

GUIDELINE

Physical Assessment 0-4 years

Scope (Staff):	Community health staff
Scope (Area):	CAHS-CH, WACHS

Child Safe Organisation Statement of Commitment

CAHS commits to being a child safe organisation by applying the National Principles for Child Safe Organisations. This is a commitment to a strong culture supported by robust policies and procedures to reduce the likelihood of harm to children and young people.

This document should be read in conjunction with this disclaimer

Aim

To conduct comprehensive and systematic physical assessments that focus on identifying key risk and protective factors and implementing early interventions according to client need, to maximise optimal health and developmental outcomes.

Risk

Where there are delays in identifying health and developmental concerns, this negatively impacts on children developing to the best of their ability.¹

Background

There is compelling evidence that early childhood is a sensitive period for child development and functioning.² Community health nurses conduct comprehensive cephalocaudal physical assessments as a component of a holistic assessment, using evidence informed knowledge and skills, and clinical judgement through:

- Eliciting and responding to parental concerns
- Gathering information about the child's current abilities and functions
- Identifying risk and protective factors
- Using evidence informed assessment methods and tools that are age appropriate.^{3 4}

The Pediatric Physical Examination: An Illustrated Handbook and Mary Sheridan's from birth to five years: Children's developmental progress, have guided the content for specific body systems assessments for the following age parameters:

- Appendix A: Neonate Birth to four weeks
- Appendix B: Infant One month to twelve months
- Appendix C: Children Twelve months to four years

Key points

- Comprehensive physical assessments will be conducted at Universal contacts according to *Universal Contact Guidelines* and at other times, as required.
- Commence parts of the physical assessment that require the child to be in a quiet and alert state, prior to undertaking a comprehensive assessment.
- The child is the focus of care and their best interests are the primary consideration in all decisions.
- Nurses think critically and use the best available evidence and relevant policy documents, in making decisions and providing care that is safe, appropriate and responsive.
- Nurses will provide additional contacts for monitoring of deviations from normal and/or will refer to a General Practitioner or other appropriate medical service, for further management.
- The *Guidelines for Protecting Children 2020* publication will guide practice when nurses have concerns that a child is being, or has been, abused.⁵

Documentation

 Nurses maintain accurate, comprehensive and contemporaneous documentation of assessments, planning, decision making and evaluations; in electronic and/or MR600 child health records.

References

- 1. Sharma A, Cockerill, H.,. From Birth to Five Years: Children's Developmental Progress. 4th ed. Abingdon, Oxon: Routledge; 2014.
- 2. Department of Health. National Action Plan for the Health of Children and Young People: 2020-2030. Perth: Government of Western Australian 2019.
- 3. Duderstadt K. Pediatric Physical Examination: An Illustrated Handbook. 3rd Edition ed: Elsevier Health Sciences; 2019.
- 4. Sharma A, Cockerill H. From Birth to Five Years: Practical Developmental Examination: Taylor & Francis; 2014.
- 5. Department of Health: Child and Adolescent Health Services. Guidelines for Protecting Children: 2020. Perth: Government of Western Australia; 2020.

 Dietitians of Canada, Canadian Paediatric Society, The College of Family Physicians of Canada, Community Health Nurses of Canada. Promoting optimal monitoring of child growth in Canada: Using the new World Health Organization growth charts – Executive Summary. Paediatrics & Child Health. 2010;15(2):77-9.

Related policies, procedures and guidelines

The following documents can be accessed in the **Clinical Nursing Manual** via the <u>HealthPoint</u> link, <u>Internet</u> link or for WACHS staff in the <u>WACHS Policy</u> link

Universal contact guidelines (0-14 days, 8 weeks, 4 months, 12 months, 2 years, SEHA)

Related CAHS-CH forms

The following forms can be accessed from the <u>CAHS-Community Health Forms</u> page on HealthPoint

Breastfeeding Assessment Guide form (CHS012)

Related CAHS-CH resources

The following resources can be accessed from the <u>CAHS-Community Health</u> <u>Resources</u> page on HealthPoint

Early Parenting Groups: Facilitator Guide

How children develop

Indicators of Need

Practice guide for Community Health Nurses

Related external resources

Advance Pediatric Assessment. 2019. Ellen M Chiocca.

Guidelines for Protecting Children 2020. Statewide Protection of Children Coordination Unit, Child and Adolescent Community Health.

Nursing and Midwifery Board of Australia. <u>Code of conduct for nurses and Code of conduct for midwives</u>. 2018

Nursing and Midwifery Board of Australia. <u>Registered Nurses Standards for Practice</u>. 2016.

This document can be made available in alternative formats on request.

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Healthy kids, healthy communities					
Compassion Excellence Collaboration Accountability Equity Respect					
Neonatology Community Health Mental Health Perth Children's Hospital					

Appendix A:	Neonate - Birth	to four weeks
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Birth to 4 weeks - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
		General Appearance		
 Facial expressions Posture Hydration and nutritional health Activity level Temperament Responsiveness Interaction with others Proportion of body parts Symmetry of body parts Movement and capacity Skin integrity Observe appearance prior to-comprehensive assessment 	 Initial presentation of the neonate is consistent with the situation (e.g. crying due to hunger) Neonate is healthy and developing appropriately 	 Deviations from the norm may be initially identified through assessing the general appearance of the neonate Recognise indicators for child abuse, including but not limited to: injury, bruising, burns, retinal haemorrhages, bite marks, fractured bones, bleeding, pain or physical discomfort or poor standard of hygiene. Assess appearance of child with consideration of their age, level of mobility and development. ¹ 	 Genetic conditions Pregnancy complications Birth trauma Congenital or non-congenital conditions Child abuse 	Concerns will be documented and noted for additional monitoring and/or referral to a medical practitioner ⇒ Refer to the <i>Guidelines for</i> <i>protecting children</i> 2020 publication for more information.

Birth to 4 weeks - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
Head (continued next page)				
Visual inspection with the neonate resting supine, and head in midline, noting: • General shape • Size • Circumference • Symmetry • Alignment	 Rounded Symmetrical Head circumference averages: males: 32-39.5cm females: 31.5–39.cm⁶ When in supine position, head will comfortably sit in the midline 	 Elongated Asymmetrical Misshapen Measurements outside of expected norm Microcephaly Macrocephaly Lesions, nodules, masses, birth marks Positional head preference Persistent head tilt (lateral flexion) 	 Birth trauma Instrumental delivery Genetic conditions Achondroplasia Noonan syndrome Hydrocephalus Craniosynostosis Uterine placement Intrauterine growth conditions and exposure to tetragons Plagiocephaly 	 Parent education and support may include: Postural exercises and repositioning Handling strategies Massage Positioning of toys to non-favoured side Variable positioning of head when put down to sleep
 Visual inspection and palpation of: Suture lines Scalp Bony structures Fontanelles 	 Anterior fontanelle should be open, soft, flat, an average of 2cm long by 2-3cm wide, but can be up to 5cm long ³ Posterior fontanelle should be smaller, triangular and 0.5 cm long by 1 cm wide ³ 	 Bulging anterior fontanelle Sunken anterior fontanelle Overriding sutures Bruising Oedema Pitting 	 Birth trauma Caput succedaneum Cephalohaematoma Changes in intracranial pressure Dehydration Genetic conditions Alpert's 	Monitor premature closure of sutures

Birth to 4 weeks - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
	 Suture lines can be overlapping or protuberant 	 Premature closure of sutures 	 Crouzon Craniosynostosis 	
	_	Neck (continued next page	2)	-
 Visual inspection through the following process: Controlled pulling up from the supine to sitting position Observing supported in sitting position Placing in the ventral suspension Extending the head in all directions Placing in prone position Noting: Symmetry Shape Range of movement 	 A short neck, which is creased with skin folds The neck rotates freely as it cannot support the weight of the head The head briefly stays erect, then lags when pulled up from a supine to a sitting position In the prone position, the head can be raised slightly The head will fall forward in the sitting position The head will drop below or in line with 	 Movement deviations: Limited range of motion Head bobbing Jerking Tremors Stiffness Resistance to movement Involuntary muscle contractions or spasms Webbed neck Positional deviations: Head held erect Persistent head tilt 	 Intrauterine growth conditions Plagiocephaly Torticollis Genetic conditions Turner syndrome Noonan syndrome 	 Parent education and support may include: Postural exercises and repositioning Handling strategies Massage Positioning of toys to non-favoured side Variable positioning of head when put down to sleep

Birth to 4 weeks - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
Head control	the plane of the body when in ventral suspension	 Positional head preference 		
	-	Face	-	-
 Through visual inspection observe facial features and expressions, noting: Spacing Size Symmetry of features Movement symmetry 	 Face is relaxed and symmetrical Features are symmetrical during episodes of crying Nasolabial folds are symmetrical 	 Low-set ears Low-set hairline Epicanthal folds inconsistent with ethnic origins Frontal bossing Absent philtrum Deviated septum Cleft lip Unilateral flattening of nasolabial fold Micrognathia Lesions, nodules, masses 	 Genetic conditions Trisomy 21/Down Syndrome Birth or other trauma Neurological deficit Milia Preauricular sinus or tag Birthmarks Intrauterine conditions, including exposure to teratogens Syphilis Foetal alcohol spectrum disorder (FASD) Congenital hypothyroidism 	⇒ Encourage medical practitioner or Breastfeeding Support Services review for any concerns, in particular feeding difficulties

Birth to 4 weeks - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
		Philtrum		
Visual inspection, noting:DefinitionDepressionLength	 Philtrum is visible and can be pronounced Can form a teardrop like shape Can be in straight lines from septum to tubercule 	 Short Smooth Limited definition to no depression 	 Intrauterine conditions, including exposure to teratogens FASD Foetal valproate syndrome Genetic conditions Pallister Killain Cornelia de Lange Wolf-Hirschhorn 	
		Eyes (continued next page	÷)	
Visual inspection, noting: • Shape • Size • Symmetry • Spacing • Position • Colour	 Eyes may move independently, appearing to intermittently squint The upper eyelids appear symmetrical When closed, eyelids completely cover cornea and sclera 	 Discharge Reddened or yellow sclera Eye watering, with or without infection Bruising Inflammation Oedema Subconjunctival haemorrhages 	 Acquired head injury Trauma Birth trauma Infection Immature tear ducts Allergy Genetic conditions Stickler syndrome Cri-du-chat 	 Parent education and support for eye watering may include: Massage techniques Regular review at universal contacts Discussion of signs of infection ⇒ Urgent referral to ophthalmologist

Birth to 4 weeks - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
		 Epicanthal folds (eyes), inconsistent with ethnic origin Ptosis 	syndrome • Prader-Willi syndrome • Jaundice • Myotonic	through medical practitioner for opacities in the pupil or corneal abnormalities
		Gaze		
Assess gaze behavior through facial expressions, movements and attempts to attract attention from others	 Neonate attempts to engage with human faces, particularly caregivers, through mutual gaze 	No mutual gaze attempts made	 Trauma Intraventricular insult Interrupted bonding and attachment Intrauterine exposure to teratogens 	Parental education and support to promote bonding and attachment
	Vision	Behaviours (continued ne	xt page)	
Assess vision behaviours via examining pupil and iris by shining a light into the eyes, noting: • Size • Equality of size	 Pupils should be round, clear, and equal Pupils react equally to light, movement, and patterns Eyes turn towards 	 Leukokoria Coloboma Fixed pupils Cloudiness and opacity of cornea Slow lateral 	 Cataract Scleral icterus Esotropia Exotropia Hypertropia Hypotropia 	 ⇒ Prompt referral to medical practitioner, particularly for any: Constant visual impairment Opacity Constant squint

Birth to 4 weeks - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
 Colour Clarity Shape Movement Pupillary reaction Blinking Following the light to midline 	 Eyes are turned away from bright light or neonate blinks in response to a flash of light Increased alertness 	 Nystagmus Sundowning Squint (intermittent or constant) Differing pupil size Refusal to open eyes after exposure to the light 		
		Ears (continued next page)	
Assess external ear including mastoid process, auricles, tragus and external auditory meatus, noting: • Shape • Size • Symmetry • Patency • Position • Firmness of cartilage	 The superior portion of the auricle is equal in height to the outer canthus of the eye Pinna is: Soft Pliable Recoils readily when folded and released 	 Discharge - pus/debris Swelling Inflammation Foreign object Excessive wax Dysmorphic deviations: Low-set-ears Skin tags Accessory tragi Malformed auricles Auricular sinus 	 Infection Sebaceous cyst Genetic conditions Trisomy 21/Down Syndrome Goldenhar Wolf-Hirchhorn Di George Trecher-Collins Nagar Usher 	Parent education and support may include ear care in relation to discharge and foreign objects

Birth to 4 weeks - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
		Preauricular sinus		
Assess neonatal hearing through observation of response to sounds N.B. Determine if Newborn Hearing Screen has been completed.	 Interested in sounds Responds to calm and familiar voices Eyes will 'corner' reflexively to the side of the noise May startle at a loud noise beyond visual field 	 Absence of startle reflex Delay in response to voice stimulation Signs of distress from exposure to loud noises 	 Congenital infections: Cytomegalovirus rubella toxoplasmosis herpes syphilis varicella Prematurity/low birth weight Intrauterine exposure to teratogens or ototoxic drugs Intrauterine conditions affecting audio processes Trauma Genetic conditions 	Parent education and support for age appropriate auditory stimulation ⇒ Refer to hospital of birth or aligned medical professional for Newborn Hearing Screen follow up

Birth to 4 weeks - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
		Nose		
 Visual and auditory inspection, noting: Patency: Nasal cavity size and shape Obvious deviations at bridge, columella and tip Symmetry: Alignment Skin integrity 	 Small and narrow Cartilage is soft and malleable Septum is relatively straight and in the midline of the nose Obligatory nose breathers Nasal patency is demonstrated if neonate breathes easily with mouth closed Removes obstructions by sneezing 	 Nasal secretions Swelling Frequent detachment, or slow or difficult feeding Persistent snuffling Cyanosis when feeding Upturned nose Flattening of bridge 	 Birth processes Facial trauma Choanal atresia Polyps Deviated septum Intrauterine exposure to teratogens FASD Genetic conditions Di George syndrome Achondroplasia Stickler syndrome 	Parent education and support may include: • Feeding strategies Discussion around use of saline drops to clear nasal passages where appropriate ⇒ Encourage medical practitioner or Breastfeeding Support Services review for any concerns, in particular feeding difficulties
	Mouth (continued next page)			
Visual inspection, and palpation where indicated, noting:General appearance	 Healthy gums are firm, moist, and pink The tongue surface appears rough but 	Cleft deviations: Cleft palate Narrow cleft Cleft lip 	 Nerve damage Infection, including Candidiasis Epstein pearls 	Parent education and support may include:Management of precocious teeth

Birth to 4 weeks - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
 Gums Integrity of hard and soft palates Mucosa Pharynx Fremulum Maxillary labial and lingual Lips: Colour Symmetry Integrity 	 moist and pink to pale pink The lingual frenulum allows the tongue to protrude over gums to meet lips and to the roof of the palate Upper lip can be lifted to touch the nose Tongue fills mouth to support effective feeding Lips are pink at rest, Palate should appear down of the palate should appear 	 Micrognathia Sub mucosal cleft Lip deviations: Thin lip Loss of control of oral secretions Gum deviations: Oedema Lesions Erythema Friable Hematomas 	 Nasal allergy Dehydration Fever FASD Genetic conditions Wolf-Hirschorn Beckwith-Wiedermann Di George Pierre Robin 	 Feeding patterns and strategies where deviations exist ⇒ Referral to Breastfeeding Support Services regarding unresolved feeding concerns When blisters or calluses are present, conduct a breastfeeding assessment for possible breastfeeding
 Moisture Tongue: Colour Size Movement Assess feeding comfort for mother and infant 	 dome shaped with transverse firm ridges Palate is not deeply indented and is whiter than the buccal mucosa and soft palate 	 Trematomas Tongue and teeth deviations: Coated Plaque Geographic tongue Macroglossia Precocious teeth Short or inflexible maxillary labial or 		breastfeeding concerns

Birth to 4 weeks - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
		lingual frenulum impacting on function		
		Vocal Behaviour		
Auditory observation, and parent report, noting the following: • Alertness • Cry	 Cry is normally: Strong Lusty Medium pitch Intermittent, in response to discomfort or need 	 High pitch Continuous Hoarseness Excessive crying Audible stridor 	 Dehydration Pain Raised intracranial pressure Gastro oesophageal reflux Intrauterine exposure to teratogens including alcohol or drugs Laryngeal trauma Neurological condition Laryngomalacia 	Discuss provision of comfort measures with parents ⇒ Seek urgent referral to medical practitioner for signs of respiratory distress or abnormal breathing sounds
Chest and Respiratory Function (continued next page)				
Visual and auditory assessment, with neonate supine, noting: • Shape	 The chest is symmetrical and compliant, and slightly barrel-shaped 	Respiratory deviations: Stridor Grunting 	InfectionLaryngomalaciaTrauma	Parent education and support may include:

Birth to 4 weeks - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
 Size Symmetry Contour Movement Respiration functioning Breath sounds 	 Sternum often drawn slightly inward on inspiration Chest rises and falls symmetrically Chest circumference from nipple line is approximately 2-3cm less than head circumference Circumference is very close in size to head circumference at birth The xiphoid may be prominent The regular breath rate is 30-60 breaths per minute 	 Crackles Rales Wheezing Rhonchi Cough Snoring Apnoea Nasal flaring Head bobbing Paradoxical breathing Tachypnoea Intercostal retractions Use of accessory muscles Chest deviations: Engorged breast tissue Nipple secretions Supernumerary nipples Pectus carinatum or excavatum 	 Birth process Pneumothorax Cystic fibrosis Intrauterine exposure to teratogens including alcohol, drugs, tobacco Hormonal influences Genetic conditions Acute bronchiolitis Acute epiglottitis Foreign body aspiration Gastroesophageal reflux 	 Range of expected normal mucosa secretions Normal breath sounds Expectations and management of engorged breast tissue ⇒ Seek urgent referral to medical practitioner for signs of respiratory distress or abnormal breath sounds

Birth to 4 weeks - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
		Musculoskeletal – Genera	I	
 Placing neonate in supine, prone and supported sitting position, observe for overall: Symmetry Flexibility Resting position Muscle tone Motor activity Skin folds Observe range of movement, noting: Flexion/extension Adduction/abduction Internal/external rotation Palpation and passive movement may be used where required to reinforce visual findings 	 Muscles are in a flexed position, normotonic and symmetrical In the supine position, arms and legs are in a semi flexed position with the hips slightly abducted 	 Poor, increased or asymmetrical tone Asymmetry Flaccidity Abnormal posture or positioning of extremities Reluctance to use or move extremities Evidence of pain on movement 	 Trauma Genetic conditions Hypotonia Hypertonia Infection Intrauterine exposure to teratogens 	⇒ Urgent referral to a medical practitioner where muscle tone deviation is accompanied by other signs of illness

Birth to 4 weeks - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies	
Reflexes					
 Assess alert neonate for presence of primitive reflexes, including: Asymmetrical tonic neck Moro reflex Gallant's reflex Placing reflex Stepping reflex Palmar grasp Plantar grasp / Babinski reflex Rooting reflex Sucking reflex 	• Primitive reflexes are symmetrical and indicative of central nervous system function	 Absence Asymmetrical Poor or delayed expression 	 Genetic / congenital Conditions Fragile X syndrome Stickler syndrome Cerebral palsy 		
Back and Spine (continued next page)					
Assess general appearance of the back, noting: • Symmetry	 The infant has a C-shaped spinal curve The secondary cervical curve is 	 Sacral dimple and/or tufts of hair Curvature 	Spina bifidaIntrauterine growth conditions	\Rightarrow Ensure medical practitioner review and assessment of pilonidal dimple	

Birth to 4 weeks - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
FlexibilitySkin integrity	present around 3-4 months spine is straight, and in midline 	AsymmetryMassesSwellingLesions	 Nutritional status Vitamin D, calcium and protein Abnormalities in spinous processes Genetic Conditions 	
	Upp	per Limbs (continued next p	page)	
Palpate the clavicles, and observe range of arm movement including: • Shoulders • Elbows • Wrists • Hands Assess through observation of: • Flexion/extension • Adduction/abduction • Internal/external rotation	 In the prone position, the arms are close to the chest and the elbows are fully flexed In the supine position, the arms are kept semi-flexed, whilst the posture is symmetrical Hands are relaxed and commonly held in a loose fist with/out thumb flex over finger Hands open intermittently 	 Oedema Flaccidity Asymmetrical posture, positioning, tone or movement Polydactyly Syndactyly Digital clubbing Webbing Persistent thumbs in fist 	 Trauma Fractures Brachial palsy Dislocations Cerebral palsy Intrauterine exposure to teratogens Amniotic Banding Syndrome Genetic conditions Edwards syndrome Neonatal Marfan syndrome Rubinstein-Taybi syndrome 	

Birth to 4 weeks - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
Flexibility	 Full range of movement when extending the arms Movements are equal in flexibility and strength 			
		Hips		
Follow Hip Assessment procedure to assess hips for stability, limb length and symmetry.	 Skin folds are symmetrical Hips are stable and relaxed with thighs easily adducted and abducted 	 Hip instability (normal in first few weeks) Asymmetrical skin creases Limb length discrepancy Fine clicking sounds (normal) Clunking sounds 	 Developmental Dysplasia of the Hip Intrauterine growth conditions Breech presentation Birthweight over 4kg Oligohydramnios Genetic conditions Trauma 	⇒ Refer any hip concerns to medical practitioner, or directly to PCH Orthopaedic Clinic if the infant is less than 4 months of age
Lower Limbs (continued next page)				
With neonate in supine position, assess range of leg movement,	 Legs are equal in length, with knee and 	 Asymmetrical skin folds 	 Developmental Dysplasia of the Hip Fractures 	

Birth to 4 weeks - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
 including the knee and ankle through observation of: Flexion/extension Adduction/abduction Internal/external rotation Assess symmetry of: Leg Length Muscle strength and tone Flexibility Skin folds 	 hip joints extended and aligned Knees will naturally lie apart with soles of the feet turned slightly inward Full range of movement in all directions Legs are equal in tone, movement, strength and flexibility 	 Asymmetrical movement or tone Unequal length of legs 	 Trauma Genetic conditions Edwards syndrome Rubinstein-Taybi syndrome Achondroplasia Intrauterine growth conditions Talipes 	
 Foot and heel: Observe the position and alignment of forefoot and heel Assess the range of motion in the ankle and plantar arch 	 Supple foot Normal angle to tibia The plantar crease is visible 	 Polydactyly Absent plantar crease Webbing Rigidity of heel or limited range of movement Adduction of the forefoot 	 Intrauterine growth conditions Trauma Talipes Developmental Dysplasia of the Hip Lower leg deviation Genetic conditions 	 Parent education and support may include: Use of passive stretching exercises for minor positional deviations where feet can easily be returned to midline Monitoring and review for resolution

Birth to 4 weeks - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
				⇒ Referral to medical practitioner or allied health professional (Child Development Services) where an inflexible deviation exists
		Abdomen		
 Visual inspection, and palpation where indicated, noting: Size Shape Contours Movement Symmetry Bowel Sounds 	 Protuberant and round Symmetrical Moves with respiration Soft Bowel sounds occur every 10 to 20 seconds 	 Tension Distension Sunken or scaphoid abdominal shape Asymmetry Visible peristalsis Hyperactive or absent bowel sounds Vomiting 	 Malrotation of the bowel Obstruction Diaphragmatic hernia Paralytic ileus Intussusception Pyloric stenosis (usually between 2-6 weeks of age Hirschsprung's disease 	 ⇒ Urgent referral to medical practitioner for: Sustained vomiting Projectile vomiting Reduced bowel sounds
Umbilicus (continued next page)				
Visual inspection, noting: • Separation of cord • Healing process	The umbilical cord is: • Odourless • Dry	 Delay in separation Cord moisture, discharge or inflammation 	Infection CystUmbilical polypGranuloma	Parental education and support may include:

Birth to 4 weeks - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
	 Separates in 7-10 days Umbilicus heals within 2 to 3 weeks from birth and should be dry, intact and non- inflamed 	 Discharge from umbilicus, including faeces Swelling, persistent or intermittent occurring where abdominal pressure is increased (crying and defecation) Lesions, Rashes, Masses 	 Neonatal Omphalitis Diastasis rectus Urachal remnant Omphalomesenteric duct remnant Umbilical hernia Environmental factors 	 Hygiene and infection control in relation to cord separation and healing Expectations for umbilical herniation Referral to medical practitioner for: Umbilical granuloma Any purulent umbilical discharge ⇒ Urgent referral to medical practitioner if omphalomesenteric duct remnant
Buttocks and Rectal Area (continued next page)				
Visual inspection and discussion with parent, noting:	 Anus is located behind the vagina in 	Buttock deviations:Lesions or rashes	Genetic conditionsMongolian spot or other birthmarks	Parent education and support may include:

Birth to 4 weeks - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
 Anal patency Stool consistency, colour and frequency Skin integrity Skin features 	 females and the scrotum in males Sphincter muscles normally maintain constriction of the anal orifice Patency is demonstrated by the passing of faeces Neonate's faeces are: Human milk fed – transitioning from meconium to yellow (brown and dark green may be normal in the absence of deviations) with texture from loose, granular to curdled Infant formula fed - pale yellow to yellow, brown, green or grey with paste to semiformed texture 	 Sacral sinus, dimples or tufts of hair Discolouration Anus deviations: Inflammation Bleeding Small opening Evidence of pain or discomfort Stool deviations: Explosive Absence Reduction in bowel movements Frequent and/or very loose bowel actions Faecal matter in urine 	 Spina bifida Allergy or atopy Infection, of skin or gastrointestinal tract Normal adjustment to oral intake Constipation Trauma Rectal tears Fissures Anal stenosis Recto-urethral fistula 	 Expected elimination patterns Strategies for management of minor skin irritations or alterations in bowel actions Referral to medical practitioner for: Sacral sinus Bleeding Recto-urethral fistula ⇒ Consider referral to specialist services where child protection issues are suspected ⇒ Refer to Guidelines for Protecting Children 2020 for further information, including information on mandatory reporting

Birth to 4 weeks - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
Urinary System				
Assess urinary output through parental report, or visual inspection where possible, noting: • Volume • Frequency • Colour	 Normal neonatal urine output is 2 ml/kg/hour Neonates are less able to concentrate urine 	 Decrease in volume and frequency Darker colour Weight loss Fever 	 Dehydration Altered feeding patterns Infection Jaundice Congenital abnormalities of kidneys and urinary tract 	 Parental education and support may include: Expected fluid input and output for age Fluid requirements
Genitourinary – Male (continued next page)				
 Visual inspection and palpation of external genitalia, noting: Urinary meatus – position and patency Foreskin Scrotum Testicular descent Relative position of scrotum to anus N.B. Do not attempt 	 Urinary orifice is: Clear Uncovered by the foreskin On the tip of the glans penis Foreskin: Does not retract easily until 2- 3 years old, complete separation of the foreskin and glaps 	 Ambiguous genitals Curvature of penis Microphallus Non-central position of urethral meatus, including hypospadias and epispadias Phimosis Paraphimosis Chordee 	 Genetic conditions Intrauterine exposure to teratogens Intrauterine growth conditions Hydrocele 	 Parental support and education may include: Strategies for routine hygiene and care Referral to medical practitioner for: Hypospadias epispadias
to forcibly retract the	toreskin and glans	Balanitis		

Birth to 4 weeks - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
foreskin	 penis is usually complete by 6 years Scrotum: Spontaneous testicular descent usually occurs prior to birth and may retract during the first 6 months of life 	 Balanoposthitis Retractable testis Testis absent or palpable outside scrotal sac Masses Swelling 		
	Genitour	inary – Female (continued i	next page)	
 Visual inspection of external genitalia, noting: Labia Presence and size of clitoris Vaginal orifice Location and patency of urethral orifice Relative position of posterior fourchette and anus 	 Labia majora is enlarged and usually covers labia minora Clitoris is often disproportionately enlarged Labia minora is thickened, enlarged and dull pink The clitoris and labia minora may be more prominent in preterm infants Hymen is a thickened 	 Discharge Swelling Masses Lesions Rashes Ambiguous genitals Imperforate hymen Hydrocolpos 	 Genetic conditions Maternal hormone influence Pseudo menstruation Infection: commonly bacterial or fungal Intrauterine exposure to teratogens Skin tags Polyps Hernia 	 Parent support and education may include: Expected range of normal Strategies for routine hygiene and care Strategies for management of minor skin irritations
	rim of tissue surrounding the			

Birth to 4 weeks - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
	 vaginal orifice, which is pink-white with a range of shapes Creamy white, mucoid/ blood - tinged vaginal discharge is normal in first 10 days 			
		Inguinal Area		
Visual inspection, and palpation of inguinal area, noting: • Shape • Contours • Symmetry • Femoral pulses	 Equal, strong femoral pulses can be felt midpoint between the iliac crest and symphysis pubis A horizontal chain of inguinal nodes run along the inferior groin 	 Poor or unequal femoral pulses Swelling Masses – either firm and reduced with pressure, or hard and immobile Enlarged nodes 	 Circulatory deviation, including coarctation of the aorta Inguinal herniation 	⇒ Prompt medical review is indicated for any inguinal swelling that does not change size when the neonate cries

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
		General Appearance		
 Facial expressions Posture Hydration and nutritional health Activity level Temperament Responsiveness Interaction with others Proportion and symmetry of body parts Movement Skin integrity Observe appearance prior to comprehensive assessment 	 Initial presentation of the infant is consistent with the situation (e.g. crying due to hunger) Infant is healthy and developing appropriately 	 Deviations from the norm may be initially identified through assessing the general appearance of the infant Recognise indicators for child abuse, including but not limited to: injury, bruising, burns, retinal haemorrhages, bite marks, fractured bones, bleeding, pain or physical discomfort or poor standard of hygiene. Assess appearance of child with consideration of their age, level of mobility and development.¹ 	 A range of congenital or non-congenital conditions Genetic conditions Environmental conditions Birth trauma Intrauterine conditions 	Observation of general appearance should be completed prior to a more detailed assessment. Any areas of concerns will be documented and noted for additional monitoring and/or referral to a medical practitioner ⇒ Refer to the <i>Guidelines for</i> <i>protecting children</i> 2020 publication for more information.

Appendix B: Infant - One month to twelve months

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies		
	Head (continued next page)					
 Visual inspection, noting: General shape Size Circumference Symmetry Alignment Range of movement Abnormal hair pattern Head alignment is evaluated when infant is in supine and resting position 	 Rounded Symmetrical Head circumference averages: males: 35–48.5 cm females: 34.5- 47.5 cm⁶ By 2 months, head is held in midline By 4 months head control is achieved, and when held sitting, head is firmly erect 	 Elongated Asymmetrical Misshapen Circumference outside expected trajectory Microcephaly Macrocephaly Positional head preference 	 Trauma Plagiocephaly Vision defect Hearing defect Intrauterine growth conditions Intrauterine exposure to teratogens Alcohol (FASD), Syphilis, Herpes, Cytomegalovirus Hydrocephalus Craniosynostosis Hypotonia Genetic conditions Fragile X Noonan syndrome Trisomy 21/Down Syndrome Achondroplasia 	 Parental education and support may include: Postural exercises Handling strategies Massage Positioning of toys to non-favoured side Variable positioning of head in particular for sleep ⇒ Refer to physiotherapist for assessment of any positional or symmetry deviations that do not resolve 		

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
 Visual inspection and palpation of: Suture lines Scalp Bony structures Fontanelles Inspect and palpate anterior fontanelle, noting: Size Tension Pulsation N.B. Nutritional assessment may provide relevant additional information where there are dehydration concerns 	 Suture lines can be overlapping or protuberant up to 2 months Suture lines may be palpable until 6 months of age Anterior fontanelle is flat with slight pulsation, and tension or bulging when infant cries, flattening when infant is calm Anterior fontanelle begins to reduce in size by 9 months with full closure by 18 months Posterior fontanelle closes by 4 months of age 	 Bulging or sunken anterior fontanelle Overlapping sutures present after 2 months Closure of sutures before 6 months Palpable suture lines after 6 months Separation of sagittal sutures Caput succedaneum Cephalhematoma Subgaleal Hemmorrhage Bruising Swelling Lesions 	 Raised intracranial pressure Dehydration Genetic conditions Crouzon Apert's Trisomy 21/Down Syndrome Craniosynostosis Birthmarks Intrauterine conditions	 ⇒ Ensure medical practitioner review is in place for suture concerns, including palpable suture lines after 6 months of age ⇒ Urgent referral to medical practitioner where a sunken fontanelle is accompanied by other signs of dehydration, or illness such as fever, rashes, or gastrointestinal symptoms

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
		Neck		
 Visual inspection and palpation, noting the following: Symmetry Shape Range of movement Musculature Extraneous tissue or masses Head control: For infants under 3 months head is moved passively whilst infant is in supine position For infants over 3 months observe the developing ability to follow light or an object 	 Neck is shortened, and musculature is gradually developed Until 3-4 months, head lag is normal when pulled to sitting position When in ventral suspension, the head is held well above the line of the body When prone, infant is able to lift head and chest well up in midline by 4 months 	 Movement deviation: Persistent head lag after 3-4 months Limited range of motion Resistance to movement Head bobbing Jerking Tremors Stiffness Involuntary muscle contractions or spasms Flexion of lower extremities Webbed neck Positional deviations: Head held erect Persistent head tilt Positional head preference 	 Intrauterine growth conditions Hypotonia Vision defect Hearing defect Plagiocephaly Torticollis Pain Meningismus or meningitis Genetic conditions Turner syndrome Noonan syndrome 	 Parent education and support may include: Postural exercises and positioning Handling strategies Massage Positioning of toys to non-favoured side Variable positioning of head, particularly for sleep or for regular holding positions

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies		
	Face					
 Through visual inspection observe facial features and expressions, noting: Symmetry Spacing and size Movement Emotional expression 	 Face is relaxed and symmetrical Age appropriate development of a range of facial expressions and movements which are spontaneous and responsive to situation Facial expressions and movement are symmetrical 	 Disproportionate features Bossing or prominence of forehead Epicanthal folds inconsistent with ethnic origins Micrognathia Lesions Lumps, particularly on or around ears Emotional expression inconsistent with expectations for age 	 Genetic conditions Russell-Silver syndrome Intrauterine conditions including exposure to teratogens Fetal Alcohol Spectrum Disorder (FASD) Trauma Milia Birthmarks Neurological condition 	 Parent education and support may include: Feeding support where micrognathia exists Features and management of birthmarks ⇒ Refer to medical practitioner for facial birthmarks, particularly around lips, eyes, nose or scalp 		
		Philtrum				
Visual inspection, noting:DefinitionDepressionLength	 Philtrum is visible and can be pronounced Tear drop shaped Can be in straight lines from septum to tubercule 	 Short or long Smooth Limited definition through to no depression 	 FASD Genetic or Congenital conditions Foetal valproate syndrome Pallister-Killian Cornelia de Lange 			

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
			 Wolf-Hirschhorn Achondroplasia 	
		Eyes (continued next page	2)	
Visual inspection, noting: Shape Size Symmetry Spacing Position Colour Examine pupil and iris by shining a light into the eyes, noting: Size Equality/symmetry of size Colour Clarity Shape Pupillary constriction	 Eyes are symmetrical, horizontal and in line with top of pinna Eye spacing narrow or wider than expected The upper eyelids are symmetrical When closed, eyelid completely covers cornea and sclera Pupils are round, clear, and equal Pupils react equally to light, movement, and patterns Eye colour is established by around 6 months Sclera visible above 	 Discharge, watery or purulent Reddened sclera Bruising or bleeding Oedema Epicanthal folds, inconsistent with ethnic origin Strabismus Ptosis Leukokoria Coloboma Fixed pupils Cloudiness and opacity of cornea Nystagmus Sundowning Sensitivity to light 	 Acquired head injury Trauma Infection Subconjunctival haemorrhage Immature blocked tear ducts Allergy Intrauterine conditions Environmental conditions Retinoblastoma (commonly linked with Leukokoria) Cataract Scleral icterus Photophobia Genetic conditions Stickler syndrome 	 Parent education may include: Eye toilet and hygiene Techniques for blocked tear ducts including massage Review eye watering regularly at universal contacts (may take up to 12 months to resolve)
Pupillary constriction	 Sclera visible above and below the cornea 	Sensitivity to light	 Stickler syndrome Cri-du-chat 	

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
 Refusal to open eyes after exposure to light 			 syndrome Prader-Willi syndrome Congenital glaucoma Congenital Cataract Dacryocystitis Sundowning 	
Gaze				
Assess gaze behaviour through observation of facial expressions, movements and attempts to attract attention from others	 Will move head to deliberately gaze attentively around Watches movement of people, animals or motor vehicles Recognises and enjoys the sight of familiar people approaching from a distance 	 No mutual gaze attempts made Infant does not show an interest in their surroundings 	 Trauma Interrupted bonding and attachment Biochemical factors 	Parent education and support may include strategies to promote bonding and attachment
Vision Behaviours (continued next page)				
Assess vision behaviours, noting: • Eye movements	 Eyes may move in unison until 3 months of age 	 Slow lateral movements Strabismus- constant 	EsotropiaExotropia	⇒ Prompt referral to medical practitioner for constant visual

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
 Blinking Increased alertness and attention to surroundings Assess also through presentation of an object or light source for infant to fixate and follow. 	 Coordination of extra- ocular muscles is usually achieved by 6 weeks and should occur by 3 months Infants can distinguish colour from 3 to 5 months of age Will follow an object at 15-30 cm distance through an arc of 30 degrees from midline at 6-8 weeks, increasing to 90 degrees by 4 months 	 Strabismus - intermittent (deviation from normal after 3 months of age) 	 Hypertropia Hypotropia Trauma Refractive error Strabismus Haemorrhage Hyphema 	impairment or evident squint over 3 months of age ⇒ Urgent referral to ophthalmologist through medical practitioner for opacities in the pupil or corneal abnormalities
		Ears (continued next page)	
Assess external ear including mastoid process, auricles, tragus and external auditory meatus, noting: • Shape • Size	 Pinna is soft, pliable, and recoils readily when folded and released The superior portion of the auricle should be equal in height to 	 Pus/debris Sebaceous cyst Inflammation Excessive wax formation 	 Congenital Infection Rubella cytomegalovirus toxoplasmosis syphilis Foreign objects 	 Parental education and support for ear care in particular to: Discharge Foreign objects Excessive wax

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
 Symmetry Patency Position Colour Firmness of ear cartilage Obstruction/foreign bodies 	 the outer canthus of the eye Auricles are vertical with no more than a 10-degree tilt Auricles are similar to facial skin colour Outer ear canal is covered with fine hair Cerumen is a normal protective secretion, ranging from grey, dry and flaky to honey- coloured to dark brown and wet Tympanic membrane is pearl-grey, sometimes pink or red tinged, translucent, intact, and in neutral position 	 Evidence of fluid in middle ear Tympanic membrane deviations Bruising around ear Dysmorphic deviations: Low-set ears Skin tags Accessory tragi Malformed auricles Auricular sinus Preauricular sinus 	 Trauma related to child abuse Genetic conditions Trisomy 21/Down Syndrome Goldenhar syndrome Wolf-Hischhorn syndrome Di George syndrome Treacher Collins syndrome Nagar Syndrome Intrauterine exposure to teratogens or ototoxic drugs Myringitis 	 ⇒ Refer to medical practitioner for any suspected infection Child Abuse - consider indicators outside of what may be expected given the child's age and development ⇒ Refer to the <i>Guidelines for protecting children 2020</i> publication for more information
Assess infant hearing as a component of ear health assessment, through discussion with	Attentive to everyday sounds, in particular will turn eyes and/or	Startle reflex persistent after 3 months of age	Intrauterine conditions affecting audiometric processes	Parent education and support may include strategies to promote
1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
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 parent, and observation of the following: Vocalisation Response to auditory stimuli 	 head towards voices by 3 months Develops recognition and response to own name around 6-10 months Vocalisations are appropriate for age Age-appropriate response to sounds 	 Delay in response to voice stimulation Language delay Decrease in age-appropriate response to range of sounds 	 Trauma Congenital Syndromes Alport, Trisomy 21/Down Syndrome, Jervell, Treacher Collins, Lange- Nielson, Usher Congenital Infection Rubella cytomegalovirus toxoplasmosis syphilis herpes Environmental conditions Prematurity/low birth weight 	appropriate auditory stimulation
Nose (continued next page)				
Visual and auditory inspection, of nasal bridge, nares, columella and septum, noting: • Symmetry • Shape	 Nose is flattened and malleable Prone to increased airway resistance because of small passages 	 Mucous and other nasal secretions Epistaxis Narrowing of the nares 	 Facial trauma Intrauterine exposure to teratogens FASD Infection 	 Parent education and support may include: Strategies to clear nasal passages where patency is interfering with feeding

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
 Size Integrity Patency of nares Alignment Skin integrity 	 Infant removes obstructions by sneezing Septum is relatively straight and in the midline of the nose Infant nose breathes during feeding 	 Infant frequently detaching during feeding Nasal flaring Oedema Lesions Upturned nose Discolouration Deviated septum 	 Polyps Inflammation Environmental factors Genetic conditions Di George syndrome Achondroplasia Stickler syndrome Choanal atresia 	 Management of feeding difficulties associated with nasal deviations
		Mouth (continued next pag	e)	
Visually inspect: Gums 	Gums are firm, moist and pink	Cleft deviations: Cleft palate 	Neurological deficitInfection	Parent education and support may include management of
Hard and soft palatesMucosa	 The tongue surface appears slightly rough, but moist, and pink to pale pink 	 Narrow cleft Sub mucosal cleft Lin deviations: 	 Genetic conditions Wolf-Hirschhorn syndrome 	 deviations such as: Precocious teeth Teething
LipsTongue	The lingual frenulum allows the tongue to protrude over gums to	Cleft lip Thin upper lip	 Beckwith- Wiedermann syndrome 	Drooling
 Teeth Note the following: Tooth eruption 	meet lips and to reach the roof of the palate	SwellingDryness	 Di George syndrome Pierre Robin syndrome 	 Minor lesions ⇒ Refer to Breastfeeding

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
 Odour Lips and mucosa: Colour Symmetry Integrity Moisture Tongue: Colour Size Movement Symmetry Assessment of feeding patterns and feeding comfort may be relevant where oral deviations exist. 	 Tongue fills mouth to support effective feeding Hard Palate appears dome shaped, but not deeply indented, with transverse firm ridges Hard Palate is lighter in colour than the soft palate and buccal mucosa Deciduous teeth erupt from 6 – 24 months Anterior permanent teeth begin to calcify at 3 to 12 months Drooling increases as objects are taken into mouth Infant develops capacity to hold, bite and chew a small piece of food by 9 	 Lesions Loss in control of oral secretions and drooling Excessive upper lip frenulum Gum deviations: Swelling Lesions Reddening Friable Hematomas Tongue and teeth deviations: Coated Plaque Unusual odour Geographic tongue Macroglossia 	 Intrauterine conditions Environmental factors Dehydration Fever Hematoma Trauma Tooth eruption Allergy 	Support Services or other relevant health professional for unresolved feeding concerns
	monuns	 Ankylogiossia 		

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
	 Deciduous teeth are smooth and glossy with a whitish hue 	Ulceration or other alteration in skin integrity		
	 The biting surface of the molar teeth is grooved and pitted 	Excessive lingual frenulum		
		 Precocious teeth Lesions, including white, yellow or brown spots 		
	Vocal	I ooth cavities	t nage)	
	VOCA	Benaviour (continueu nex	t page)	
 Auditory observation, and parent report, noting the following: Alertness Cry Pitch of sounds Language acquisition 	 Strong, lusty and of medium pitch Will develop deliberate vocalisation as a means of interpersonal communication Screams in annoyance Laughs, chuckles or 	 High pitch Continuous Hoarseness Monotonous vocalisation or inconsistency with developmental expectations Excessive crying Audible stridor 	 Dehydration Pain Raised intracranial pressure Gastro oesophageal reflux Laryngeal trauma Neurological condition Croup 	 Parent education and support may include: Discussion of comfort measures Expected vocal development for age

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
	 Gradual development of a range of vocal sounds 		 Infant of narcotic, or other substance- dependent mother 	
			Hearing impairment	
	Chest and Re	espiratory Function (continue	ued next page)	
 Visual and auditory assessment, with infant supported in upright position, noting: Chest shape Movement Respiratory rate Respiratory effort Breathing pattern Breathing sounds Assessment of sleep patterns through parent report may offer additional information related to respiratory tract, allergy or infection 	 The chest is symmetrical and slightly barrel-shaped Chest circumference is close in size to head circumference up to 2 years of age Chest then gradually develops adult shape Rhythm of breaths is regular including symmetrical rise and fall of chest The regular breath rate is 24-55 breaths per minute (between birth and 12 months with higher rates for younger infants) 	 Oral/nasal mucosal secretions Stridor Grunting Crackles Rales Wheezing Rhonchi Cough Snoring Apnoea Nasal flaring Head bobbing Paradoxical breathing Tachypnoea 	 Infection, including; bronchiolitis and epiglottitis Laryngomalacia Trauma Foreign body aspiration Asthma Croup Gastroesophageal reflux Pneumothorax Genetic or congenital conditions Cystic fibrosis Joubert syndrome 	 Parent education and support may include: The range of normal mucosal secretions Strategies for management of specific deviations Signs to alert parent to need for further review ⇒ Seek urgent medical review for any signs of respiratory distress including stridor, grunting, apnoea episodes, nasal flaring and intercostal retraction or

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
	 Infant may use oral airway spontaneously or in response to nasal occlusion 	 Intercostal retraction Use of accessory muscles Cyanosis central or extremities 		other altered breathing sounds
	Musculos	celetal – General (continued	l next page)	
 Through placing infant in prone, sitting and standing position if child is walking, observe for overall: Symmetry Flexibility Resting position Muscle tone Motor activity Skin folds Assess range of movement through observation of age- appropriate activity, noting: Elexion/extension 	 Muscles are in a flexed position, normotonic and symmetrical In the supine position, arms and legs are in a semi flexed position with the hips slightly abducted Infant will start to transition from a 'bear walk' crawl to pulling up to standing position When hands are held, will purposefully step on alternating feet and may start to walk alone 	 Asymmetry in tone Flaccidity Abnormal posture or positioning of extremities Movement limitation or reluctance to use limbs Unbalanced gait Evidence of pain or tenderness on movement Swelling Masses Inflammation 	 Trauma Infection Genetic or congenital conditions Trisomy 21/Down Syndrome Cerebral Palsy Hypotonia Hypertonia 	 Parent education and support may include: Safety Avoidance of common injuries related to developmental milestones Strategies to improve muscle tone and strength

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
 Adduction/abduction Internal/external rotation Palpation and/or passive movement may be used to reinforce visual findings Assess crawling, standing or walking, noting: Balance and pivots Agility Gait 				
	R	eflexes (continued next page	ge)	
 Assess alert infant for presence and gradual diminishing of primitive reflexes, including: Palmar grasp Asymmetrical tonic neck reflex Moro reflex 	 Primitive reflexes are symmetrical and indicative of central nervous system function Primitive reflexes diminish from 3-4 months of age with cerebral cortex 	 Asymmetrical Poor expression or delay in response Persistence of primitive reflexes beyond 4-6 months Delay in development of postural reflexes 	 Genetic conditions Fragile X syndrome Stickler syndrome Cerebral palsy Trisomy 21/Down Syndrome Trauma Brachial palsy 	⇒ Refer to medical practitioner where reflexes persist beyond expected time frame, especially in association with other concerns

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
 Stepping reflex Rooting response Sucking response Sucking response Assess gradual age- appropriate development of postural and voluntary movement, including: Head control Facial expressions Grasp Reach Weight bearing capacity 	 maturity, and disappear by 4-6 months As primitive reflexes diminish, infant develops postural reflexes and voluntary movements which support control of balance, posture and movement in a gravity based environment 	and voluntary movements by 9 months of age	• Hypotonia	
	Back	and Spine (continued next	t page)	
Assess general appearance of the back, noting: • Symmetry • Flexibility • Curvature • Skin	 The spine is initially C-shaped and in midline The head should be aligned directly over the sacrum Spine gradually develops a cervical 	 Sacral dimple or sinus Tufts of hair, particularly in sacral area Pronounced curvature Swelling Asymmetry 	 Intrauterine growth conditions Spina bifida Genetic conditions Abnormalities in spinous processes 	⇒ Ensure medical practitioner review of any pilonidal dimple or sinus

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
	curve by 3-4 months and lumbar curve as the infant bears weight and begins to walk	MassesLesions		
	Upp	per Limbs (continued next p	bage)	
Palpate the clavicles, and observe range of arm movement including: Hands Elbows Wrists Shoulders Assess through observation of: Flexion/extension Adduction/abduction Internal/external rotation Symmetry Strength Flexibility	 Infant will gradually develop capacity to lift chest up when lying on abdomen, supporting at first on forearm, and later on extended arms and flattened palms Age-appropriate development in use of both hands. May show a preference for one by 18 months Develops capacity to pick up small objects with a pincer grasp by 12 months Limbs gradually become more pliable and movements 	 Swelling Distortion Bruising Limited, reluctance or discomfort on movement Erythema Extra digits Syndactyl Webbing Digital clubbing Persistent clenched fists or thumbs in fist beyond 3 months Early preference for one hand 	 Trauma including, fracture, subluxation, or dislocation Brachial palsy Intrauterine exposure to teratogens Cerebral palsy Environmental conditions Genetic conditions Edwards syndrome Marfan syndrome Rubinstein-Taybi syndrome Achondroplasia 	

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
	 become smoother and continuous Should have full range of movement when extending the arms in all directions Movements are equal in flexibility and in strength 	Asymmetrical movement or muscle tone		
		Hips		
Follow Hip Assessment procedure to assess hips for stability, abduction, limb length and symmetry.	 Skin folds are symmetrical Hips are stable, and thighs are easily adducted and abducted Knees are equally aligned 	 Uneven leg length Asymmetrical buttock folds and thigh creases Movement restriction Reluctance to move Not crawling by 8 months Bottom shuffling or alternative crawling method Limping or waddling gait 	 Intrauterine growth conditions Genetic conditions Developmental Dysplasia of Hip Trauma Environmental conditions, including constrictive wrapping 	⇒ Refer any hip concerns to medical practitioner, or directly to PCH Orthopaedic Clinic if the infant is less than 4 months of age

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies	
Lower Limbs (continued next page)					
Assess while infant is supine or in standing position, noting: length strength flexibility movement skin folds Through observation of: flexion/extension adduction/abduction internal/external rotation 	 Legs are equal in length with symmetry in skin folds Legs are equal in movement, strength and flexibility Knee and hip joints extended and aligned Knees will naturally lie apart with soles of the feet turned slightly inward Bow leggedness is common until 4-5 years As the ability to walk is developed, the infant's stance is wide with small steps and rapid cadence 	 Unequal leg length Asymmetry in skin folds Asymmetrical movement Asymmetrical muscle tone Genu varum Genu valgum Talipes – positional or genetic 	 Birth trauma Trauma, including fractures or dislocations Intrauterine growth conditions Tibial torsion Nutritional deficiency Genetic conditions Edwards syndrome Rubinstein-Taybi syndrome Achondroplasia Duchenne muscular dystrophy 		
Foot and heel	Foot is suppleVisible plantar crease	 Rigidity or limited range of movement, including: 	Intrauterine growth conditionsGenetic conditions	Parent education and support may include:Use of passive stretching	

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
 Assess forefoot and heel for position and alignment Assess ankle and plantar arch for range of motion 	In the supine position, the medial and lateral malleoli are parallel	 Limited dorsiflexion Adduction of forefoot Fixed position of hindfoot Polydactyly Absent plantar crease Webbing 	 Talipes Metatarsus adductus Trauma 	 exercises for minor positional deviations where feet can easily be returned to midline Monitoring and review for resolution ⇒ Referral to medical practitioner or allied health professional where an inflexible deviation exists
	At	odomen (continued next pa	ige)	
 Visual inspection, and palpation where indicated, noting: Size Shape Symmetry Sounds Contours Skin integrity 	 Protuberant and round (pot-bellied) Symmetrical Moves with respiration Soft Bowel sounds are present and generally heard every 10-20 seconds 	 Tension Distension Sunken or scaphoid shape Asymmetry Visible peristalsis Vomiting Hyperactive or absent bowel sounds 	 Changes in oral intake Infection Constipation Intolerance or atopy Malrotation of bowel Obstruction Intussusception Paralytic ileus 	 ⇒ Urgent referral to medical practitioner for: Sustained vomiting Projectile vomiting Reduced bowel sounds

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
		Evidence of pain or discomfort	 Pyloric stenosis (usually between 2-6 weeks of age 	
			Hirschsprung's disease	
	Ur	nbilicus (continued next pa	ige)	
 Visual inspection, noting: Size Shape Integrity Separation of cord Healing of cord stump 	 The umbilical cord has separated and is dry and healed Lies at vertical level corresponding to between L3 and L5 Size, shape, depth, length, and overall appearance is variable Forms a visible depression on skin in 90% of infants Protrusion may occur in10% of infants Underlying abdominal muscles surrounding umbilicus are concave 	 Intermittent or constant bulging or swelling, more pronounced with increased abdominal pressure (crying and defecation) Discharge from umbilicus Erythema Inflammation Lesions Masses Omphalitis Umbilical lint 	 Umbilical hernia Diastasis rectus Infection Omphalomesenteric duct remnant Urachal remnant Cyst Umbilical polyp Granuloma Cellulitis Environmental conditions 	 Parent education and support may include: Routine umbilical care Strategies for management of minor infections ⇒ Prompt referral to medical practitioner for umbilical discharge

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
	Buttocks	and Rectal Area (continued	l next page)	
 Visual inspection and discussion with parent, noting: Anal patency Stool consistency, colour and frequency Skin integrity Skin features 	 Patency demonstrated through passing of faeces which is normally: Human milk fed – yellow (brown and dark green may be normal in the absence of deviations) with texture from loose, granular to curdled Infant formula fed - pale yellow to yellow, brown, green or grey with paste to semi- formed texture Infant faeces become darker, more formed and odour increases with introduction of solid food 	 Buttock deviations: Lesions or rashes Discolouration Sacral sinus, dimples or tufts of hair Rectal deviations: Changes in frequency of bowel motions Changes in colour or consistency of bowel motions Bleeding 	 Birthmarks Trauma Genetic conditions Response to change in dietary and fluid intake Constipation Infection: bacterial, viral or parasitic Fissures Rectal tears Allergy or Atopy 	 Parent education and support may include: Dietary needs Normal patterns of output Strategies to address minor deviations Referral to medical practitioner for: Sacral sinus Bleeding Recto-urethral fistula ⇒ Consider referral to specialist services where child protection issues are suspected ⇒ Refer to Guidelines for Protecting Children 2020 for further information, including

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
				information on mandatory reporting
		Urinary System		
Assess urinary output through parental report, or visual inspection where possible, noting: • Volume • Frequency • Colour Note: Nutritional assessment may contribute to findings	 Normal urine output is >2 ml/kg/hour in infants Infants void an average of 20 times per day/once per hour Infant bladder will completely empty at least once during a four hour period 	 Change in urine: Volume Frequency Colour Presence of blood Weight loss Behavioural irritability 	 Urinary Tract Infection Pyelonephritis Dehydration Changes in fluid intake Urinary reflux Jaundice Diabetes Congenital abnormalities of kidneys and urinary tract 	 Parental education and support may include: Expected urinary output for age and how to monitor Fluid requirements
Genitourinary – Male (continued next page)				
Visual inspection of penis, scrotum and inguinal areas, and palpation of testes, noting: • Position • Size	 Urinary orifice is patent, uncovered by the prepuce, located at the tip of the glans penis Foreskin does not retract until 2-3 years old. Complete 	 Ambiguous genitals Curvature of penis Microphallus Deviation in position of urethral meatus, including hypospadias and epispadias 	 Genetic conditions Intrauterine exposure to teratogens Infection Testicular torsion 	Parent education and support may include routine hygiene needs and age appropriate expectations ⇒ Urgent referral to emergency department for

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
 1-12 months - Area Patency of urethra Skin Testicular descent N.B. Do not attempt to forcibly retract the foreskin 	 Within the Norm separation of the foreskin and glans penis is usually complete by 6 years Spontaneous testicular descent usually occurs before birth and may retract during the first 6 months Cremasteric reflex can be activated by cold, emotion, or touch 	 Common Deviations Phimosis (tight foreskin) Paraphimosis Chordee Balanitis Balanoposthitis Scrotal swelling, acute or persistent Abnormal distance from scrotum to anus Circumcision – healing complications include bleeding, redness, cyanosis, discharge, or swelling Testis absent or 	 Possible Causes Intrauterine growth conditions Hydrocele 	Specific Strategies paediatric surgical review for signs of torsion ⇒ Refer to medical practitioner for review of any deviation in testicular descent over 4 months of age
		 Testis absent or outside of scrotal sac 		

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
		Genitourinary – Female		
 Visual inspection of: Labia Vaginal orifice Urethral meatus Perianal area Clitoris Noting the following: Shape Position Contours Patency Skin integrity N.B. Careful examination should be conducted where discharge exists 	 Clitoris is about 3mm in length and 3mm in transverse diameter The labia minora are thin ridges of tissue which cover the urethral and vaginal orifices and meet at the clitoris Labia minora frequently protrude from the labia majora Urethral meatus may be difficult to visualise due to thickened hymen Vaginal orifice is patent, surrounded by hymen, with no discharge 	 Rashes Lesions Redness Lacerations Bruising Swelling Pain Discharge Odour Hydrocolpos Ambiguous genitals 	 Trauma Allergy or atopy Environmental conditions or irritants Infection, commonly bacterial or fungal Genetic conditions Imperforate hymen Hernia 	Parent support and education may include routine hygiene needs and age appropriate expectations ⇒ Consider referral to specialist services where child protection issues are suspected Refer to <i>Guidelines</i> <i>for Protecting Children</i> <i>2020</i> for further information, including information on mandatory reporting

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies	
Inguinal Area					
 Visual inspection, and palpation of inguinal area along the: Juncture of the thigh and abdomen Along the inguinal ligament and the saphenous vein 	 A horizontal chain of inguinal nodes run along the inferior groin Regular femoral pulses can be felt midpoint between the iliac crest and symphysis pubis 	 Masses – either firm and reduced with pressure, or hard and immobile Tenderness Enlarged glands Poor, unequal or absence of femoral pulses 	 Prematurity Genetic conditions Coarctation of the aorta Lymphadenopathy Infection Inguinal hernia 	⇒ Prompt medical review is indicated where any inguinal swelling is reddened, painful, or does not change size when the infant cries, especially if accompanied by other signs of illness such as fever, vomiting or distended abdomen	
		Skin (continued next page)		
Visual inspection, and palpation where required, noting the following: • Colour • Texture • Integrity • Turgor	 The skin is smooth, even, clear and intact Mucous membranes are moist Normal colour according to race Skin is elastic and returns rapidly to original shape following gentle pinching 	 Pallor, redness, cyanosis Unusual pigmentation or discolouration Plethora of protein Bruising Rashes, lesions, scars Thickening, drying, cracking, flaking or scaling of skin 	 Jaundice Erythema toxicum neonatorum Milia Trauma Genetic conditions Congenital dermal melanocytosis (Mongolian blue spot) 	 Parent education and support may include strategies for management of deviations such as: Minor infections Infestation Allergy and eczema (atopic dermatitis) 	

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies	
 Hydration of exposed skin and mucous membranes Temperature N.B. Skin should be inspected in areas of natural light, or a well-lit space with fluorescent lighting where possible 	 Capillary refill is under 2 seconds Pigmentation variations occur in darker skinned infants in nail-bed, palm, sole and genital areas 	 Blistering Itching Papules, Plaques, Vesicles, Nodules Skin tags, dimples, cysts Hydration deviations: Reduction in skin elasticity Flushed appearance Xerosis (dry skin) Skin takes > 3 secs to return to original shape 	 Cutis marmorata Macular or cavernous haemangioma Nevus vasculosus Telangiectatic nevi Dehydration Allergy Eczema (atopic dermatitis) Infection - bacterial, viral or fungal Fever or overheating Infestation, including scabies Intrauterine exposure to teratogens 	 Environmental influences Expected fluid intake and output for age ⇒ Referral to a medical practitioner for birthmarks and rashes, particularly where birthmarks are located on face, head or buttock areas ⇒ Prompt referral to a medical practitioner where deviations are accompanied by other signs of illness 	
Hair (continued next page)					
Visual inspection, noting: • Distribution • Colour	• Fine soft, downy lanugo hair is present at birth and can persist for up to 3-4 months	 Absent hair or bald patches Dryness Oiliness 	Seborrheic dermatitis (cradle cap)	Parent education and support may include strategies for management of:	

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
 Hair line Quantity Texture Growth pattern 	 Lanugo is gradually shed and replaced by vellus hair which is short, fine, soft, poorly pigmented and covers most of body Vellus type hair is also present on the scalp from birth, gradually replaced from 3-7 months of age by intermediate scalp hair Terminal hair is pigmented, longer, thicker and replaces vellus hair on the scalp by 2 years of age Growth is uniform, and specific to body area 	 Infestation Coarse texture Change in growth rate Irritation, dryness, lesions or scaling of scalp 	 Environmental conditions, including friction on surfaces Infection, e.g. tinea capitus (ringworm) or impetigo Trauma Nutritional deficiency Stress or recent illness Pallister-Killian syndrome 	 Seborrhic dermatitis Hygiene needs Control of environmental factors
Nails (continued next page)				
Visual inspection, noting:	 Nails are soft, pliable and fast growing 	Short and thick	 Infection: bacterial, viral or fungal 	Parent education and support may include:

1-12 months - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
 Colour Contour Shape Texture Cleanliness 	 Nails are adherent to nail bed Nail beds are pink, smooth, flat or slightly convex, with uniform thickness 	 Fragile or thin Nail shedding (onychomadesis) Dryness Transverse depressions or grooves (Beau's lines) Pruritus Clubbing Paronychia Odour Cyanosis Nail atrophy/ absence 	 Environmental conditions, including exposure to moisture Psoriasis Ectodermal dysplasia Trauma Stress or significant illness 	 Routine care and hygiene strategies Expected growth patterns

1 to 4 years - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies		
	General Appearance					
 Facial expressions Posture Activity level Temperament Responsiveness Interaction with others Proportion and symmetry of body parts Movement Nutritional status Skin Integrity Observe appearance prior to comprehensive assessment 	 Initial presentation of the child is consistent with the situation (e.g. crying due to tiredness or pain) Child appears healthy and appropriately developed 	 Deviations from the norm may be initially identified through overall assessment of general appearance of the child Recognise indicators for child abuse, including but not limited to: injury, bruising, burns, retinal haemorrhages, bite marks, fractured bones, bleeding, pain or physical discomfort or poor standard of hygiene. Assess appearance of child with consideration of their age, level of mobility and development.¹ 	 A range of congenital or non-congenital conditions Genetic conditions Environmental conditions Child abuse – consider indicators outside of what may be expected given the child's age and development 	Observation of general appearance should be completed prior to a more detailed assessment. Any areas of concerns will be documented and noted for additional monitoring and/or referral to a medical practitioner ⇒ Refer to the <i>Guidelines for</i> <i>protecting children</i> 2020 publication for more information.		

Appendix C: Children - Twelve months to four years

1 to 4 years - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies		
	Head					
 Visual inspection with the head at midline, while sitting supported, noting: General shape Size Circumference Symmetry Alignment Range of, movement, tone and flexibility 	 Rounded Symmetrical When child is upright, head will comfortably sit in the midline Head circumference averages: males: 43.5–53 cm females: 42.5-52cm⁶ Brain reaches 80% of adult size by 2 years Sutures are proximate and immobile Skin is flush with scalp Anterior fontanelle closes by around 18 months of age 	 Asymmetrical Circumference outside expected trajectory Microcephaly Macrocephaly Bruising Swelling Lesions Positional head preference or tilt Jerking, tremors or involuntary spasms Persistence or premature closure of anterior fontanelle Bulging or sunken anterior fontanelle in younger child 	 Plagiocephaly Dehydration- more easily observed in younger child Trauma Space-occupying intracranial lesions Gastro-oesophageal reflux disease (GORD) where overfeeding contributes to torticollis Intrauterine growth conditions and exposure to tetragons FASD Craniosynostosis Neurological condition Epilepsy Brain injury Visual or hearing deficit Hydrocephaly 			

1 to 4 years - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies	
Neck					
 Visual inspection, noting the following: Symmetry Shape Mobility Musculature Lymph nodes Consider relevant history from parent report, including: injury, head tilt, pain, stiffness, persistent lymph gland swelling and respiratory infection 	 Neck lengthens at 3- 4 years, and neck to body proportion becomes closer to adult size Trachea is at midline Lymph nodes are non-visible, mobile, non-tender and not warm to touch 	 Stiffness or resistance to movement or range of motion Pain Lateral inclination of the head Lymphadenopathy Positional shift of Trachea 	 Torticollis GORD Raised intracranial pressure Meningitis Infection Cerebral palsy Hypotonia Genetic conditions Turner's syndrome Trisomy 21/Down Syndrome 	⇒ Urgent referral for medical review of any child with neck stiffness accompanied by signs of acute illness	
	Face (continued next page)				
 Through visual inspection observe facial features and expressions, noting: Symmetry Spacing and size 	 Face is relaxed and symmetrical Nose should be symmetric and in centre of child's face 	 Bruising Swelling or oedema Alteration in skin integrity Asymmetry 	 Trauma child abuse Fatigue Allergy Environmental conditions 	Child Abuse - consider indicators outside of what may be expected given the child's age and development	

1 to 4 years - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
 Movement Emotional expression 	 Facial expressions are spontaneous and responsive to situation Symmetry of smile, laugh, creases and wrinkles reveal normal function/ innervation 	 Lesions Dark circles under eyes Neurological deficit Lack of, or inappropriate, emotional expression Involuntary movements 	 Infection Genetic conditions Russell-Silver Trecher-Collins Medication side effect Mental illness Myotonia 	⇒ Refer to the Guidelines for protecting children 2020 publication for more information
	-	Eyes (continued next pag	ge)	
 Visual inspection, noting: Shape Size Symmetry Position and spacing Visual engagement 	 Eyebrows extend to just beyond the outer canthus Raising and lowering of eyebrows is symmetrical Eyelashes are full and evenly distributed Upper and lower eyelids and palpebral fissures symmetrical Gaze is symmetrical 	 Discharge, watery or purulent Conjunctival redness or inflammation Crusting or scaling Eyelid inflammation, swelling, lesions, or discoloration Sunken eyelids Ptosis Loss of hair - eyelashes or eyebrows 	 Acquired head injury Infection, bacterial, viral or fungal Allergy Dehydration Trauma 	Parent education and support for infection control measures and hygiene where eye infection is suspected

1 to 4 years - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
	 Eyes are symmetrical, horizontal and in line with top of pinna Conjunctiva and sclera are smooth, clear, whitish and glistening (yellow tinge normal in children with dark skin) 	 Subconjunctival haemorrhage 		
	Visio	n Behaviours (continued n	ext page)	
Assess by examining the pupil and iris, and by shining a light into the eyes, noting: • Size • Symmetry • Colour • Clarity • Shape • Movement • Pupillary constriction	 Pupils are round, clear, equal in size and reactivity to light Pupils may be larger than adults Irises are circular Eyes move in unison Shifts between near and far vision tasks and tracks an object across 180° from 12 months 	 Fixed or unequal pupil size Sluggish reactivity to light Corneal cloudiness or opacity Strabismus Hypertropia Hypotropia Limitation in expected eye movements Coloboma 	 Retinoblastoma Cataract Scleral icterus Photophobia Glaucoma Optic nerve deficit Neurological deficit Trauma Nystagmus Strabismus – intermittent or constant 	 ⇒ Prompt referral to medical practitioner for any visual impairment, opacity or strabismus ⇒ Urgent referral to ophthalmologist through medical practitioner for opacities in the pupil or corneal abnormalities

1 to 4 years - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
Light sensitivity		Discolouration of		
 Ability to fix and follow 		sclera		
		Ears (continued next pag	ge)	
Assess external ear including mastoid process, auricles, tragi and external auditory meatus, noting: • Position • Size • Shape • Symmetry • Colour • Skin integrity • Patency • Firmness of ear cartilage • Observe for infection or discharge of	 The superior portion of the auricle is equal in height to the outer canthus of the eye Auricles are vertical with less than 10° tilt The pinna is 80% of adult size by 4 – 5 years of age The pinna is soft and pliable and recoils readily when folded and released Colour is similar to facial skin 	 Inflammation Erythema Oedema Tenderness Discharge Lesions or masses Abrasions Piercings – deviations may include inflammation, scar tissue, trauma Bruising around ear 	 Otitis Externa Mastoiditis Other infection Sebaceous cysts Trauma Environmental conditions 	 Parent education and support related to external ear may include: Wax production Hygiene Infection control ⇒ Refer to medical practitioner for any suspected infection Child Abuse - consider indicators outside of what may be expected given the child's age and development

1 to 4 years - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
Examine ear canal and visualise tympanic membrane using otoscopy Visible tympanic membrane landmarks include cone of light, umbo, and handle of malleus	 Skin of distal two thirds of ear canal is similar to external ear, and is covered with fine hair Tympanic membrane is thin oval shaped and concave Cerumen is a normal protective secretion, ranging from grey, dry and flaky to wet, honey to dark brown colour and texture Cone of light position: 4-6 o'clock on the right and 6-8 o'clock on the left 	 Erythema Bulging Retracted Perforated Discharge Grommet Thickening and scarring of membrane typically appears as white area 	 External ear infection Trauma Foreign objects, which may precipitate wax production or discharge Inadequate middle ear drainage Middle ear infection 	 ⇒ Referral options and parent education and support for: Foreign bodies Discharge Excessive wax or suspected infection

1 to 4 years - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
		Nose		
Visual and auditory inspection, noting in relation to nasal bridge, nares, columella and septum: • Symmetry • Shape • Size • Skin integrity • Alignment • Patency of nares	 Septum is straight and in midline of the nose Nasal passages enlarge in early childhood, allowing easier airflow Nares can be easily occluded Child removes obstructions by sneezing 	 Mucous or other nasal secretions Oedema Epistaxis Nasal flaring Asymmetry Narrowing of the nares Flattening Discolouration or lesions 	 Infection Inflammation Foreign body Allergy Nasal polyps Trauma FASD 	
		Mouth (continued next pa	ge)	
Using the Oral health examination procedure and 'Lift the Lip', inspect: • Gums • Mucosa • Lips	 Oral mucosa is shiny, smooth, moist, and pink (bluish or pale in child with dark skin) Upper frenulum gradually disappears with growth of maxilla 	Gum deviations: oedema Lesions Inflammation Friable Halitosis 	 Dehydration Infection: bacterial, viral or fungal Trauma Allergy Environmental conditions 	 Parental support and education for minor deviations may include: Teething processes Drooling

1 to 4 years - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
 Tongue Teeth Noting the following: Colour Symmetry Integrity Moisture Movement of tongue Tooth eruption Odour The 'Lift the Lip' resource should be used from 12 months of age, to assess oral health. 	 Lingual frenulum allows child to poke tongue out past lips and move from side to side Deciduous teeth appear between 6– 24 months Drooling is normal between 3 and 15 months of age Dorsal surface of tongue is slightly rough, moist and pink, sometimes patterned; ventral surface thin, with prominent vessels 	Lip deviations: • Oedema • Dryness • Lesions • Fissures • Persistent drooling • Persistence of upper frenulum Tongue deviations: • Coated • Plaque or lesions • Geographic tongue • Macroglossia • Ankyloglossia • Difficulty swallowing Tooth deviations: • Plaque • Lesions • Trauma	 Poor hygiene Neurological impairment Tooth eruption Nutritional deficiency FASD Myotonia Medications Congenital and genetic abnormalities Trisomy 21/Down Syndrome Hypothyroidism 	 Minor lesions or infections Dental hygiene Healthy eating ⇒ Direct referral to Dental practitioner is recommended for parental or professional concerns regarding teeth

1 to 4 years - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies		
	Vocal Behaviour					
 Auditory observation, and parent report, noting the following: Speech patterns Pitch of sounds Language acquisition 	 Will vocalise deliberately using a range of volume and pitch as a means of interpersonal communication May scream in annoyance Gradual age- appropriate development of speech and language 	 High pitch Continuous Hoarseness, acute or prolonged Excessive crying Speech sounds inconsistent with developmental expectations 	 Raised intracranial pressure Infection, particularly in upper respiratory tract Allergy Hypothyroidism Dehydration Pain GORD Laryngeal trauma Neurological condition Hearing impairment 	 Parental education and support for minor deviations, may include: Croup and other upper respiratory infection strategies Allergy control ⇒Consider further assessment and referral to speech therapist for parental or professional concerns with speech 		
	Chest and R	espiratory Function (conti	nued next page)	<u> </u>		
Visual and auditory assessment, with child sitting upright, noting: • Chest shape • Movement • Respiratory rate	 Chest shape is round, barrel like and equal to head circumference until about 2 years After 2 years, chest becomes adult shaped, gradually 	 Noisy breathing, including grunting or stridor Snoring Crackles Wheezing 	 Infection, including bronchiolitis and epiglottitis Laryngomalacia Trauma Foreign body aspiration Asthma 	Parent education and support may include:Hygiene practices for respiratory infection control		

1 to 4 years - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
 Respiratory effort Breathing pattern Breathing sounds N.B. Assessment of sleep patterns through parent report may give information related to respiratory tract, allergy or infection 	 exceeding head circumference by 5-7 cm Respirations regular at rate of 20-30 per minute from 1-5 years Symmetrical chest rise and fall Child may use oral airway 	 Rhonchi Stridor Cough Apnoea Breath-holding Cheyne-Stokes breathing Tachypnoea Interceptal retraction 	 Croup Pneumothorax Increased intracranial pressure Adenoid or tonsillar hypertrophy Cardiac conditions Genetic conditions Cystic fibrosis 	 Asthma education and action plan as appropriate ⇒ Seek urgent medical review for any signs of respiratory distress which may include stridor, grunting and wheezing, intercostal retraction
	spontaneously or in response to nasal occlusion Musculos	 Accessory muscle use Persistent barrel chest skeletal – General (continued) 	 Joubert syndrome ed next page) 	
Observe for overall symmetry, including: Length Strength and tone Flexibility Skin folds Range of motion Mobility of joints	 Movements are equal in flexibility and strength Upper and lower limbs are symmetrical in length Laxity of ligaments predisposes to musculoskeletal 	 Muscular pain or tenderness Bone or joint pain Oedema Warmth Movement limitation Unilateral weakness 	 Trauma Sprain, Strain, Fracture Subluxation/dislocation Synovitis Neurological disorder Scoliosis Spina bifida 	Parent education and support regarding safety, and avoidance of common injuries related to developmental milestones Be alert to non- accidental injury, which may manifest commonly with rib,

1 to 4 years - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
 Circulation Sensation Assess range of movement through observation of activity or play, noting: Flexion and extension Adduction and abduction Internal/external rotation Palpation and passive movement assessment may be required to reinforce visual findings 	 injury in young children Movements gradually become smoother and continuous Mature pattern of muscle action and motion by 3 years of age Gradual age- appropriate increase in fine and gross motor control and capacity 	 Disproportionate limb or digit size, outside normal expectations Hypermobility of joints Palpable masses Muscle contracture 	 Rheumatoid arthritis Haemophilia Genetic conditions Trisomy 21/Down Syndrome Duchenne muscular dystrophy Marfan syndrome Osteogenesis imperfecta FASD Osteomalacia Tumour Leukaemia 	clavicular, sternal or spinal musculoskeletal injuries ⇒ Consider referral to specialist services where child protection issues are suspected Refer to <i>Guidelines</i> <i>for Protecting</i> <i>Children 2020</i> for further information, including information on mandatory reporting
	Bac	k and Spine (continued ne	xt page)	
Assess general appearance of back while the child is standing erect, noting: • Symmetry, including hips, shoulders and rib cage	 Lumbar curve forms as the infant begins to bear weight and begin to walk Exaggerated lumbar lordosis is normal in young children 	 Rigidity, particularly while sitting Lateral curvature Pronounced curvature Pain 	 Genetics Trauma Kyphosis Scoliosis 	

1 to 4 years - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
 Curvature Flexibility Range of movement Skin 	 Normal curvature (C- shaped) develops by 3- 4 years, including neck and lumbar lordosis, and thoracic kyphosis 			
	Bending and stretching should be without resistance			
	Up	per Limbs (continued nex	t page)	
Assess range of movement in: • Hands • Elbow • Wrists • Shoulders Noting the following: • Strength • Flexibility	 Able to use both hands and arms equal in strength and flexibility May show hand preference by 18 months of age Development and ossification of the hands continues until 11-12 years of age Normal arm swing begins from 18 months and arms 	 Oedema Distortion Limited or reluctance with movement Pain or discomfort on movement Asymmetrical tone on movement, including limpness Digital clubbing Persistent fist formation 	 Trauma fracture, subluxation, or soft tissue injury Neurological deficit Genetic conditions Edwards syndrome Marfan syndrome Rubinstein-Taybi syndrome Achondroplasia Cerebral palsy Environmental conditions 	 Parent education and support for: Expected range of movement and ability for age Injury prevention e.g. radial-ulnar joint subluxation and shoulder dislocation are common from 2-4 years of age Child Abuse - Consider sign of child

1 to 4 years - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
	move reciprocally with legs by 2 years			abuse and conduct further assessment
				Refer to <i>Guidelines</i> <i>for Protecting</i> <i>Children 2020</i> for further information.
		Hips		
Follow Hip Assessment procedure to assess gait and toe walking	Gait is symmetrical, though may be disjointed in toddler	 Waddling or limping gait Unilateral toe walking 	 Conditions which may be associated with hip deviations include: Genetic conditions Trisomy 21/Down Syndrome Larson's syndrome Congenital Arthrogryposis Spina bifida Scoliosis Developmental Dysplasia of Hips 	⇒ Referral for medical review where any previously undiagnosed hip dysplasia is suspected

1 to 4 years - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
	Lo	wer Limbs (continued next	t page)	
Assess lower limbs through observation of child standing and gait, noting: Muscle tone Strength Observe for symmetry in; Length Strength Flexibility Movement Skin folds	 Legs are equal in length, movement, strength and flexibility Stance includes wide base of support, hyperextension of knees and hips, and disjointed (toddling) pattern when walking. Stance is slightly apart by 2 years and in line with body by 4 years. which gradually becomes more smooth In-toeing normal from 15 months and usually resolves by 4 years Genu varum (Bowleggedness) - normal to 2.5–3 years 	 Asymmetrical skin folds Movement Tone Rotation Unequal limb length Bowed legs with space greater than 5 cm between knees after 2.5–3 years In-toeing affecting mobilisation 	 Trauma, including fractures or subluxation Talipes Tibial torsion Nutritional deficiency Vitamin D, calcium and protein Genetic Conditions Edwards syndromeRubinstein-Taybi syndromeAchondroplasia 	 Parent education and reassurance of common deviations which should resolve spontaneously, including: Tibial torsion by 4-5 years Genu valgum by 7 years Genu varum by 2.5–3 years ⇒ Consider referral to GP relevant allied health services for specialised treatment of positioning or movement deviations
1 to 4 years - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
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	Genu valgum (Knock knees) - common until 7 years			
Assess foot and heel, noting:Position and alignmentRange of motion	 Feet are supple Plantar crease is visible on each foot When supine, the lateral malleoli may normally rotate up to 20 degrees posteriorly Pes planus (flat feet) are normal in early walking phase Longitudinal arch develops by 2-3 years Walking mostly with heal toe gait and toe walking lessens 6 months after walking and resolves by 3 years 	 Rigidity or limited range of movement, including dorsiflexion Flat feet (Pes planus) persistent after 2-3 years Heel or arch pain Toe-walking most of the time 6 months after started walking or persisting beyond 3 years 	 Trauma Genetics Duchenne muscular dystrophy Cerebral palsy Short Achilles tendon Autism 	 Parent education and support may include: Discourage the use of equipment such as walkers and jolly jumpers ⇒ Consider referral to relevant allied health services for specialised treatment of positioning or movement deviations

1 to 4 years - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
		Abdomen		
 Visual inspection and palpation where required, noting: Size Shape Symmetry Contours Bowel sounds Skin texture, colour and integrity Nutritional status 	 Protuberant and round (pot-bellied) normal until 4 years Abdomen moves with respiration Soft Symmetrical Bowel sounds present 	 Reduction or increase in bowel motions, including consistency, or colour Vomiting Pain, tenderness or guarding Distension Tension or rigidity Visible peristalsis Palpable masses or protrusions Swelling or lesions Hyperactive or absent bowel sounds 	 Gastrointestinal infection Constipation Normal response to dietary changes Peritonitis Full bladder Obstruction Paralytic ileus Trauma Malnutrition Foreign body Coeliac disease Cystic fibrosis Hirschsprung's disease 	 ⇒ Urgent referral to medical practitioner for: Sustained vomiting Reduced bowel sounds Pain on palpitation and/or guarding/rigidity
Umbilicus (continued next page)				
Visual inspection, noting: • Size • Shape	 Forms a visible depression or protrusion on skin 	SwellingMassesLesions	HerniationPolypGranuloma	Parent education and support may include:Routine umbilical care

1 to 4 years - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
ContoursSkin integrity	Size shape, depth, length, and overall appearance is variable	DischargeLint	Dermoid CystDiastasis recti abdominis	
		Buttocks and Rectal Are	ea	
 Inspection should include discussion with parent, noting: Anal patency Skin Elimination patterns Toilet training History of dietary intake and growth pattern may contribute to assessment 	 Stools may be passed normally from 1-3 times per day through to 2-3 times per week Stool consistency is highly variable, but should be soft, formed, and easy to pass without pain or trauma Continence develops from 2 years of age with an average of 3 years 	 Lesions Lacerations or tears Bruising Discolouration Tufts of hair, particularly in crease Evidence of itching Erythema Inflammation Fissures Skin Tags Changes in frequency or consistency of bowel motions 	 Response to change in nutritional intake Genetics Infestation Constipation Infection Polyps Trauma Child Abuse 	 Parental support and education may include strategies to address minor deviations with Elimination patterns Nutritional needs Physical activity needs for normal bowel function Hygiene Toilet training ⇒ Consider referral to specialist services where child protection issues are suspected ⇒ Refer to Guidelines for Protecting Children 2020 for

1 to 4 years - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
				further information, including information on mandatory reporting
		Urinary System		
Assess fluid intake and urinary output by parental report, noting: • Frequency • Volume • Colour • Bladder control Visual assessment and dip stick analysis of urine sample where relevant	 Young child's urine output is >1 ml/kg/h Bladder capacity is about 1% of child's body weight Toddlers and pre- schoolers will void on average between 8- 14 times per day Kidneys immature until 2 years, predisposing child to dehydration and hypovolaemia Urine colour is clear, and pale yellow to amber 	 Decrease in volume and frequency Cloudy urine Weight loss Signs of dehydration Haematuria Strong smelling urine Behavioural irritability Fever Vomiting 	 Diabetes Urinary tract infection Urinary reflux Pyelonephritis Glomerulonephritis Other infection Changes in fluid intake 	 Parental education and support may include: Fluid requirements Expected urinary output Timing and strategies for developing bladder control ⇒ Refer for medical review of any signs of urinary tract infection

1 to 4 years - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
		Genitourinary – Male		
Use visual inspection of penis and scrotum and inguinal areas, and palpation of testes, noting: • Position • Size • Patency of urethra • Skin • Testicular descent (At 2 years enquire about testicular descent) N.B. Do not attempt to forcibly retract the foreskin	 Urinary orifice is patent, uncovered by the prepuce, located at the tip of the glans penis Retraction of foreskin is possible by 3 years of age Scrotum is normally loose and wrinkled Testes descended Cremasteric reflex is strong in early childhood initiated in response to cold, wet or anxiety 	 Balinitis Hypospadias Chordee Phimosis (tight foreskin) Deviations in position of testes Small flat scrotum Enlarged scrotum Absent cremasteric reflex Scrotal pain Lymphadenopathy Inguinal swelling Circumcision – post surgical deviations may include bleeding, redness, cyanosis, discharge or swelling 	 Genetics Infection Undescended testis Retractile testis Hydrocele Testicular torsion Inguinal herniation 	 ⇒ Urgent referral for paediatric surgical review of signs of torsion which may include: pain, scrotal swelling, unilateral absence of cremasteric reflex, nausea and/or vomiting and later, scrotal oedema ⇒ Refer to medical practitioner for review of any deviations in testicular descent

1 to 4 years - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
		Genitourinary – Female)	
 Visual inspection of: Labia Vaginal orifice Urethral meatus Perianal area Inguinal area Inguinal area Noting the following: Shape Position Contours Patency Skin integrity 	 Labia minora is thin, covers the urethral and vaginal orifices Labia minora frequently protrudes from the labia majora The vaginal orifice is partly covered by the hymen membrane, which varies but is normally annular and crescent shaped No vaginal discharge Urethral meatus is small 	 Rashes Lesions Erythema Lacerations Bruising Oedema Pain Discharge Odour Labial adhesion or partial fusion Tenderness in the lower abdomen Bulging or tenderness in inguinal area Lymphadenopathy 	 Allergy Infection, including fungal, viral or bacterial Trauma Child abuse Foreign body Allergy or atopy Infestation, e.g. pinworm 	 Parental education and support may include: Normal age appropriate developmental expectations Hygiene requirements ⇒ Refer the child for immediate specialised assessment where there are any child protection concerns Refer to Guidelines for Protecting Children 2020 for further information, including information on mandatory reporting

1 to 4 years - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
		Skin (continued next pag	je)	
 Visual inspection, and palpation where required, noting the following: Colour Texture Integrity Turgor Hydration of exposed skin and mucous membranes Temperature N.B. Skin should be inspected in areas of natural light, or a well-lit space with fluorescent lighting where possible 	 Exposed skin areas normally feel dryer than body creases Mucous membranes are moist A child's skin is normally smooth and even Skin colour variation occurs between and within races and affects assessment findings Darker skin is often normally drier 	 Pallor Redness Plethora of protein Bruising- consider signs of child abuse Rashes, lesions, scars Thickening, drying, cracking, flaking or scaling, Blistering of skin Itching Clamminess Hairy patches, or dimpling in the lumbosacral area Cyanosis, either extremities or central Jaundice 	 Syncope Anaemia Hypo or hyperthermia Trauma Child Abuse Stress Dehydration Burns Infection, including fungal, viral or bacterial Eczema (atopic dermatitis) Infestation Nutritional deficit Raynaud's phenomenon Exposure to environmental extremes 	 Parental education and support may include strategies for: Minor rashes, infections or infestations Allergy and eczema (atopic dermatitis) Hygiene Safety and avoidance of common skin injuries related to developmental milestones, including sun safety Child Abuse - consider indicators
 Where colour change is suspected, inspect skin in an area 		 Clustered pigmentation 	 Behavioural deviations, such as thumb or finger sucking Neurological disorder 	be expected given the child's age and development

1 to 4 years - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
where there is less melanin, and use palpation and temperature assessment to add to findings			 Endocrine disorders Liver disease Congenital heart or lung disease 	Refer to Guidelines for Protecting Children 2020 for further information, including information on mandatory reporting
		Nails (continued next pag	ge)	
 Visual inspection, noting: Colour Contour Thickness Texture Assess time of capillary refill (in relevant settings) 	 Nail beds are pink, smooth, flat or slightly convex, with uniform thickness Nails are adherent to nail bed Capillary refill is 2-3 seconds or less 	 Dry or brittle nails Paronychia (inflammation of surrounding skin) Tenderness Convex or concave curving Cyanosis Pallor Yellow or white colour Thickened nail bed 	 Anaemia Nutritional deficiency Trauma Infection, commonly bacterial or fungal Hypoxia Endocrine disorder Trachonychia Ectodermal dysplasia Chronic respiratory or cardiac disease 	 Parental education and support may include strategies related to: Nail care Behavioural deviations Localised infections Nutritional needs

1 to 4 years - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
		 Transverse depressions or grooves (Beau's lines) Splinter haemorrhages Nail-biting or picking Clubbing Prolonged capillary refill 	 Behavioural deviations such as nail-biting, thumb sucking Stress or significant illness Genetic conditions 	
		Hair (continued next pag	je)	
Visual inspection, noting: Colour Quality Texture Quantity Distribution	 Short, fine, poorly pigmented vellus hair covers all but the palms, soles and mucous membrane areas Thick, mature terminal hair replaces intermediate vellus hair on scalp by 2 years of age Terminal hair is more coarse, thick longer and pigmented and 	 Coarse Dull, dry or brittle Delayed growth Thin distribution Alopecia Irritation, dryness, lesions or scaling of scalp Infestation Matting Oily or dirty hair 	 Infection, e.g. tinea capitus (ringworm) or impetigo Infestation Seborrheic dermatitis Nutritional deficiency Thyroid disorder Immune disorder Hormonal disorder Behavioural disorder, such as hair pulling Ectodermal dysplasia 	 Parental education and support may be provided for common deviations such as: Infestation Infection Dermatitis Hygiene needs Age appropriate behavioural management related to hair

1 to 4 years - Area	Within the Norm	Common Deviations	Possible Causes	Specific Strategies
	grows on the scalp and eyebrows	 Precocious or delay in body hair distribution 	 Neglect Stress or recent illness Environmental exposure e.g. chlorine, frequent washing 	