

# Severe Maternal Morbidity (SMM)



NATIONAL PERINATAL  
EPIDEMIOLOGY CENTRE

Based on the findings of Severe Maternal Morbidity in Ireland Annual Report 2019



In this audit, a case of SMM was defined as a pregnant or recently-pregnant woman who experienced any one of sixteen maternal morbidities.

## 375 SMM

Among 57,983 maternities in the 19 Irish maternity units in 2019

# 1/155

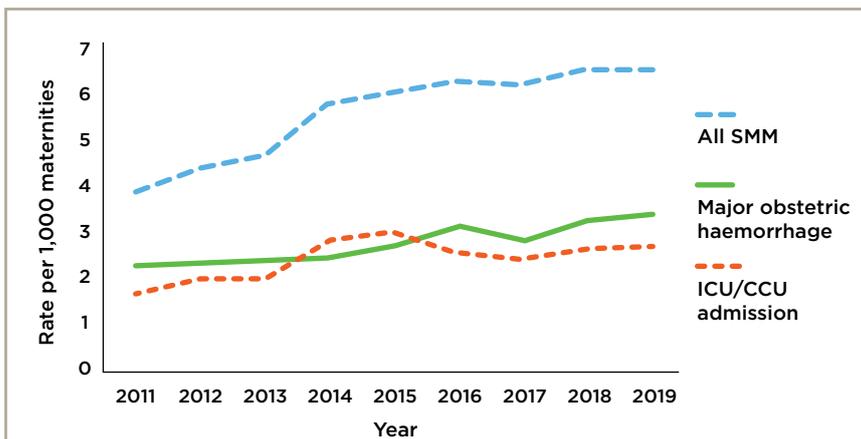
Incidence of women experiencing a SMM is one in 155 maternities



41%  
ICU

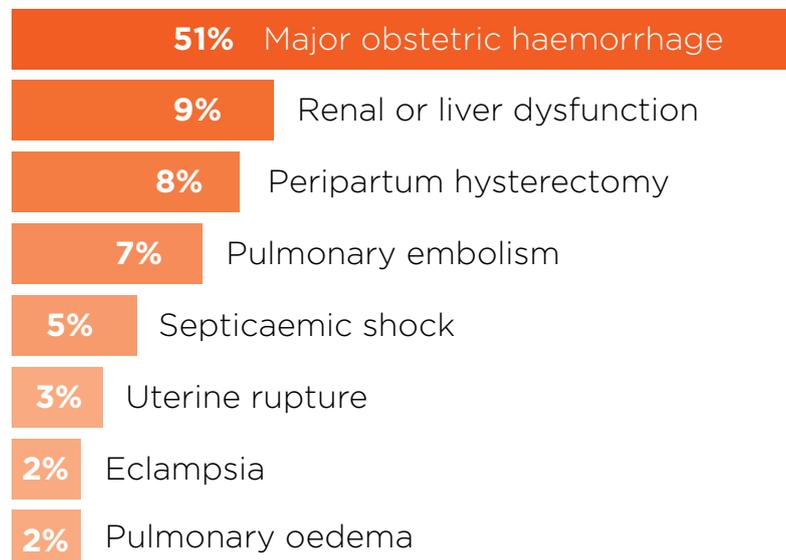
## 154 women

(41%) were admitted to Intensive Care Unit/Critical Care Unit



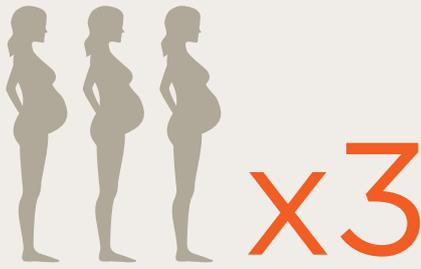
**Figure 1.** Trend in rate of SMM, major obstetric haemorrhage and intensive care admission/coronary care admission (ICU/CCU), 2011-2019. **68% increase in SMM rate since 2011.**

### Most common morbidities

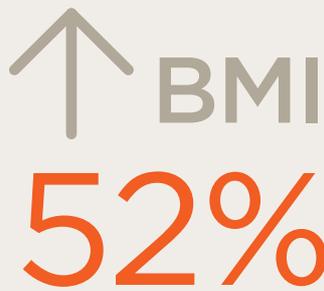


### 16 MATERNAL MORBIDITIES AUDITED, DEFINED AS:

- major obstetric haemorrhage (MOH)
  - estimated blood loss  $\geq$  2500ml and or transfused 5 units of blood
- uterine rupture
- peripartum hysterectomy
- eclampsia
- renal or liver dysfunction
- pulmonary oedema
- acute respiratory dysfunction
- pulmonary embolism
- cardiac arrest
- coma
- cerebrovascular event
- status epilepticus
- septicaemic shock
- anaesthetic complications
- admission to an intensive care or coronary care unit
- interventional radiology



A multiple pregnancy was associated with more than a threefold increase risk of SMM



Obese women had a 52% increased risk of SMM



Perinatal mortality rate (PMR) was 4.5 times higher in women experiencing SMM

## Selected Recommendations

- Robust clinical audit on adverse maternal outcomes requires the protected time of clinical staff. Funding should be provided by the Health Service Executive (HSE) to facilitate the same.
- Research on the incidence of morbidly adherent placenta in Ireland is warranted.
- Antenatal education:
  - (a) Antenatal education/information should be provided by the multidisciplinary team to women to ensure an understanding of maternal morbidity and complication awareness.
  - (b) When a pregnant woman is identified as high risk for significant morbidity, specific education should be available to her during antenatal birth preparation.
  - (c) The national standards on antenatal education should provide guidance on specific education for maternal morbidity awareness.

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The full report is available on the NPEC [website](#)