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Pregnancy and Childbirth

# COVID-19 Review of national clinical practice guidelines for key questions relating to the care of pregnant women and their babies

## Authorship

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## Objective & Methods

### Review objective

- ❖ Summarise guideline recommendations for the care of pregnant women and their babies during COVID-19 pandemic

### Methods

- ❖ Identify and review the national clinical practice guidelines that addresses each of the 14 prioritised questions
- ❖ Guidelines restricted to country level national, professional societies and government organisations
- ❖ One reviewer in each country extracted data from relevant guideline(s) and a second reviewer verified the data
- ❖ A consensus defined as >80% of countries having the same answer to the question posed



## Questions & subgroups

1. Is it recommended that pregnant women wear a surgical mask or N-95 respirator during hospital appointments?
2. Are additional ultrasound scans (e.g. growth, Doppler, biophysical profile) indicated?
3. Are antenatal steroids for fetal lung maturation contraindicated?
4. Is it recommended to undertake URGENT delivery where maternal respiratory support is required
5. Is vaginal birth contraindicated?
6. Is it recommended that ALL women coming into labour or nearing term have a COVID-19 swab test/Rapid antigen for Covid-19?
7. Is it contraindicated for partners of labouring women to accompany them during labour?
8. Is epidural/spinal analgesia contraindicated?
9. Is the use of Entonox during labour and birth contraindicated?
10. Is delayed umbilical cord clamping contraindicated?
11. Should a designated member of the neonatal team be present at birth?
12. Is “skin to skin” contact between the mother and baby contraindicated?
13. Is it recommended that otherwise well babies be separated from their mothers after birth?
14. Is breast feeding contraindicated?

### Subgroups of interest

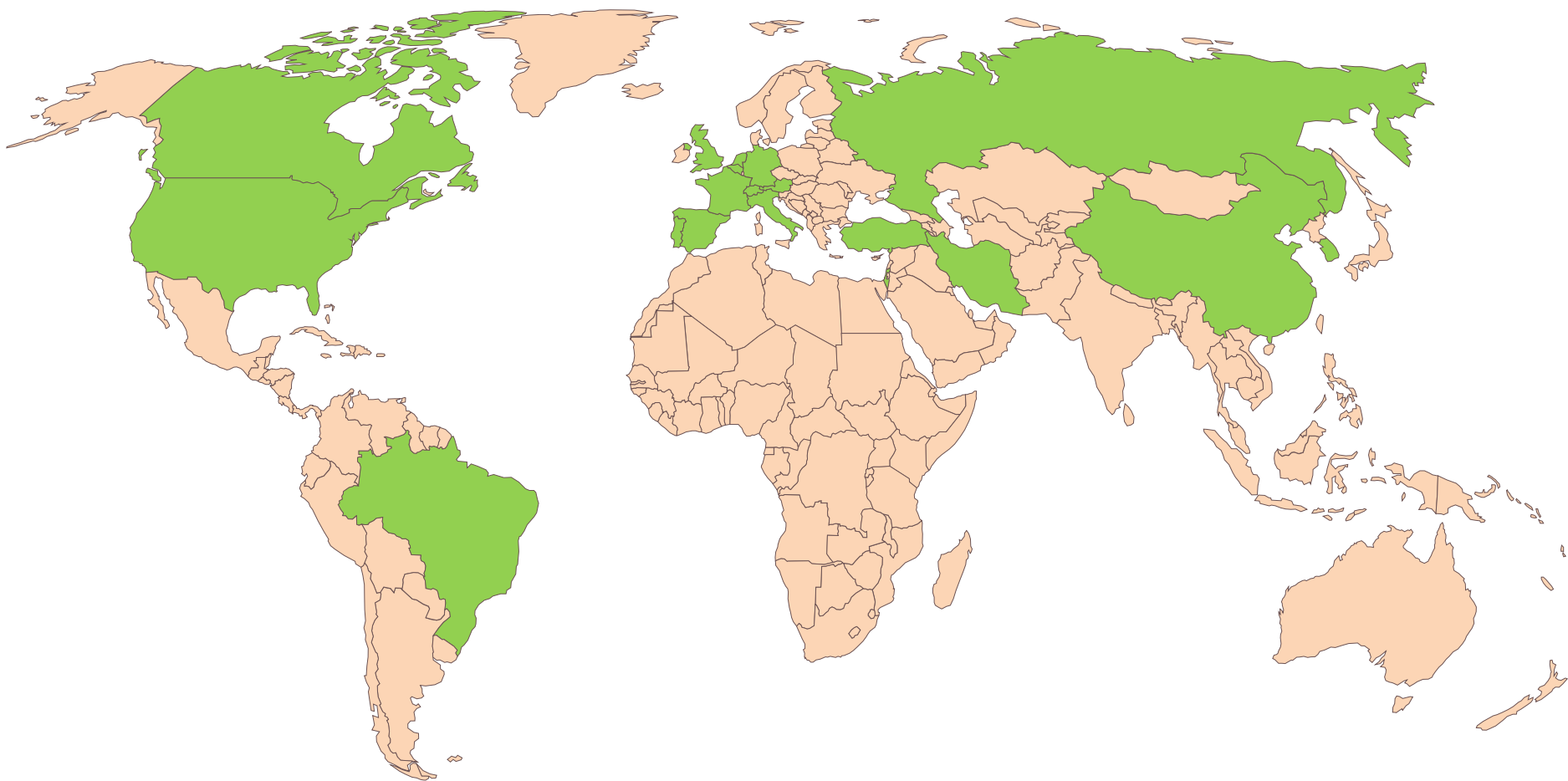
- COVID-19 positive (symptomatic or not)
- Symptomatic (fever, cough) but COVID-19 status unknown
- Asymptomatic, COVID-19 status unknown but at risk due to close contact with COVID-19 positive person
- Asymptomatic and not at risk due to to close contact with COVID-19 positive person



## Answers

1. Yes – the guideline recommends the practice
2. Consider – the guideline states that the practice may be considered under certain conditions
3. No – the guideline advises against the practice
4. The guideline states further research is needed or there is insufficient evidence to recommend
5. The guideline recommendation is unclear
6. Guidelines within country are contradictory
7. The guideline does not mention the clinical question/There is no guideline available

19 countries with more than 10,000 COVID-19 positive cases on 10<sup>th</sup> April 2020 included



# Reviewer team

Country	1 <sup>st</sup> reviewer	2 <sup>nd</sup> reviewer
Austria	Philipp Klaritsch	Martin Metzenbauer
Belgium	Liesbeth Lewi	Jute Richter
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Israel	Yoav Yinon	Lior Drukker
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Turkey	Cagri Gulumser	Metin Gülmezoglu
United Kingdom	Zarko Alfirevic	Aris Papageorghiou
United States	David M. Haas	Nimisha Kumar



## Analysis

- We explored the level of consensus in recommendations for each question across countries by looking at the number of countries within which a guideline was available that addressed the target question(s) i.e., for each question, we excluded countries in which there was no guideline or the guideline did not address the specific question or where guidelines within countries were contradictory)
- We set consensus levels at 80% i.e., where 80% of countries with a guideline that addressed the question made the same recommendation

## Consensus

(where 80% of countries with a guideline that addressed the question made the same recommendation)

- ❖ **Pregnant women who are COVID-19 positive**
  - Should wear a surgical mask or N-95 respirator during hospital appointments
  - Vaginal birth is not contraindicated
  - Epidural/spinal analgesia is not contraindicated
  
- ❖ **Pregnant women who are symptomatic but COVID-19 status unknown**
  - Should wear a surgical mask or N-95 respirator during hospital appointments
  - Vaginal birth is not contraindicated
  - Epidural/spinal analgesia is not contraindicated
  
- ❖ **Pregnant women who are asymptomatic and status unknown and at risk**
  - Should wear a surgical mask or N-95 respirator during hospital appointments
  - Vaginal birth is not contraindicated
  - Epidural/spinal analgesia is not contraindicated
  - Delayed umbilical cord clamping is not contraindicated
  
- ❖ **Pregnant women who are asymptomatic AND not at risk due to close contact with known COVID-19 positive person**
  - Should wear a surgical mask or N-95 respirator during hospital appointments
  - Partners of labouring women accompanying them during labour is not contraindicated
  - Delayed umbilical cord clamping is not contraindicated





## Consensus not reached

### ❖ **Pregnant women who are COVID-19 positive**

- Are additional ultrasound scans (e.g. growth, Doppler, biophysical profile) indicated?
- Are antenatal steroids for fetal lung maturation contraindicated?
- Is it contraindicated for partners of labouring women to accompany them during labour?
- Is the use of Entonox during labour and birth contraindicated?
- Is delayed umbilical cord clamping contraindicated?
- Should a designated member of the neonatal team be present at birth?
- Is “skin to skin” contact between the mother and baby contraindicated?
- Is it recommended that otherwise well babies be separated from their mothers after birth?
- Is breast feeding contraindicated?

### ❖ **Pregnant women who are symptomatic but COVID-19 status unknown**

- Are additional ultrasound scans (e.g. growth, Doppler, biophysical profile) indicated?
- Are antenatal steroids for fetal lung maturation contraindicated?
- Is it contraindicated for partners of labouring women to accompany them during labour?
- Is the use of Entonox during labour and birth contraindicated?
- Is delayed umbilical cord clamping contraindicated?
- Should a designated member of the neonatal team be present at birth?
- Is “skin to skin” contact between the mother and baby contraindicated?
- Is it recommended that otherwise well babies be separated from their mothers after birth?
- Is breast feeding contraindicated?



## Consensus not reached

### ❖ **Pregnant women who are asymptomatic and status unknown and at risk**

- Are antenatal steroids for fetal lung maturation contraindicated?
- Is it contraindicated for partners of labouring women to accompany them during labour?
- Is the use of Entonox during labour and birth contraindicated?
- Should a designated member of the neonatal team be present at birth?
- Is “skin to skin” contact between the mother and baby contraindicated?
- Is it recommended that otherwise well babies be separated from their mothers after birth?
- Is breast feeding contraindicated?

### ❖ **Pregnant women who are asymptomatic AND not at risk due to close contact with known COVID-19 positive person**

- Is the use of Entonox during labour and birth contraindicated?

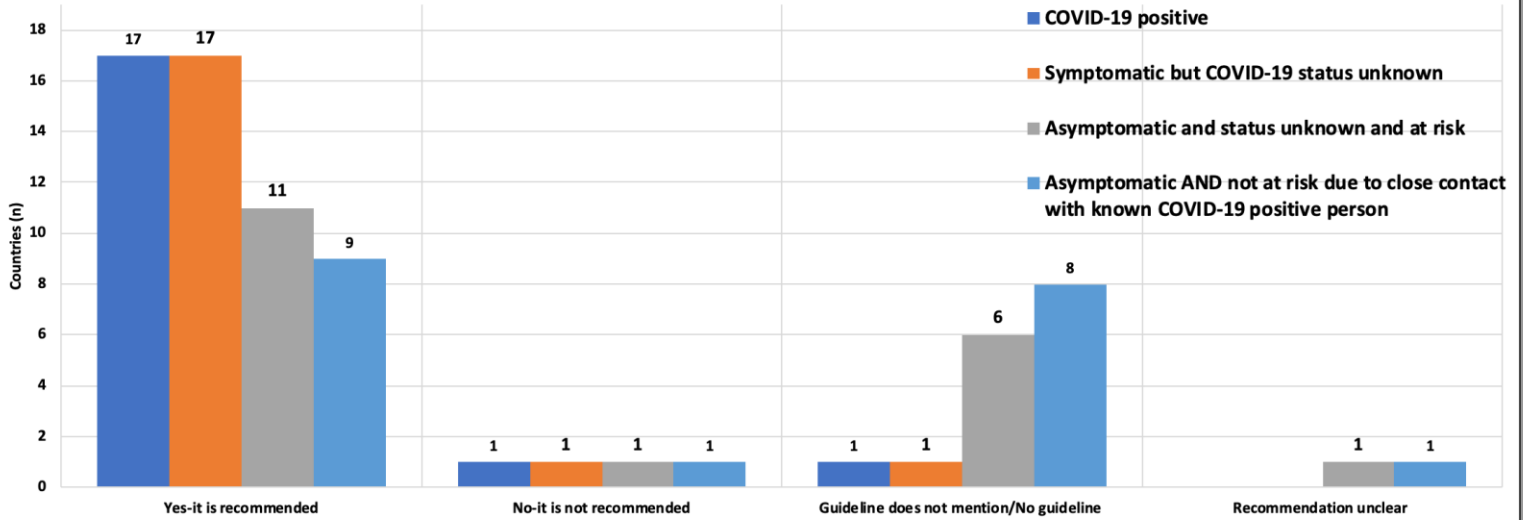
### ❖ **All women**

- Is it recommended to undertake URGENT delivery where maternal respiratory support is required
- Is it recommended that ALL women coming into labour or nearing term have a COVID-19 swab test/Rapid antigen for Covid-19?

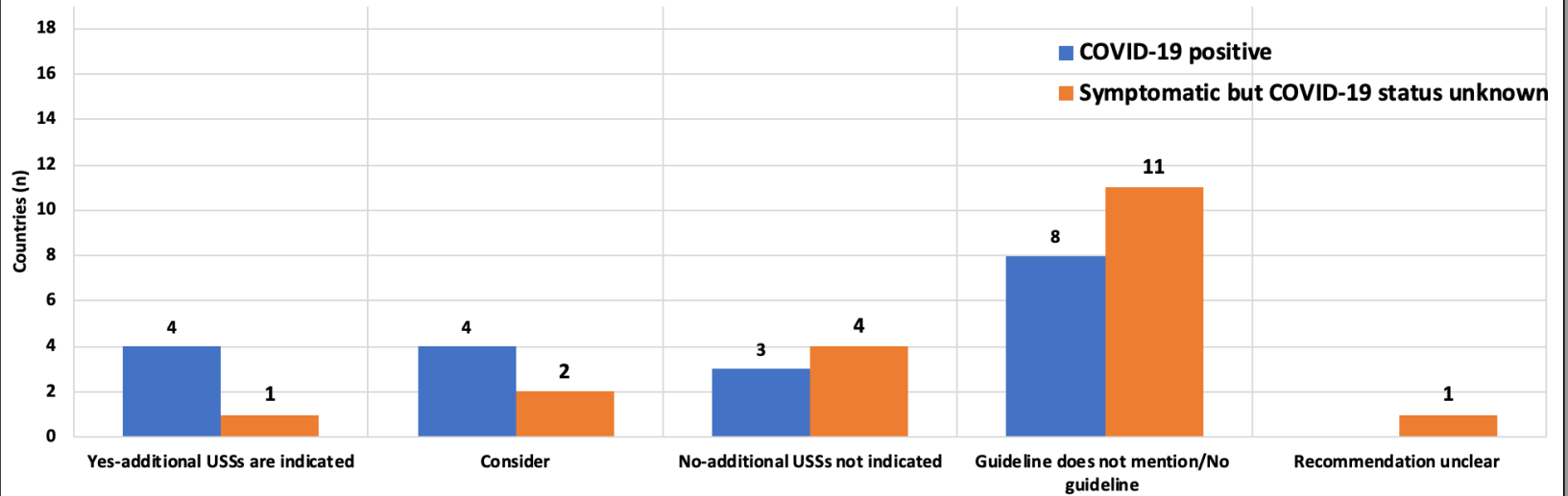


- ❖ It is important to note that this work does not make recommendations. Rather, it identifies, collates and summarises clinical practice guideline recommendations on key clinical questions available across a number of countries. We also explored the level of consensus in recommendations for each question across countries.
- ❖ No formal quality assessment of included guidelines was undertaken and we do not endorse recommendations from any country.
- ❖ Recommendations from individual countries may differ from guidance by international organisations.

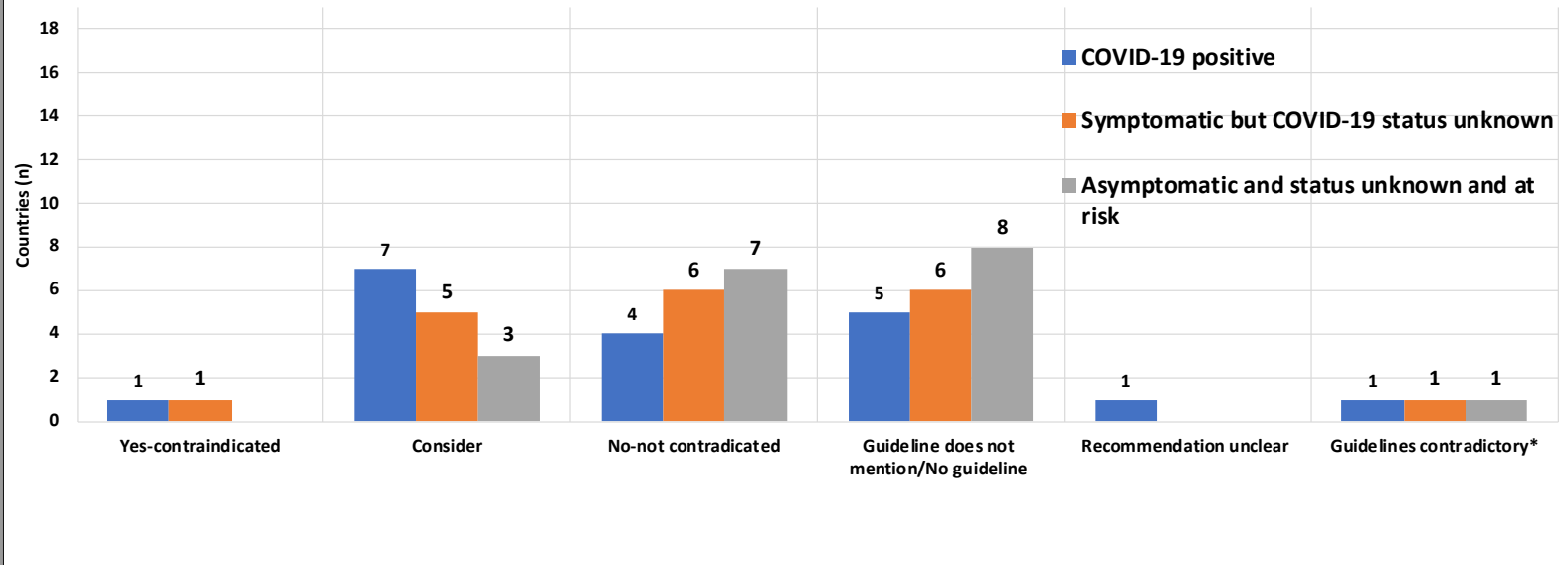
### Is it recommended that pregnant women wear a surgical mask or N-95 respirator during hospital appointments?



### Are additional ultrasound scans (e.g. growth, Doppler, biophysical profile) indicated?

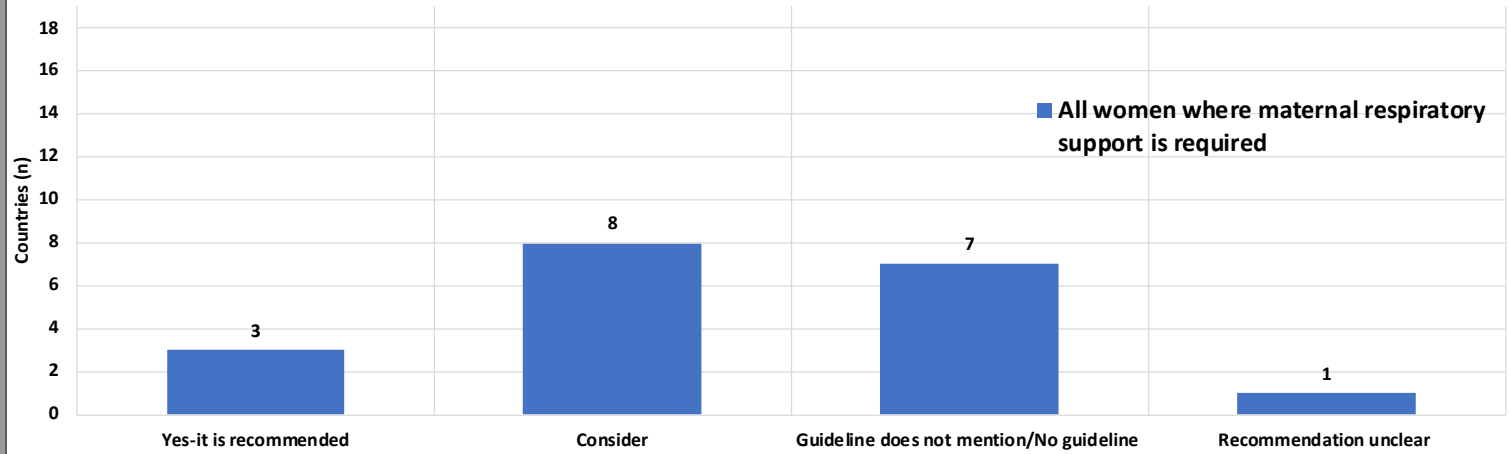


### Are antenatal steroids for fetal lung maturation contraindicated?

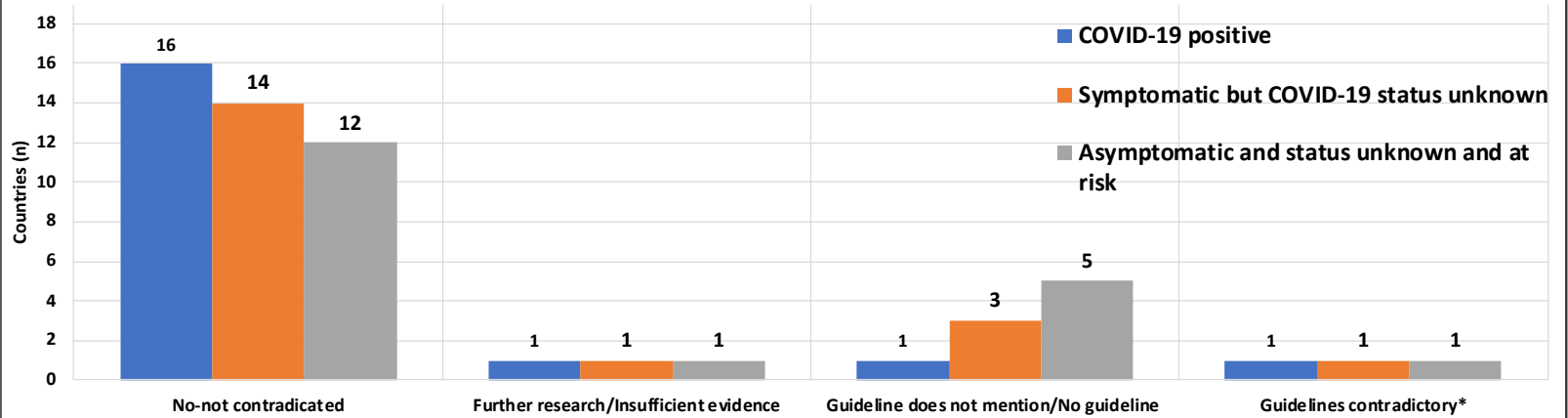


\*Yes-contraindicated/No-not contradicated (COVID-19 positive (symptomatic or not))

### Is it recommended to undertake URGENT delivery where maternal respiratory support is required

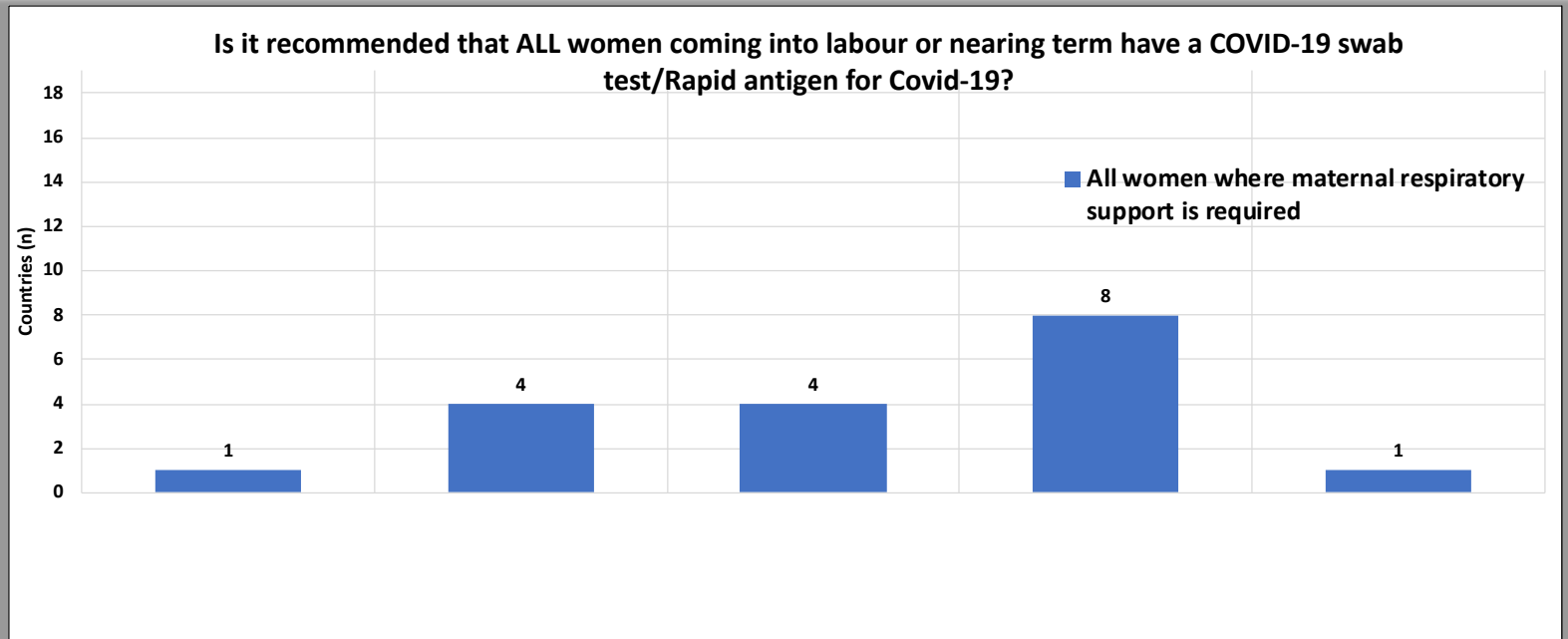


### Is vaginal birth contraindicated?

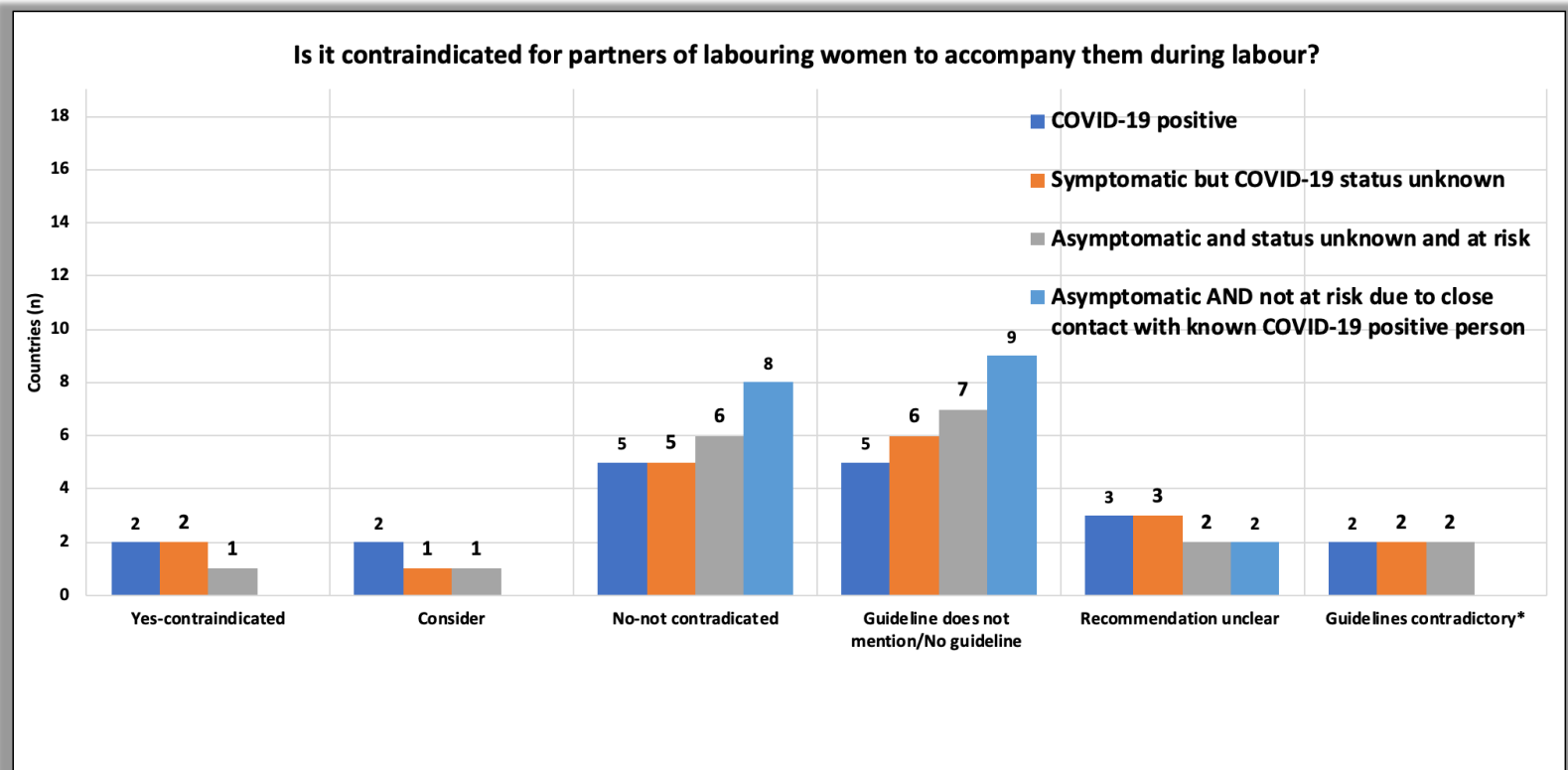


\*Consider/Guidelines does not mention (all 3 groups)





\*Guideline does not mention/guideline recommendation is unclear

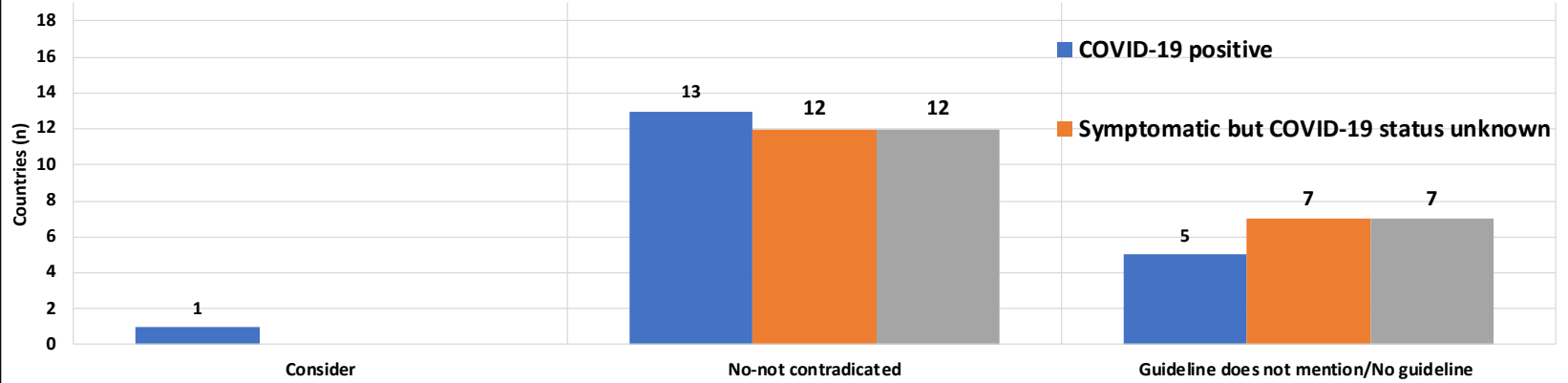


\*No-not contraindicated/Guidelines does not mention (COVID-19 positive & Symptomatic but COVID-19 status unknown groups)

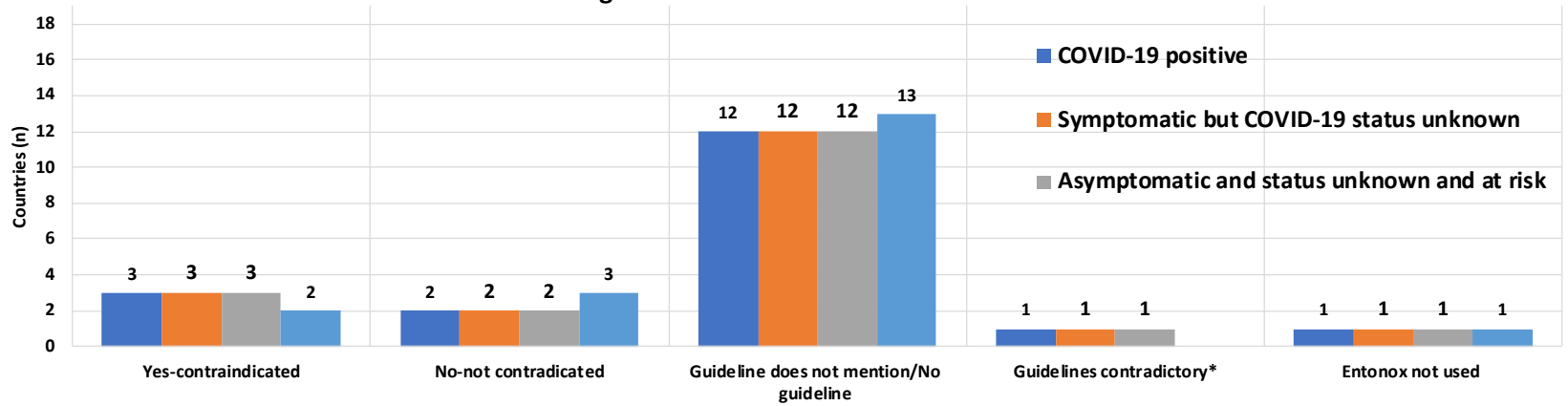
\*Consider/Guidelines does not mention (Asymptomatic and status unknown and at risk group)

\*Yes-contraindicated/No-not contraindicated (all groups)

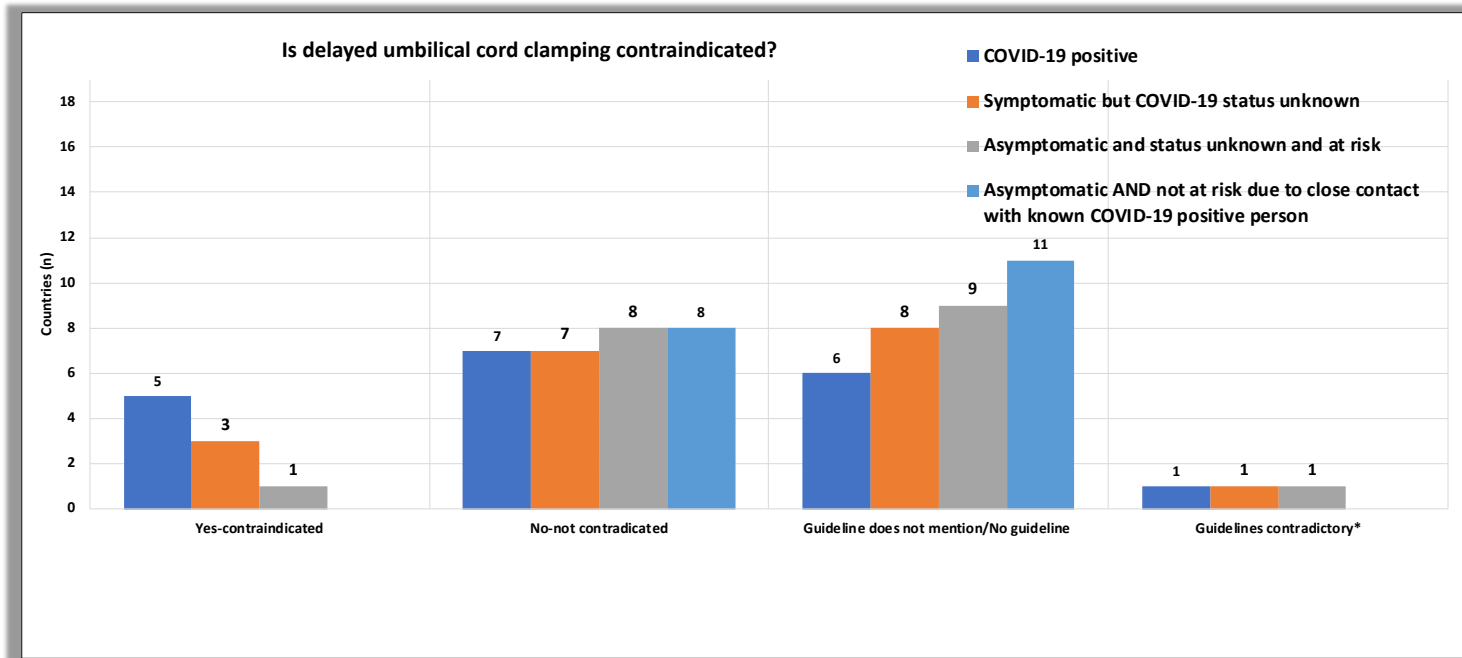
### Is epidural/spinal analgesia contraindicated?



### Is the use of Entonox during labour and birth contraindicated?



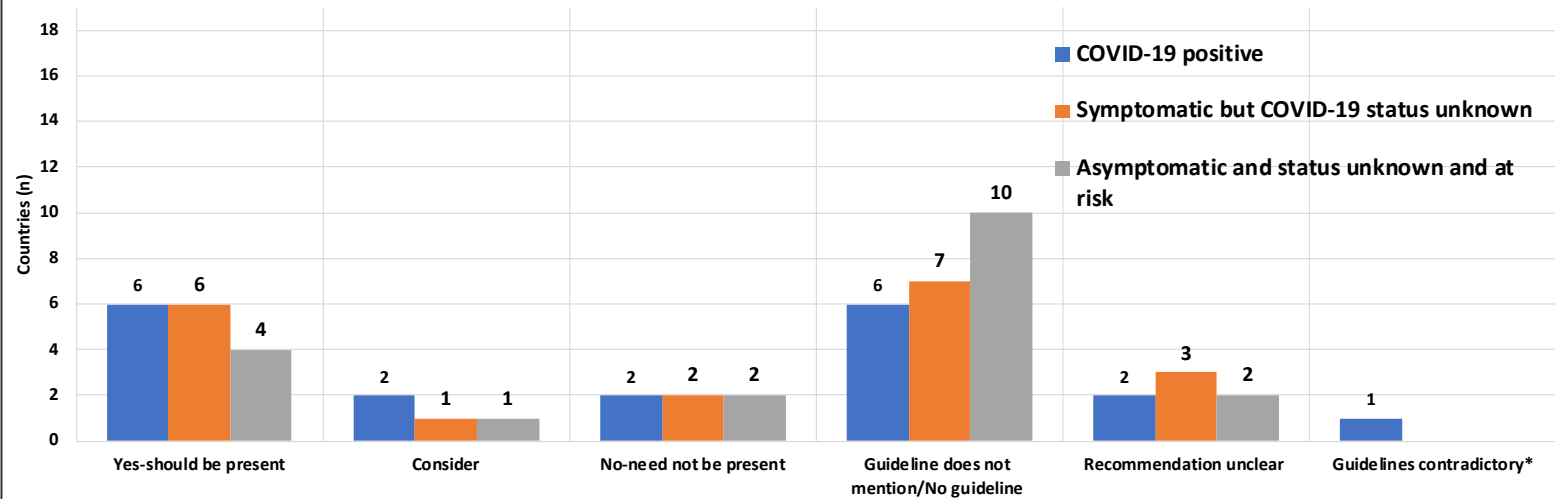
\*Yes-contraindicated/Guidelines does not mention (all groups)



\*Yes-contraindicated/Consider (COVID-19 positive & Symptomatic but COVID-19 status unknown groups)

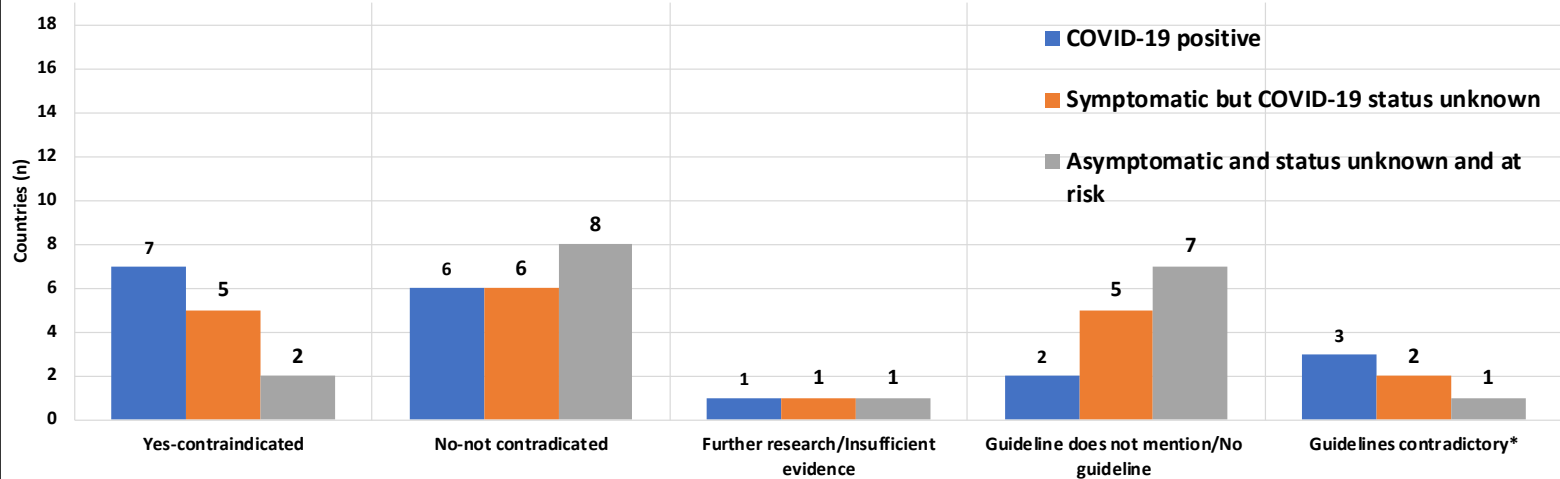
\*Consider/Guidelines does not mention (Asymptomatic and status unknown and at risk group)

### Should a designated member of the neonatal team be present at birth?



\*Guidelines does not mention/Guideline recommendation is unclear (COVID-19 positive (symptomatic or not))

### Is “skin to skin” contact between the mother and baby contraindicated?



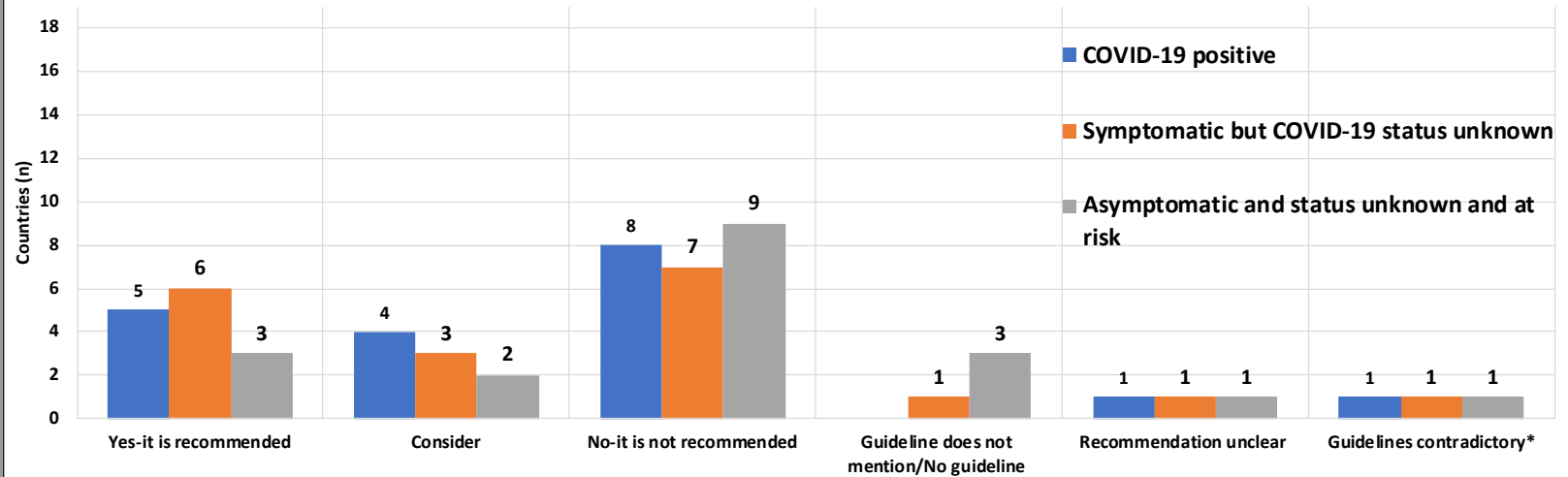
\*Yes-contraindicated/No-not contraindicated (COVID-19 positive (symptomatic or not))

\*Yes-contraindicated/Consider (COVID-19 positive & Symptomatic but COVID-19 status unknown groups)

\*Consider/Guidelines does not mention (Asymptomatic and status unknown and at risk group) (x2)

\*No-not contraindicated/Guidelines does not mention (COVID-19 positive & Symptomatic but COVID-19 status unknown groups)

### Is it recommended that otherwise well babies be separated from their mothers after birth?

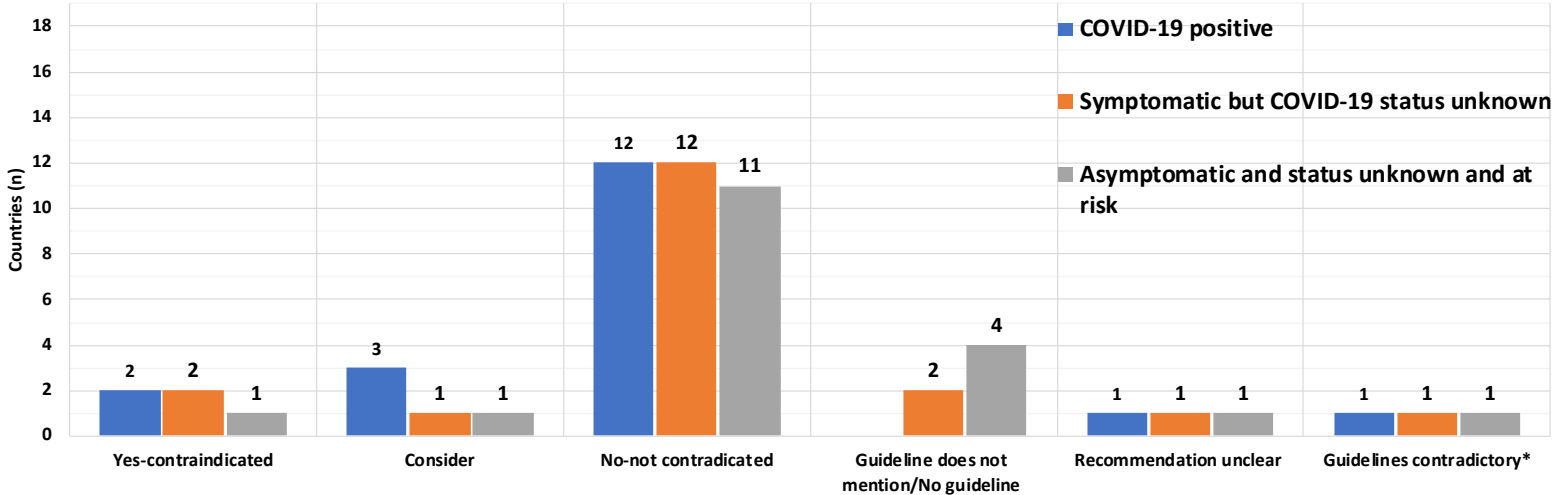


\*Yes-contraindicated/Consider (COVID-19 positive & Symptomatic but COVID-19 status unknown groups)

\*Consider/Guidelines does not mention (Asymptomatic and status unknown and at risk group)



### Is breast feeding contraindicated?



\*Yes-contraindicated/Consider (all three groups)

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