication skills, including turn-taking, joint attention, and responding to social cues. Challenges in social interaction or lack of reciprocity may suggest autism spectrum disorder.
- Articulation and Phonological Development (3-7 years):
 Children refine their speech sounds and pronunciation. Persistent speech sound errors or difficulty being understood may indicate speech sound disorder.

Cognitive Development:

Cognition involves the acquisition of intellectual abilities such as problem-solving, memory, and attention. The chart outlines milestones in areas such as object permanence, symbolic play, and executive functions. Deviations may be observed in children experiencing cognitive delays, learning disabilities, or attention deficits.

- Object Permanence (6-24 months):
 Infants gradually understand that objects continue to exist even when out of sight. Lack of object permanence or persistent confusion regarding object permanence may indicate cognitive delays.
- Symbolic Play (12-36 months):
 Toddlers engage in pretend play, using objects to represent other things. Limited imaginative play or lack of symbolic understanding may be indicative of cognitive impairment.
- Problem-Solving Skills (12-36 months):
 Children demonstrate increasing ability to solve simple problems through trial and error.
 Persistent difficulties in problem-solving or lack of functional play may suggest developmental or intellectual delays.
- Conceptual Understanding (3-7 years):
 Children develop concepts such as time, quantity, and spatial relationships. Persistent difficulty understanding basic concepts may indicate learning difficulties.

Socioemotional Development:

Socioemotional milestones pertain to the development of interpersonal skills, emotional regulation, and social awareness. The chart details stages of attachment, empathy, and the emergence of self-identity. Red flags may include difficulties in forming relationships, emotional dysregulation, or signs of social anxiety.

- Attachment (Birth-12 months):
 Infants form bonding and secure attachments with caregivers, seeking comfort and proximity. Lack of attachment behaviors or excessive clinginess may indicate attachment disorders.
- Emotion Regulation (6-36 months): Toddlers develop strategies for managing emotions, such as self-soothing and seeking comfort from caregivers. Persistent emotional dysregulation or extreme reactions may signal emotional or behavioral disorders.

- Socialization (12-36 months):
 Children engage in parallel play and begin to understand social norms and roles. Lack of interest in social interaction or difficulty in forming peer relationships may suggest social-emotional challenges.
- Empathy and Perspective Taking (3-7 years):
 Children develop empathy and the ability to understand others' perspectives. Lack of empathy or difficulty understanding others' feelings may indicate social-emotional difficulties.

Three-Month Intervals:

The chart employs a 3-month interval approach, allowing for a nuanced understanding of developmental progress. By capturing the layers of skills—attempting, performing, and mastering—over relatively short periods, the chart accommodates the dynamic nature of early childhood development. This approach enables caregivers and professionals to detect subtle variations and address concerns promptly.

Red Flags and Intervention:

Monitoring developmental milestones and recognizing red flags is crucial for early intervention. Persistent deviations from expected milestones, significant delays, regression, or loss of previously acquired skills warrant further assessment by healthcare professionals. Early intervention services, including speech therapy, occupational therapy, physical therapy, and developmental interventions, can help address developmental concerns and support optimal outcomes for children.

The *C.H.I.L.D. Protocol* developmental milestones and red flags chart provides a comprehensive framework for tracking a child's growth and identifying potential developmental delays or deviations. By monitoring key areas of development from birth to 7 years of age, parents and professionals can intervene early to promote healthy development and address any challenges that may arise.

Parents should not be frightened but rather act proactively and preventively if a child is not quite there yet. Please, consult with the child's primary care provider, showing him/her the *C.H.I.L.D. Protocol* report with the summary results you received.

Professionals using this website, please contact the parent as soon as possible to share the results and take appropriate action.