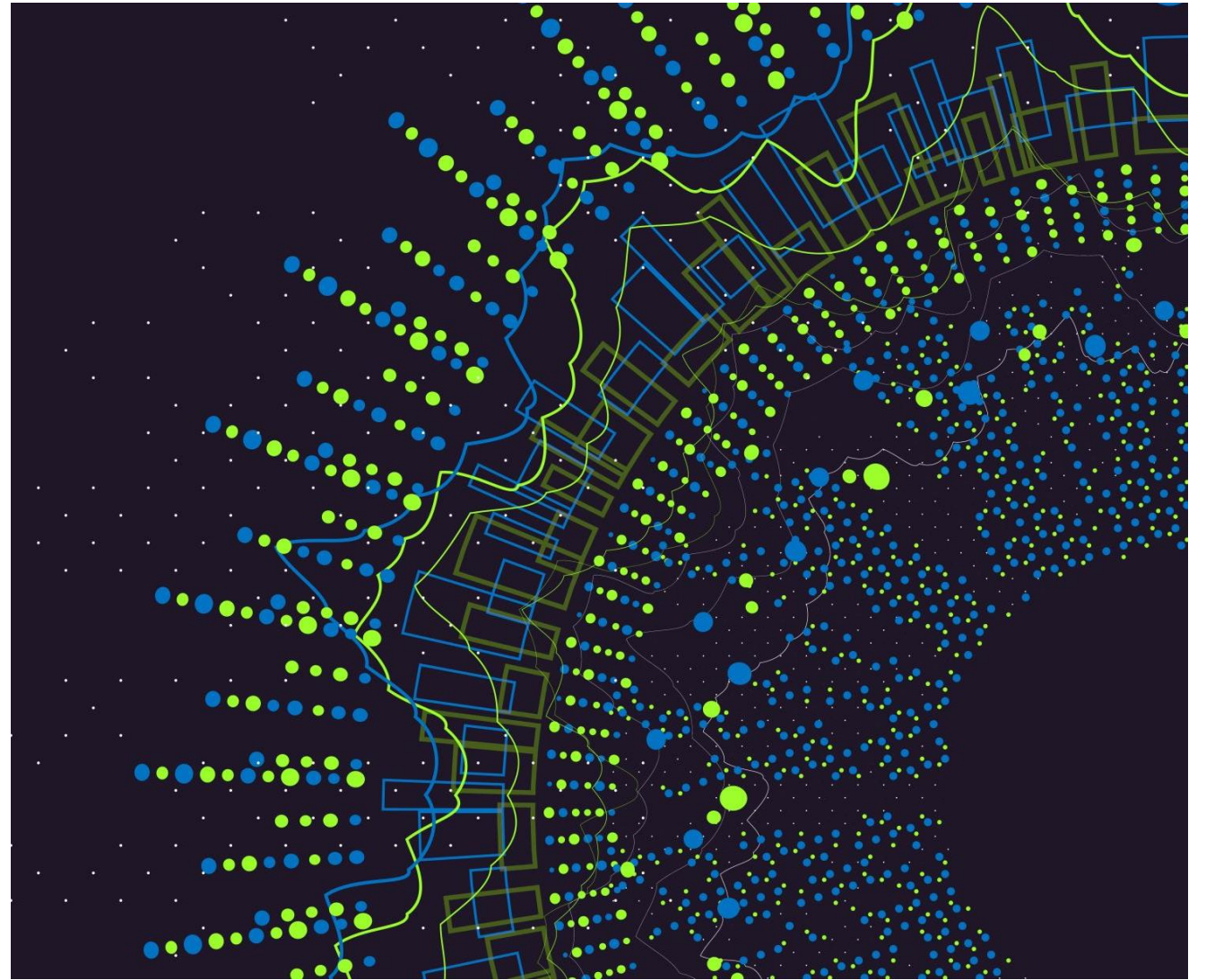


COVID-19: CARE OF MOTHER AND BABY DURING CHILDBIRTH

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Care of mother with COVID-19 and her baby

- Antepartum, Intrapartum, Postnatal

Minimise infection risk

- Baby, healthcare professionals, partner

OUTCOMES
IN
PREGNANT
WOMEN
WITH
COVID-19

Outcomes	No of studies	Pregnant women with covid-19	Comparison group	Odds ratio (95% CI)
Comparison: non-pregnant women of reproductive age with covid-19				
All-cause mortality	11	242/122 222 (0.2)	5 252/2 138 726 (0.2)	1.48 (0.62 to 3.49)
ICU admission	10	912/118 403 (0.8)	11 513/1 908 957 (0.6)	2.61 (1.84 to 3.71)
Invasive ventilation	8	310/116 458 (0.3)	3607/1 772 716 (0.2)	2.41 (2.13 to 2.71)
ECMO	5	19/30 694 (0.1)	122/432 623 (0.0)	3.71 (0.71 to 19.41)
Comparison group: pregnant women without covid-19				
Maternal outcomes:				
All-cause mortality	21	47/11 362 (0.4)	37/411 126 (0.0)	6.09 (1.82 to 20.38)
ICU admission	21	447/12 957 (3.4)	1 962/459 359 (0.4)	5.41 (3.59 to 8.14)
Preterm birth <37 w	48	1 306/12 076 (10.8)	26 068/436 964 (6.0)	1.57 (1.36 to 1.81)
Caesarean section	53	4165/12 385 (33.6)	147 645/614 402 (24.0)	1.17 (1.01 to 1.36)
Perinatal outcomes:				
Stillbirth	25	76/9 338 (0.8)	1 397/414 139 (0.3)	1.81 (1.38 to 2.37)
Neonatal death	21	16/3 153 (0.5)	28/9 263 (0.3)	2.35 (1.16 to 4.76)
Admission neonatal unit	29	687/4 072 (16.9)	6 968/193 124 (3.6)	2.18 (1.46 to 3.26)
Fetal distress	6	131/1 073 (12.2)	246/3 933 (6.3)	2.22 (1.45 to 3.41)

ANTENATAL & EARLY LABOUR

Maintain

Maintain facility-based care as recommended

Assess

Assess for COVID-19

- Screen at first point of contact
- Diagnose and assess severity

Establish

Establish infection prevention and control strategies

- Implement source control
- Universal masking
- PPE, hand hygiene, distance

IN LABOUR

If preterm (24-34 weeks) and mild COVID-19 -
corticosteroids for fetal lung maturity

Asymptomatic COVID-19

- Establish labour and further obstetric care as per usual protocol
- Regular monitoring – maternal temperature, respiratory rate, oxygen saturation
- Routine CTG not needed

Symptomatic COVID-19

- Assess severity
- Close maternal and fetal monitoring
- Multidisciplinary team involvement – obstetrician, anaesthetist, physician, neonatologist
- Medical management of COVID-19

IN LABOUR

Routine caesarean section not indicated

No contraindication for fetal blood sampling or fetal scalp electrodes

Encourage **mobility** and upright position where possible

Offer adequate **pain relief**

Entonox – keep distance, breathe into circuit, mouth piece care



All women have the right to a safe and positive childbirth experience, whether or not they have a confirmed **COVID-19** infection.



Respect and dignity



A companion of choice



Clear communication by maternity staff



Pain relief strategies



Mobility in labour where possible and birth position of choice



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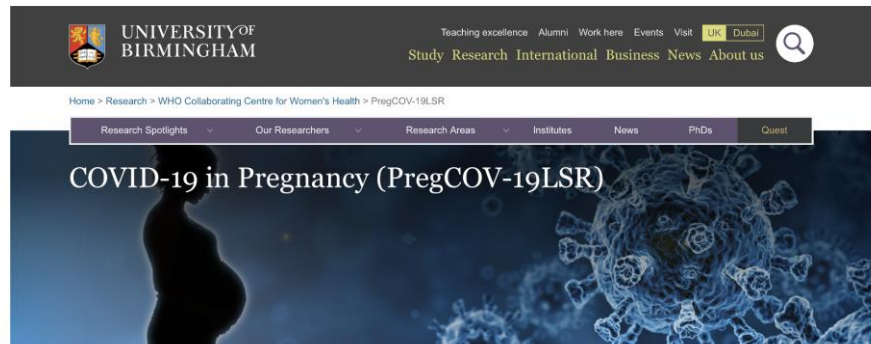
MOTHER-TO-CHILD TRANSMISSION (MTCT) CONCERNS



VERTICAL



HORIZONTAL



MTCT

Overall rates of SARS-CoV-2 positivity in babies is low

1.8% (95% CI 1.1 – 2.7%) of the 11,573 babies (99 studies) tested RT-PCR positive

vertical transmission rare

FACTORS ASSOCIATED WITH SARS- COV-2 POSITIVITY IN BABIES

Risk factors	No. of studies	No. of mother-baby dyads	Risk factor present/test positive babies n/N	Risk factor present/test negative babies n/N	OR (95% CI)
Timing of maternal infection					
Postnatal vs antenatal	10	750	19/73	103/677	4.99 (1.24 - 20.14)
3rd vs 1st or 2nd trimester	4	1346	99/99	1106/1122	0.39 (0.08 - 1.82)
Intrapartum factors					
Preterm vs term	27	3160	38/221	400/2939	1.26 (0.81 - 1.95)
Vaginal birth vs CS	36	3942	107/185	1843/3757	1.10 (0.80 - 1.53)
Postnatal care					
Not separated at birth vs separated	8	1321	33/75	544/1246	1.01 (0.47 - 2.17)
Breastfed vs not breastfed	7	1004	41/68	582/936	0.82 (0.44 - 1.54)



BIRTH

Vaginal birth safe for mother and baby

Partner present for delivery

Delayed cord clamping

Do not separate baby from mother at birth

Routine admission to neonatal unit not indicated

CAESAREAN SECTION IN WOMEN WITH COVID-19

Routine caesarean section not indicated

Schedule elective caesarean section at end of the operating list

Unwell mother – caesarean section to facilitate maternal resuscitation

Emergency caesarean section – donning PPE time consuming

Keep staff in theatres to minimum

PPE can make communication difficult – use checklist

Simulation and drills

POSTNATAL

Support mothers with skin-to-skin and kangaroo care

Rooming-in day and night with relevant infection control measures

Recommend and support breastfeeding – both asymptomatic and symptomatic women



Women with COVID-19 can **breastfeed** if they wish to do so. They should:



Practice respiratory hygiene and wear a mask



Wash hands before and after touching the baby



Routinely clean and disinfect surfaces



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ALTERNATIVES TO BREASTFEEDING

Avoid formula milk wherever possible

Use dedicated breast pump, infection control

Face covering not for babies

If a woman with **COVID-19** is too unwell to breastfeed, she can be supported to safely provide her baby with breastmilk in other ways, including by:



Expressing
milk



Enabling women
who have stopped
breastfeeding to
resume
production of
breast milk



Donor
human milk



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POSTNATAL

- Thromboprophylaxis
- If baby in NICU, maternal visit not recommended
- Postnatal physical and mental health
- Continued remote or in-person support where appropriate



WORKFORCE

Workable' Guidelines for maternity – update regular basis

Establish Senior/Experienced clinicians to lead the work

Processes to minimise COVID-19 infection risks to mothers - screen & treat

Processes to reduce staff risks - drills & skills

Reorganised Maternity Unit

- Safe zones/areas - 'low covid risk'
- High risk zones/areas - 'high covid risk'

Improve communication
Shared guidelines, daily lessons, Hand over, Zoom meetings





Thank you!