



**Scottish Paediatric & Adult Infection & Immunology Network (SPAIIN)**

HIV Perinatal Pathway

Pregnancy Booking Guidance

**NOTE**

This guideline is not intended to be construed or to serve as a standard of care. Standards of care are determined based on all clinical data available for an individual case and are subject to change as scientific knowledge and technology advance and patterns of care evolve. Adherence to guideline recommendations will not ensure a successful outcome in every case, nor should they be construed as including all proper methods of care or excluding other acceptable methods of care aimed at the same results. The ultimate judgement must be made by the appropriate healthcare professional(s) responsible for clinical decisions regarding a particular clinical procedure or treatment plan. This judgement should only be arrived at following discussion of the options with the patient, covering the diagnostic and treatment choices available. It is advised, however, that significant departures from the national guideline or any local guidelines derived from it should be fully documented in the patient’s case notes at the time the relevant decision is taken.

**Contents**

[Healthy Pregnancy - Booking Checklist (NSD610-019.02) 3](#_Toc134195732)

[Woman’s Health 3](#_Toc134195733)

[HIV Specific Care – New Diagnosis 4](#_Toc134195734)

[Healthy Pregnancy – 20 Weeks Checklist (NSD610-019.03) 5](#_Toc134195735)

[Continued Care 5](#_Toc134195736)

[Maternal ART – Virological Monitoring/TDM 5](#_Toc134195737)

[Maternal ART – MDT Communication 6](#_Toc134195738)

[Maternal ART – Psycho-social Support 6](#_Toc134195739)

[Premature Neonatal Care Plan – PEP/Feeding 6](#_Toc134195740)

[Healthy Pregnancy – 36 Weeks Checklist (NSD610-019.04) 7](#_Toc134195741)

[Delivery Plan 7](#_Toc134195742)

[Delivery Plan at 36 Weeks 7](#_Toc134195743)

[Maternal ART 7](#_Toc134195744)

[Neonatal Care Plan 8](#_Toc134195745)

[Healthy Pregnancy – Delivery Checklist 9](#_Toc134195746)

[Healthy Mother 9](#_Toc134195747)

[Healthy Baby 9](#_Toc134195748)

[Infant Testing Pathway 9](#_Toc134195749)

[Healthy Pregnancy – Late Presenter (NSD610-019.06) 11](#_Toc134195750)

# Healthy Pregnancy - Booking Checklist (NSD610-019.02)

Please complete the Booking Checklist electronically or print off and complete a paper version.

Obstetric Management

## Woman’s Health

* Ensure folic acid started
* Infant feeding discussed
* Delivery plan discussed
* The combined screening test for trisomy 21 is recommended as this has the best sensitivity and specificity and will minimise the number of women who may need invasive testing.
* Invasive prenatal diagnostic testing should not be performed until after the HIV status of the mother is known and should ideally be deferred until HIV PCR has been adequately suppressed.
* If not on treatment and the invasive diagnostic test procedure cannot be delayed until viral suppression is achieved, it is recommended that women should commence antiretroviral therapy (ART) to include raltegravir or dolutegravir and be given a single dose of nevirapine 200mg 2-4 hours prior to the procedure.
* [See BHIVA 2018 (2020 third interim update)](https://www.spaiin.scot.nhs.uk/wp-content/uploads/BHIVA-Pregnancy-guidelines-update-2014.pdf) [Pregnancy Guidelines – Section 8: Obstetric Management](https://www.bhiva.org/file/5f1aab1ab9aba/BHIVA-Pregnancy-guidelines-2020-3rd-interim-update.pdf)
* Sexual Health Screening
* Check sexual health screening carried out and negative. (If positive, genital tract infections should be treated according to BASHH guidelines)
* HIV Management and Prevention of Transmission

## HIV Specific Care – New Diagnosis

* Positive result given with specialist BBV team member who liaises with obstetrician to support giving diagnosis.
* Inform paediatric neonatologist of result.
* Patient referred to specialist teams as part of ANC.
* Patient referred to specialist centre for HIV care and initial consultation as soon as possible.
* Confirmatory and baseline bloods taken including HBV, HCV and resistance test.
* Ensure patient registered with GP.
* Measures taken for PMTCT discussed with patient and need to start on ART either for own health or for PMTCT depending on initial baseline blood tests.
* Efficacy of success rates discussed.
* Discuss aim to start ART as soon as possible.
* In women who commence ART in pregnancy an HIV PCR should be performed 2-4 weeks after commencing ART, at least once every trimester and at delivery, as per BHIVA guidelines.
* LFTs should be performed as per routine initiation of ART and then with each routine blood test.

# Healthy Pregnancy – 20 Weeks Checklist (NSD610-019.03)

Please complete the 20 weeks checklist electronically or print off and complete a paper version.

Obstetric Management

## Continued Care

* Confirm patient understands transmission risks and delivery options based on HIV PCR, See BHIVA 2018 (2020 third interim update) [Pregnancy Guidelines](https://www.bhiva.org/file/5f1aab1ab9aba/BHIVA-Pregnancy-guidelines-2020-3rd-interim-update.pdf)
* Discuss infant feeding advice, see BHIVA 2018 (2020 third interim update) - [Pregnancy Guidelines – Section 9.4: Infant Feeding](https://www.bhiva.org/file/5f1aab1ab9aba/BHIVA-Pregnancy-guidelines-2020-3rd-interim-update.pdf)
* Patient information leaflets are available on the BHIVA website:
  + [Leaflet 1 - HIV and feeding your newborn baby](https://www.bhiva.org/file/5bfd3080d2027/BF-Leaflet-1.pdf)
  + [Leaflet 2 - General information on infant feeding for women living with HIV](https://www.bhiva.org/file/5bfd308d5e189/BF-Leaflet-2.pdf)
* Inform patient about help available for formula feeding (contact [www.waverleycare.org](http://www.waverleycare.org/) for more information).
* Routine growth scans monthly from 28 weeks.
* Modify as obstetrically indicated.
* Contraceptive needs should be discussed
* HIV Management and Prevention of Transmission

## Maternal ART – Virological Monitoring/TDM

* Ensure appropriate ART started - See BHIVA 2018 (2020 third interim update – [Pregnancy Guidelines – Section 6: Current issues in the use of ART in pregnancy and outcomes](https://www.bhiva.org/file/5f1aab1ab9aba/BHIVA-Pregnancy-guidelines-2020-3rd-interim-update.pdf)
* In women commencing ART in pregnancy, LFTs should be performed as per routine initiation of ART and then with each routine blood test.
* Consider twice daily darunavir if initiating darunavir-based ART or if known resistance - see BHIVA 2018 (2020 third interim update) [Pregnancy Guidelines - Section 6.3: Woman is not already on cART: what to start](https://www.bhiva.org/file/5f1aab1ab9aba/BHIVA-Pregnancy-guidelines-2020-3rd-interim-update.pdf)
* Consider third trimester TDM particularly if combining tenofovir and atazanavir - see BHIVA 2018 (2020 third interim update) [Pregnancy Guidelines – Section 6.7: Pharmacokinetics of antiretrovirals in pregnancy](https://www.bhiva.org/file/5f1aab1ab9aba/BHIVA-Pregnancy-guidelines-2020-3rd-interim-update.pdf)
* Ensure pharmacy team knows of potential maternal and neonatal drugs and formulations that may be required.
* HIV PCR/CD4 count and routine biochemistry and haematology at/around 24 weeks.

## Maternal ART – MDT Communication

* Ensure regular MDT linking care between Infectious Disease/GUM, obstetrics and neonates/paediatrics.

## Maternal ART – Psycho-social Support

* Ensure partner notification complete for newly diagnosed patients and all other children screened.
* Ensure any counselling or psychiatric support needed for patient, particularly if new diagnosis, is in place.

## Premature Neonatal Care Plan – PEP/Feeding

* Ensure documented plan for neonatal PEP recorded in notes.
* Ensure paediatrician has seen maternal resistance reports, maternal ART exposure history and HIV PCR results.
* Ensure infant feeding plan documented in notes.

# Healthy Pregnancy – 36 Weeks Checklist (NSD610-019.04)

Please download and complete the 36-week checklist or print off and complete a paper version.

Obstetric Management

## Delivery Plan

* Review intrapartum/postpartum management plan for mother and baby.
* For women taking ART, a decision regarding recommended mode of delivery should be made after review of plasma HIV PCR results at 36 weeks.

## Delivery Plan at 36 Weeks

* ***If HIV PCR <50 copies/mL*** – in the absence of obstetric contraindications, a planned vaginal delivery is recommended.
* ***If HIV PCR 50-399 copies/mL*** – Pre-labour CS (PLCS) should be considered, taking into account the actual HIV PCR, the trajectory of the HIV PCR, length of time on treatment, adherence issues, obstetric factors and the woman’s views.
* ***If HIV PCR is 400 copies/mL*** – PLCS is recommended.
* Where the indication of PLCS is PMTCT, PLCS should be undertaken at between 38 and 39 weeks’ gestation.
* Ensure pharmacy team knows of potential maternal drugs and formulations that may be required.
* Notify paediatric department in advance, if planned, on admission if unplanned.
* Confirm current maternal HIV medication including dose and frequency.
* HIV Management and Prevention of Transmission

## Maternal ART

* **Detectable HIV PCR** – if plasma **HIV PCR of >50 copies/mL** at 36 weeks.  Review adherence and concomitant medication.  Perform resistance test if appropriate.  Consider further therapeutic drug monitoring.  Optimise to best regimen and consider intensification - see BHIVA 2018 (2020 third interim update) [Pregnancy Guidelines – Section 5.2.7: Failure to suppress](https://www.bhiva.org/file/5f1aab1ab9aba/BHIVA-Pregnancy-guidelines-2020-3rd-interim-update.pdf)
* **Undetectable HIV PCR** – if plasma **HIV PCR <50 copies/mL** at 36 weeks continue on current ART and check HIV PCR again at delivery.

## Neonatal Care Plan

* **PEP** – review neonatal PEP plan and ensure documented in clinical notes with delivery plan - see BHIVA 2018 (2020 third interim update) [Pregnancy Guidelines – Section 9.1: Infant PEP](https://www.bhiva.org/file/5f1aab1ab9aba/BHIVA-Pregnancy-guidelines-2020-3rd-interim-update.pdf)
* **Infant Feeding** – re-iterate advice over infant feeding. See links in “Healthy Pregnancy – 20 weeks” for further information on infant feeding. Ensure local pathway for accessing support for formula feeding accessible.

# Healthy Pregnancy – Delivery Checklist

Please download and complete the delivery checklist electronically or print off and complete a paper version.

## Healthy Mother

* All women are recommended to continue ART post-partum
* Ensure follow-up appointment arranged at HIV clinic within 4 – 6 weeks
* Ensure sufficient ART supplied on discharge to last until next HIV clinic appointment
* Ensure reproductive health advice addressed, and advise this will be revisited at 4 – 6 week follow-up
* Letter to GP

## Healthy Baby

* **Neonatal PEP** – Ensure neonatal PEP plan documented in notes.  Ensure that mother has supply to complete remaining course of neonatal PEP on discharge.
* **Neonatal Feeding** – Re-iterate advice over infant feeding. See links in “Healthy pregnancy – 20 weeks” for further information on infant feeding.

Infant Testing Pathway

Ensure baby is followed up under the local testing pathway.

For non-breastfed infants, HIV diagnostic testing should be undertaken:

* during the first 48 hours and prior to hospital discharge
* at 6 weeks (or at least 2 weeks after cessation of infant prophylaxis)
* at 12 weeks (or at least 8 weeks after cessation of infant prophylaxis)
* On other occasions if additional risk including at 2 weeks of age if HIGH RISK at delivery.

For breastfed infants, HIV diagnostic testing should be undertaken:

* during the first 48 hours and prior to hospital discharge
* at 2 weeks
* monthly for the duration of breastfeeding (maternal HIV PCR should also be checked monthly during breastfeeding)
* at 4 and 8 weeks after cessation of breastfeeding

**Infants with a positive test for HIV should be referred urgently to a specialist centre for management of HIV**

**A positive HIV diagnosis in an infant should be fed back to the obstetric unit where the infant was born to allow investigation of any avoidable factors in transmission.**

* **Immunisations** – see BHIVA 2018 (2020 third interim update) [Pregnancy Guidelines – Section 9.3: Immunisation](https://www.bhiva.org/file/5f1aab1ab9aba/BHIVA-Pregnancy-guidelines-2020-3rd-interim-update.pdf)

Infants born to HIV-positive mothers should be given the routine national immunisation schedule as outlined in the Green Book.

Rotavirus vaccine should be given to all HIV-exposed infants unless confirmed infected and shown to be severely immunosuppressed. If uncertain about administration of live vaccines, expert advice should be sought. Infants considered at VERY LOW or LOW RISK of HIV transmission may be given BCG at birth if indicated according to UK guidelines for HIV-unexposed infants.

Neonatal immunisation with or without hepatitis B immunoglobulin (HBIG) should commence within 24 hours of delivery. The national infant HBV schedule should then be followed.

**GP** – Ensure discharge letter to GP with PEP, feeding, immunisation and follow-up plan.

# Healthy Pregnancy – Late Presenter (NSD610-019.06)

Please download and complete the late presenter checklist electronically or print off and complete a paper version.

**As a matter of urgency please contact a specialist centre (in NHS Lothian or NHS GG&C) for advice.**

* See BHIVA 2018 (2020 third interim update) [Pregnancy Guidelines – Section: 6.4 Late-presenting women not on treatment](https://www.bhiva.org/file/5f1aab1ab9aba/BHIVA-Pregnancy-guidelines-2020-3rd-interim-update.pdf)
* A woman who presents after 28 weeks should commence ART without delay if not already on.
* If the HIV PCR is unknown or >100 000 HIV RNA copies/mL a three – or four – drug regimen that includes raltegravir 400mg BD or dolutegravir 50mg OD is suggested.
* An untreated woman presenting in labour at term should be given a stat dose of nevirapine 200mg and commence oral zidovudine 300mg with lamivudine 150mg BD and raltegravir 400mg BD.
* Intravenous zidovudine should be infused for the duration of the labour and delivery.
* In preterm labour (< 37+0 weeks), if the baby is unlikely to be able to absorb oral medications, consider the addition of a stat dose of tenofovir 490mg to the treatment in recommendations above to further load the baby.
* Women presenting in labour/with rupture of membranes (ROM)/requiring delivery without a documented HIV result must be recommended to have an urgent HIV test.
* A reactive/positive result must be acted upon immediately with initiation of the interventions for prevention of vertical transmission of HIV without waiting for further/formal serological confirmation.