



LRI Children's Hospital

Henoch Schonlein Purpura HSP UHL Childrens Medical Guideline

| Staff relevant to: | Clinical staff working within the UHL Children's Hospital. |
|---------------------|--|
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| Written by: | A.Hall |
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NB: Paper copies of this document may not be most recent version. The definitive version is held on InSite in the Policies and Guidelines Library

1. Introduction & Scope

HSP is a multi-system vasculitic disorder which can affect: Skin, Joints, G.I, Renal, Cerebral, Scrotal area & Lungs. The major long term morbidity is related to renal involvement.

This guideline is intended for the use of health professionals caring for children with suspected or diagnosed Henoch Schönlein Purpura. It provides guidance on investigations, diagnosis, management and referral.

Related Documents:

Urine Sample Collection UHL Childrens Guideline C90/2005

2. Initial Management of Newly Diagnosed HSP

Diagnosis of HSP

- Purpura, predominantly lower limbs and buttocks
- Abdominal pain (75% cases)
- Arthritis / arthralgia (66% cases)
- Haematuria / proteinuria
- Hypertension

Exclude of other causes of purpuric rash

(eg. Meningococcal septicaemia, DIC, ALL, TTP, NAI, other vasculitides

- Normal urinalysis (no or trace protein) AND
- Normotensive

- Any Haematuria or Proteinuria on dipstick
 AND / OR
- Hypertension (bp > 95th centile on 3 separate readings)*
- FBC, Urea, electrolytes, creatinine, albumin
- Urine protein:creatinine ratio (uPCR)

Any indication for admission?

- Hypertension
- Oedema
- Abnormal blood or urine test results
- Severe joint pain
- Severe abdo pain
- GI Haemorrhage
- Neurological symptoms
- Other acute complications e.g. orchitis
- Confirm diagnosis with registrar or consultant.

NO

- Organise general paediatric review within 1 week
- Counsel re: indications for further medical review
- Provide urine containers for early morning urine specimen (EMU)
- Provide infoKID.org.uk web address for information on HSP

*see BP centile charts (appendix)

Admit under general paediatrics. Are any of the following present?

- Hypertension (BP>95th x3readings)
- Urine Protein:creatinine ratio (uPCR) >100 mg/mmol creatinine
- Macroscopic haematuria
- Albumin < 30 g/dl
- eGFR < 90ml/min/1.73m²

Refer to Paediatric Nephrology

Next Review: June 2026

YES

2.1 Clinical Procedure

Diagnosis: Usually clinical No specific diagnostic test

It is important to consider other causes of a non-blanching rash

ALL children require:

- Urine dipstick
- Blood pressure
- Assessment for fluid overload and nephrosis

Investigations:

Consider the following if uncertainty about diagnosis

- FBC
- Clotting
- U&E
- Autoantibodies

If urinalysis shows 2+ proteinuria or more, check U&E's, Alb, FBC, urine Protein/creatinine ratio

Admit: If considered clinically necessary e.g.

- Severe symptoms of joint pain
- Severe abdominal pain
- G I haemorrhage
- Neurological symptoms
- Orchitis
- Evidence of acute glomerulonephritis, nephrotic syndrome or abnormal renal function (hypertension, oedema, abnormal blood or urine results)

Clinical course:

- HSP is usually self-limiting (most remit within 6 weeks).
- A minority may relapse
- Long term morbidity is related to renal involvement
- If the kidneys are involved, this usually manifests within 3 months from the date of onset – but can present up to 12 months later

Management:

• Joint symptoms:

Simple analgesia:

e.g. Paracetamol or NSAIDS (discuss with nephrology if

hypertensive or evidence of renal

involvement)

Abdominal pain:

Simple analgesia

Severe gut involvement consider oral Prednisolone 1mg/kg/day (max 60mgs) for up to 2 weeks Consider surgical review

Renal involvement:

If Haematuria or proteinuria or Hypertension (BP>95th centile on three readings see charts) FBC, U&E's, Alb, Early morning Urine Prot/creat ratio (uPCR)

Seek opinion of Paed Nephrologist if -

hypertensive, uPCR >100mg/mmol, (early morning specimen) **Macro**scopic haematuria Alb <30g/dl eGFR<90ml/min/1.73m² (height x 40/creat)

The aim is for early detection of those with severe renal involvement, for treatment with immunosuppression, prior to the development of scarring

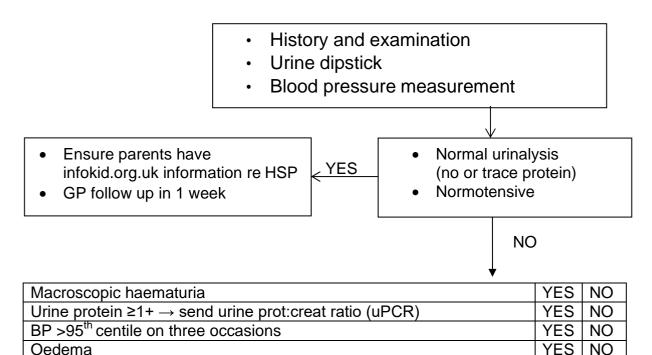
- All patients BP and early morning urine dipstick at 1 and 2 weeks 1, 3 and 6 months post diagnosis (consider requesting GP follow up with template letter, this can only occur if we can give GP > 1 weeks' notice, so first review should occur within hospital setting.)
- Note also it may be unrealistic to expect GP's to screen for hypertension in the very young, if a small adult cuff is too big the child should attend a paediatric setting for BP screening
- If all follow up is to occur within the hospital setting the same guidance for frequency and need for referral should be followed and it should be overseen by a member of the general paediatric team
- Review or early clinic appointment if symptomatic
- Children with recurrent episode should be monitored as for first episodes

2.2 FOLLOW UP referral to Paediatric Nephrology:

- Any child with persistent proteinuria (2+ or more) beyond 3 months from the onset.
- Persistent haematuria beyond 12 months
- Hypertension
- Abnormal renal function

ALL patients with confirmed renal involvement need long-term follow-up

General Paediatric Review at 1 Week Following Diagnosis



If NO to ALL of above (i.e. microscopic haematuria)

- Day Care Follow up in one week. As per guideline for GP follow up.
- Ensure patient/parents have infoKID.org.uk website address or print out infoKID HSP leaflet if parents have no computer access

If YES to ANY of above

- FBC, U&E ,bone, LFT, Clotting, ASOT, ANA, dsDNA, ANCA, C3, C4
- Renal USS
- Early morning urine for urine protein:creat ratio (uPCR)
- Ensure patient/parents have infoKID.org.uk website address or print out infoKID HSP leaflet if parents have no computer access
- If investigations normal and uPCR does not show significant proteinuria followup as per guideline for GP (non-urgent renal follow up for persistent microscopic haematuria)
- If above investigations abnormal discuss with nephrology.
 Refer to paediatric nephrology for review urgent opd if uPCR > 200 mg/mmol or uPCR > 100 mg/mmol and rising

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| General l | Paediatric Pathwa | ay for children with H | ISP | Nephritis | | | | | |
|--|--|--|--------------|----------------|--|--|--|--|--|
| ie. All patients | with microscopic haemat | uria with no proteinuria at one | week p | oost diagnosis | | | | | |
| Date of diag | nosis: | 95 th centile for bp: | | | | | | | |
| 2 weeks post | Macroscopic haematuria | - | YES | NO | | | | | |
| diagnosis | Urine protein ≥1+ → send | d urine prot:creat ratio (uPCR) | YES | NO | | | | | |
| (date): | uPCR >200 mg/mmol or > | >100 mg/mmol and increasing | | | | | | | |
| | BP >95 th centile on three | occasions | YES | NO | | | | | |
| | Oedema | | YES | NO | | | | | |
| | If YES to any of above: | | | | | | | | |
| | 1) FBC, PRP, Clotting | , ASOT, ANA, dsDNA, ANCA, C3, | C4 | | | | | | |
| | 2) Renal USS | | | | | | | | |
| | Refer to paediatri | c nephrology – for review withir | 1 wee | k | | | | | |
| If NO to all o | of above, arrange paediatr | ic review for 1 month following | diagn | osis | | | | | |
| 1 month post | Macroscopic haematuria | | YES | NO | | | | | |
| diagnosis | Urine protein ≥1+ → send | d urine prot:creat ratio (uPCR) | YES | NO | | | | | |
| (date): | uPCR >200 mg/mmol or > | >100 mg/mmol and increasing | | | | | | | |
| | BP >95 th centile on three | occasions | YES | NO | | | | | |
| | Oedema | | YES | NO | | | | | |
| | 2) Renal USS | r, ASOT, ANA, dsDNA, ANCA, C3, c nephrology – for review withir | | ks | | | | | |
| If NO to all o | | ic review for 2 months following | | | | | | | |
| 2 months | Macroscopic haematuria | | YES | NO | | | | | |
| post | Urine protein ≥1+ → send | d urine prot:creat ratio (uPCR) | YES | NO | | | | | |
| diagnosis | uPCR >100 mg/mmol | | | | | | | | |
| (date): | BP >95 th centile on three | occasions | YES | NO | | | | | |
| | Oedema | | YES | NO | | | | | |
| | 2) Renal USS3) Refer to paediatri | c nephrology – for review within | n 2 wee | | | | | | |
| | | ic review for 3 months following | | | | | | | |
| 3 months | Macroscopic haematuria | | YES | NO | | | | | |
| post | • | urine prot:creat ratio (uPCR) | YES | NO | | | | | |
| diagnosis | uPCR >100 mg/mmol | | \ \rac{1}{2} | | | | | | |
| (date): | BP >95 th centile on three | occasions | YES | NO | | | | | |
| | Oedema | | YES | NO | | | | | |
| If YES to any of above: 1) FBC, PRP, Clotting, ASOT, ANA, dsDNA, ANCA, C3, C4 2) Renal USS 3) Refer to paediatric nephrology – for review within 1 month If NO to all of above, arrange paediatric review for 6 months following diagnosis | | | | | | | | | |
| II NO to all o | i above, arrange paediatr | ic review for a months following | g ulagn | 10313 | | | | | |

| 6 months | Macroscopic haematuria | | YES | NO | | | | | | | |
|--|---|--|-----|----|--|--|--|--|--|--|--|
| post | Urine protein ≥ 1+ → send | urine prot:creat ratio (uPCR) | YES | ОИ | | | | | | | |
| diagnosis | uPCR >100 mg/mmol | | | | | | | | | | |
| (date): | BP >95 th centile on three o | ccasions | YES | NO | | | | | | | |
| | Oedema | | YES | NO | | | | | | | |
| | If YES to any of above: | | | | | | | | | | |
| | 1) FBC, PRP, Clotting, ASOT, ANA, dsDNA, ANCA, C3, C4 | | | | | | | | | | |
| | 2) Renal USS | | | | | | | | | | |
| | 3) Refer to paediatric nephrology – for review within 1 month | | | | | | | | | | |
| If NO to all of above, arrange paediatric review for 12 months following diagnosis | | | | | | | | | | | |
| 12 months | Macroscopic OR MICROSC | OPIC haematuria | YES | NO | | | | | | | |
| post | Urine protein ≥1+ → send | urine prot:creat ratio (uPCR) | YES | NO | | | | | | | |
| diagnosis | uPCR > 50 mg/mmol | | | | | | | | | | |
| (date): | BP >95 th centile on three o | YES | NO | | | | | | | | |
| | Oedema | | YES | NO | | | | | | | |
| | If YES to any of above: | | | | | | | | | | |
| Continue to | 1) FBC, PRP, Clotting, | ASOT, ANA, dsDNA, ANCA, C3, | C4 | | | | | | | | |
| review 6 | 2) Renal USS | | | | | | | | | | |
| monthly | Refer to paediatric | nephrology – for routine revie | ew | | | | | | | | |
| | | | | | | | | | | | |
| If NO to all of | above for 2 consecutive clir | nic visits 6 months apart and | | | | | | | | | |
| If urinalysis ne | gative for ≥6 months and | Discharge – no further follow | up | | | | | | | | |
| never had a hi | story of proteinuria ≥1+ | | | | | | | | | | |
| | | | | | | | | | | | |
| If urinalysis ne | gative for ≥6 months | Discharge - arrange lifelong annual GP | | | | | | | | | |
| but history of | proteinuria ≥1+ | review of BP | | | | | | | | | |
| | | urine dipstick for proteinuria | | | | | | | | | |
| | | All female patients | | | | | | | | | |
| | | counselled about the need to tell their GP | | | | | | | | | |
| | | and obstetrician about their history of | | | | | | | | | |
| | | HSP if they become pregnant. | | | | | | | | | |

Pathway for patients referred back during GP assessment period:

| Macroscopic haematuria | YES | NO |
|--|-----|----|
| Urine protein ≥1+ → send urine prot:creat ratio | YES | NO |
| uPCR >200 mg/mmol or >100 mg/mmol and increasing | | |
| BP >95 th centile on three occasions | YES | NO |
| Oedema | YES | NO |

If NO to ALL of above (ie. Only microscopic haematuria without significant proteinuria)

- General Paediatric follow up
 - o within one week if less than 2 months following diagnosis
 - o within two weeks if more than 2 months following diagnosis.
- Print out general paediatric pathway (p6 and 7) and file in notes

If YES to ANY of above

- Refer to paediatric nephrology on call consultant
- Request Renal USS

Source of useful information for parents: https://www.infokid.org.uk/

3. Education and Training

No new training is required to implement this guideline.

4. Monitoring and Audit Criteria

None

5. Supporting Documents and Key References

- 1. Nottingham University Hospital Clinical Guideline for the Management of Henoch Schönlein Purpura. Revised Nov 2019
- 2. Narchi H. Risk of long term renal impairment and duration of follow up recommended for Henoch Schönlein purpura with normal or minimal urinary findings: a systematic review. *Arch Dis Child* 2005;90;916-920
- 3. Tizard E J, Hamilton-Ayres M J J. Henoch-Schönlein Purpura. *Arch Dis Child Pract Ed*.2008;93:1-8

6. Key Words

Haematuria, Henoch Schönlein Purpura, HSP, Hypertension, Proteinuria, Nephrology, Urinalysis

The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs.

As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.

| Contact & review details | | | | | | | | | | |
|--|-----------------------|--|--|--|--|--|--|--|--|--|
| Guideline Lead (Name and Title) | Executive Lead | | | | | | | | | |
| A. Hall - Associate Specialist | Chief Medical Officer | | | | | | | | | |
| Details of Changes made during review: Removed COVID specific related guidance Added assessment pathways | | | | | | | | | | |

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University Hospitals of Leicester NHS

Leicester Royal Infirmary

Infirmary Square Leicester LE1 5WW Tel: 0300 303 1573

Switchboard Fax: 0116 258 7565

| | if urinalysis/blood pressure normal. /Date of Diagnosis:// | | | |
|-------------------|---|--------|-------------|-----------------|
| Dear Dr | , | | | |
| RE: | | | | |
| _ | ed with Henoch-Schönlein Pupura (HSP). T as:/using a small adult / adu | | ialysis was | normal and the |
| 95% centile blood | d pressure for height centile is / | | | |
| | HSP require follow up screening for the domain to 50% of patients, usually within the find initial episode. | - | | • |
| _ | teful if you could perform on-going clinical o the paediatrician on call if any signs of n | | _ | to the proforma |
| 2 weeks post | Macroscopic or microscopic haematuria | Yes | No | |
| diagnosis | Urine protein ≥1+ | Yes | No | |
| (date): | BP >95th centile on three occasions | Yes | No | |
| | bi >55th centile on timee occasions | 103 | NO | |
| | Oedema | Yes | No | |
| | L bove refer to paediatrician on call (isolated | | | |
| • | naturia can be referred for outpatient asse , review 1 month following diagnosis. | ssment | :) | |
| 4 weeks post | Macroscopic or microscopic haematuria | Yes | No | <u>-</u> |
| diagnosis (date): | Urine protein ≥1+ | Yes | No | |
| | BP >95th centile on three occasions | Yes | No | |
| | Oedema | Yes | No | |

If YES to ANY of above refer to paediatrician on call (isolated microscopic haematuria can be referred for outpatient assessment)

No to all of above, review 3 months following diagnosis.

| 3 months post | Macroscopic or microscopic haematuria | Yes | No |
|---------------|---------------------------------------|-----|----|
| diagnosis | Urine protein ≥1+ | Yes | No |
| (date): | | | |
| | BP >95th centile on three occasions | Yes | No |
| | Oedema | Yes | No |

If YES to ANY of above refer to paediatrician on call (isolated microscopic haematuria or low grade proteinuria can be referred for outpatient assessment)

No to all of above, review 6 months following diagnosis.

| 6 months post | Macroscopic or microscopic haematuria | Yes | No |
|---------------|---------------------------------------|-----|----|
| diagnosis | Urine protein ≥1+ | Yes | No |
| (date): | | | |
| | BP >95th centile on three occasions | Yes | No |
| | Oedema | Yes | No |

If YES to ANY of above refer to paediatrician on call (isolated microscopic haematuria or low grade proteinuria can be referred for outpatient assessment)

No to all of above, no further follow up required.

Please note if a child has recurrent episodes of HSP it is advised that their follow up is commenced from the beginning as for first presentation. Children with recurrent episodes are at increased risk of long term problems. Thank you for your assistance in the management of this child.

BP Centile Charts

| See Parentise | | | Boys - Height Centile | | | | | | | | | | | | | |
|--|-----|----------------------|-----------------------|-----|-----|-----|-----|-----|-----|----|----------|----|----|----|----------|----------|
| 1 | Age | BP centile | | | | | | | , | Ĭ | | | | | | |
| 1 | | al. | | | | | | | | | | | | | 90% | 95% |
| 1 | | | | | | | | | | | | | | | 42 | 42 |
| 10 | 1 | | | | | | | | | | | | | | 54 57 | 54 57 |
| Som | | | | | | | | | | | | | | | 69 | 69 |
| Sph | | 50 th | | | | | | | | | | | | | 46 | 46 |
| Sp. 12 | 2 | | 100 | 100 | 101 | 102 | 103 | 103 | 104 | 55 | 55 | 56 | 56 | 57 | 58 | 58 |
| Sche | | | | 105 | 105 | 106 | 107 | 107 | 108 | 57 | 58 | 58 | 59 | 60 | 61 | 61 |
| 3 | | | | | | | | | | | | | | | 73 | 73 |
| 95\(^n\) 106\(^n\) 106\(^n\) 107\(^n\) 107\(^n\) 108\(^n\) 109\(^n\) 109\(^n\) 60\(^n\) 61\(^n\) 61\(^n\) 62\(^n\) 63\(^n\) 64\(^n\) 65\(^n\) 66\(^n\) 67\(^n\) 67\(^n\) 78\(^n\) 79\(^n\) 79\(^n\) 109\(^n\) | 2 | | | | | | | | | | | | | | 49 | 49 |
| Span 12 118 118 119 119 120 121 122 72 73 73 74 75 | 3 | | | | | | | | | | | | | | 61 64 | 61 64 |
| Caph | | | | | | | | | | | | | | | 76 | 76 |
| 4 graph 102 103 104 105 105 106 107 60 61 62 62 63 63 65 66 67 68 67 69 67 69 67 68 67 67 67 68 69 69 69 60 61 61 61 61 61 61 61 | | EO th | | | | | | | | | | | | | 52 | 52 |
| 95th 107 107 108 108 108 109 110 110 110 63 64 65 66 67 78 79 87 95 95 6 96 96 151 51 52 53 54 65 66 67 95 66 96 96 151 51 52 53 54 65 66 66 97 95 96 96 96 96 96 96 96 96 96 96 96 96 96 | 4 | | 102 | 103 | 104 | 105 | 105 | 106 | 107 | 60 | 61 | 62 | 62 | 63 | 64 | 64 |
| S | | 95th | 1 | | | | | | | | | | | | 67 | 68 |
| 10 | | | | | | | | | | | | | | | 79 | 80 |
| Composition 107 108 109 110 111 112 126 127 128 139 120 121 121 122 123 124 78 79 80 81 82 | 5 | | | | | | | | | | | | | | 55 67 | 55 67 |
| 95° +12 | J | oe th | | | | | | | | | | | | | 70 | 71 |
| Company Comp | | 95 th +12 | | | | 121 | | | | 78 | 79 | 80 | | 82 | 82 | 83 |
| So | | 50 th | | | | | | | | | | | | | 57 | 58 |
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| 7 90 th 106 107 108 109 110 111 111 110 68 68 69 70 70 70 95 th 110 110 111 111 111 112 112 112 113 115 116 117 72 73 73 74 75 95 th 12 12 122 121 114 115 116 117 72 73 73 74 75 95 th 12 12 122 123 124 126 127 128 83 83 84 85 85 85 89 90 th 107 108 109 110 111 112 112 112 169 70 70 70 71 72 95 th 111 112 112 112 114 115 116 117 72 73 73 74 75 95 th 12 123 124 124 126 127 128 129 84 85 85 86 87 89 90 th 107 108 109 110 111 112 112 112 112 117 72 73 73 74 75 95 th 111 112 112 114 115 116 117 72 73 73 74 75 95 th 12 123 124 124 126 127 128 129 84 85 85 86 87 87 99 99 100 101 101 101 57 58 59 60 61 61 89 90 th 107 108 109 110 111 111 112 113 115 116 118 119 74 74 75 76 76 76 95 th 112 112 113 115 116 118 119 74 74 75 76 76 76 95 th 12 123 124 124 125 127 128 130 131 86 86 87 88 88 88 89 99 100 101 102 103 59 60 61 62 63 63 64 87 88 88 88 89 99 100 101 102 103 69 60 61 62 63 63 64 87 88 88 88 89 89 90 101 101 102 103 69 60 61 62 63 63 64 87 88 88 88 89 99 100 101 102 103 69 60 61 62 63 63 63 63 63 63 63 63 63 63 63 63 63 | | Q5 th | | | | | | | | | | | | | 72 | 73 |
| 7 | | | | | | | | | | | | | | | 84 59 | 85 59 |
| 95th 110 110 111 112 114 115 116 71 71 727 73 73 73 73 73 75th 12 122 123 124 126 127 128 83 83 84 85 85 85 85 85 85 85 | 7 | | | | | | | | | | | | | | 59 71 | 59 71 |
| SQ ^h 95 96 97 98 99 99 100 57 57 58 59 59 59 59 59 59 59 | , | 95 th | | | | | | | | | | | | | 74 | 74 |
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| S5 th + 12 | | | 1 | | | | | | | | | | | | 60 | 60 |
| 95 th +12 | 8 | | | | | | | | | | | | | | 72 | 73 |
| S0h 96 97 98 99 100 101 101 107 71 72 73 74 | | 95 th +12 | | | | | | | | | | | | | 75 97 | 75 97 |
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| 95th +12 | | | | | | | | | | | | | | | 75 70 | 76 70 |
| 11 | | 95 th +12 | | | | | | | | | | | | | 78 90 | 78 90 |
| Conth Cont | 11 | | - | | | | | | | _ | | | | | 63 | 63 |
| Cath 95th + 12 126 126 128 130 132 135 136 89 90 90 90 90 90 90 90 | | | | | | | | | | | | | | | 76 | 76 |
| 12 | | 95 th | | | | | | | | 77 | | 78 | | 78 | 78 | 78 |
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| 95th +12 | | | | | | | | | | | | | | | 76 79 | 76 79 |
| 13 | | 95 th +12 | | | | | | | | | | | | | 91 | 91 |
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| 95 th +12 | | | | | | | | | | | | | | | 77 | 77 |
| 14 | | | | | | | | | | | | | | | 81 93 | 81 93 |
| 119 120 123 126 127 128 129 74 74 75 77 78 | 14 | | | | | | | | | | | | | | 66 | 67 |
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| 95 th +12 | | os th | | | | | | | | | | | | | 83 | 84 |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | 95 th +12 | - | | | | | | | | | | | | 95 | 96 |
| acth of the position of the p | 15 | | | | | | | | | | | | | | 67 | 68 |
| 95 th +12 139 141 143 144 146 147 147 90 91 93 95 96 16 | | | | | | | | | | | | | | | 81 85 | 81 85 |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | 95 th +12 | | | | | | | | | | | | | 97 | 97 |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | 16 | | | | | | | | | | | | | | 69 | 69 |
| a5th 95th +12 130 131 133 134 135 136 137 80 81 83 84 85 95th +12 142 143 145 146 147 148 149 92 93 95 96 97 17 50th 90th 128 129 130 131 132 133 134 78 79 80 81 82 | | | | | | | | | | | | | | | 82 | 82 |
| 17 | | os th | | | | | | | | | | | | | 86 | 86 |
| an th 128 129 130 131 132 133 134 78 79 80 81 82 | 47 | | | | | | | | | _ | | | | | 98 | 98 |
| St. 1 | 17 | | | | | | | | | | | | | | 70 82 | 70 83 |
| | | anth asth | 132 | 133 | 134 | 135 | 137 | 138 | 134 | 81 | 79 82 | 84 | 85 | 86 | 86 | 87 |
| 95 th +12 144 145 146 147 149 150 150 93 94 96 97 98 | | 95 th +12 | | | | | | | | | | | | | 98 | 99 |
| · · · · · · · · · · · · · · · · · · · | | | | | | | | | | | | | | | | |

| | | | Girls - Height Centile | | | | | | | | | | | | |
|-----|--|------------|------------------------|------------|------------|------------|------------|------------|----------|----------|----------|------------|----------|----------|----------|
| Age | BP centile | 5% | 10% | 25% | SBP 50% | 75% | 90% | 95% | 5% | 10% | 25% | DBP 50% | 75% | 90% | 95% |
| 1 | 5∩ th | 84 | 85 | 86 | 86 | 87 | 88 | 88 | 41 | 42 | 42 | 43 | 44 | 45 | 46 |
| | 9∩ th | 98 | 99 | 99 | 100 | 101 | 102 | 102 | 54 | 55 | 55 | 56 | 57 | 58 | 58 |
| | 95 th +12 | 101 113 | 102 114 | 102 114 | 103 115 | 104 116 | 105 117 | 105 117 | 59 71 | 59 71 | 60 72 | 60 72 | 61 73 | 62 74 | 62 74 |
| 2 | 50 th | 87 | 87 | 88 | 89 | 90 | 91 | 91 | 45 | 46 | 47 | 48 | 49 | 50 | 51 |
| | 90 th | 101 104 | 101 105 | 102 106 | 103 106 | 104 107 | 105 108 | 106 109 | 58 62 | 58 63 | 59 63 | 60 64 | 61 65 | 62 66 | 62 66 |
| | 95 th 95 th +12 | 116 | 105 | 118 | 118 | 119 | 120 | 109 | 62 74 | 75 | 75 | 76 | 77 | 78 | 78 |
| 3 | 50 th | 88 | 89 | 89 | 90 | 91 | 92 | 93 | 48 | 48 | 49 | 50 | 51 | 53 | 53 |
| | an th | 102 106 | 103 106 | 104 107 | 104 108 | 105 109 | 106 110 | 107 110 | 60 64 | 61 65 | 61 65 | 62 66 | 63 67 | 64 68 | 65 69 |
| | 95 th 95 th +12 | 118 | 118 | 119 | 120 | 121 | 122 | 122 | 76 | 77 | 77 | 78 | 79 | 80 | 81 |
| 4 | 50 th | 89 | 90 | 91 | 92 | 93 | 94 | 94 | 50 | 51 | 51 | 53 | 54 | 55 | 55 |
| | an th | 103 107 | 104 108 | 105 109 | 106 109 | 107 110 | 108 111 | 108 112 | 62 66 | 63 67 | 64 68 | 65 69 | 66 70 | 67 70 | 67 71 |
| | 95 th 95 th +12 | 119 | 120 | 121 | 121 | 122 | 123 | 124 | 78 | 79 | 80 | 81 | 82 | 82 | 83 |
| 5 | 5∩ th | 90 | 91 | 92 106 | 93 | 94 | 95 | 96 110 | 52 64 | 52 65 | 53 66 | 55 67 | 56 68 | 57 60 | 57 70 |
| | 90 th | 104 108 | 105 109 | 106 109 | 107 110 | 108 111 | 109 112 | 110 113 | 64 68 | 65 69 | 66 70 | 67 71 | 68 72 | 69 73 | 70 73 |
| | 95 th 95 th +12 | 120 | 121 | 121 | 122 | 123 | 124 | 125 | 80 | 81 | 82 | 83 | 84 | 85 | 85 |
| 6 | 5∩ th | 92 | 92 | 93 | 94 | 96 | 97 | 97 | 54 | 54 | 55 | 56 | 57 | 58 | 59 |
| | 90 th 95 th | 105 109 | 106 109 | 107 110 | 108 111 | 109 112 | 110 113 | 111 114 | 67 70 | 67 71 | 68 72 | 69 72 | 70 73 | 71 74 | 71 74 |
| | 95 th +12 | 121 | 121 | 122 | 123 | 124 | 125 | 126 | 82 | 83 | 84 | 84 | 85 | 86 | 86 |
| 7 | 50 th | 92 | 93 | 94 | 95 | 97 | 98 | 99 | 55 | 55 | 56 | 57 | 58 | 59 | 60 |
| | an th | 106 109 | 106 110 | 107 111 | 109 112 | 110 113 | 111 114 | 112 115 | 68 72 | 68 72 | 69 73 | 70 73 | 71 74 | 72 74 | 72 75 |
| | 95 th 95 th +12 | 103 | 122 | 123 | 124 | 125 | 126 | 127 | 84 | 84 | 85 | 85 | 86 | 86 | 87 |
| 8 | 5∩ th | 93 | 94 | 95 | 97 | 98 | 99 | 100 | 56 | 56 | 57 | 59 | 60 | 61 | 61 |
| | 90 th | 107 110 | 107 111 | 108 112 | 110 113 | 111 115 | 112 116 | 113 117 | 69 72 | 70 73 | 71 74 | 72 74 | 72 75 | 73 75 | 73 75 |
| | 95 th +12 | 122 | 123 | 124 | 125 | 127 | 128 | 129 | 84 | 75 85 | 86 | 86 | 73 87 | 73 87 | 73 87 |
| 9 | 50 th | 95 | 95 | 97 | 98 | 99 | 100 | 101 | 57 | 58 | 59 | 60 | 60 | 61 | 61 |
| | an th | 108 112 | 108 112 | 109 113 | 111 114 | 112 116 | 113 117 | 114 117 | 71 74 | 71 74 | 72 75 | 73 75 | 73 75 | 73 75 | 73 75 |
| | 95 th 95 th +12 | 124 | 124 | 125 | 126 | 128 | 129 | 130 | 86 | 86 | 87 | 87 | 87 | 87 | 87 |
| 10 | 50 th | 96 | 97 | 98 | 99 | 101 | 102 | 103 | 58 | 59 | 59 | 60 | 61 | 61 | 62 |
| | 90 th | 109 113 | 110 114 | 111 114 | 112 116 | 113 117 | 115 119 | 116 120 | 72 75 | 73 75 | 73 76 | 73 76 | 73 76 | 73 76 | 73 76 |
| | 95 th +12 | 125 | 126 | 126 | 128 | 129 | 131 | 132 | 87 | 87 | 88 | 88 | 88 | 88 | 88 |
| 11 | 50 th | 98 | 99 | 101 | 102 | 104 | 105 | 106 | 60 | 60 | 60 | 61 | 62 | 63 | 64 75 |
| | an th | 111 115 | 112 116 | 113 117 | 114 118 | 116 120 | 118 123 | 120 124 | 74 76 | 74 77 | 74 77 | 74 77 | 74 77 | 75 77 | 75 77 |
| | 95 th +12 | 127 | 128 | 129 | 130 | 132 | 135 | 136 | 88 | 89 | 89 | 89 | 89 | 89 | 89 |
| 12 | 50 th | 102 | 102 | 104 | 105 | 107 | 108 | 108 | 61 75 | 61 75 | 61 | 62 | 64 | 65 76 | 65 76 |
| | 90 th | 114 118 | 115 119 | 116 120 | 118 122 | 120 124 | 122 125 | 122 126 | 75 78 | 75 78 | 75 78 | 75 78 | 76 79 | 76 79 | 76 79 |
| | 95 th +12 | 130 | 131 | 132 | 134 | 136 | 137 | 138 | 90 | 90 | 90 | 90 | 91 | 91 | 91 |
| 13 | 50 th | 104 116 | 105 117 | 106 119 | 107 121 | 108 122 | 108 123 | 109 123 | 62 75 | 62 75 | 63 75 | 64 76 | 65 76 | 65 76 | 66 76 |
| | 90 th | 121 | 122 | 123 | 124 | 126 | 126 | 123 | 79 | 79 | 79 | 79 | 80 | 80 | 81 |
| | 95 th +12 | 133 | 134 | 135 | 136 | 138 | 138 | 139 | 91 | 91 | 91 | 91 | 92 | 92 | 93 |
| 14 | 50 th | 105 118 | 106 118 | 107 120 | 108 122 | 109 123 | 109 123 | 109 123 | 63 76 | 63 76 | 64 76 | 65 76 | 66 77 | 66 77 | 66 77 |
| | 90 th | 123 | 123 | 124 | 125 | 126 | 123 | 127 | 80 | 80 | 80 | 80 | 81 | 81 | 82 |
| | 95 th +12 | 135 | 135 | 136 | 137 | 138 | 139 | 139 | 92 | 92 | 92 | 92 | 93 | 93 | 94 |
| 15 | 5∩ th 9∩ th | 105 118 | 106 119 | 107 121 | 108 122 | 109 123 | 109 123 | 109 124 | 64 76 | 64 76 | 64 76 | 65 77 | 66 77 | 67 78 | 67 78 |
| | an th 95 th +12 | 124 | 124 | 125 | 126 | 127 | 127 | 128 | 80 | 80 | 80 | 81 | 82 | 82 | 82 |
| | | 136 | 136 | 137 | 138 | 139 | 139 | 140 | 92 | 92 | 92 | 93 | 94 | 94 | 94 |
| 16 | 50 th 90 th | 106 119 | 107 120 | 108 122 | 109 123 | 109 124 | 110 124 | 110 124 | 64 76 | 64 76 | 65 76 | 66 77 | 66 78 | 67 78 | 67 78 |
| | | 124 | 125 | 125 | 127 | 127 | 128 | 128 | 80 | 80 | 80 | 81 | 82 | 82 | 82 |
| | 95 th 95 th +12 | 136 | 137 | 137 | 139 | 139 | 140 | 140 | 92 | 92 | 92 | 93 | 94 | 94 | 94 |
| 17 | 5∩ th 9∩ th | 107 120 | 108 121 | 109 123 | 110 124 | 110 124 | 110 125 | 111 125 | 64 76 | 64 76 | 65 77 | 66 77 | 66 78 | 66 78 | 67 78 |
| | Q5 th | 125 | 125 | 126 | 127 | 128 | 128 | 128 | 80 | 80 | 80 | 81 | 82 | 82 | 82 |
| | 95 th +12 | 137 | 137 | 138 | 139 | 140 | 140 | 140 | 92 | 92 | 92 | 93 | 94 | 94 | 94 |