

Determination of signs of life for births before 23+0 weeks gestation where active resuscitation is not considered appropriate

This guidance document developed by the National Clinical Programme for Neonatology, the National Perinatal Epidemiology Centre and the National Women and Infants Health Programme outlines the assessment of extremely preterm infants, where following discussion with the parents, active resuscitation and intensive care is not considered appropriate for births before 23+0 weeks gestation.

This guidance has been developed in order to provide clarity in the determination whether the infant is liveborn and thereafter the associated documentation to be populated in the event of a pre-viable livebirth.

Guidance is also documented in relation to the meaning of 'pre-viable intrauterine death', 'stillbirth' and 'neonatal death' in order to assist the healthcare professional.

Signs of life are seldom witnessed in a fetus in the first trimester. Therefore, assessment to determine signs of life should occur from the second trimester onwards.

A live birth is determined by the presence of one or more of the following signs of life for a period of **greater than 1 minute after birth**. The observations should be undertaken in a discrete manner while wrapping the infant and handing him/her to his/her parents. The use of a stethoscope or palpitation of the umbilical cord is not necessary.



Spontaneous
respirations
and/or crying



Easily visible
heart beat



Visible
cord pulsation



Definite
movement of
arms and legs



Fleeting reflex
activity, including
transient gasps



Short-lived
visible pulsation
of the chest wall



Twitches and/or
involuntary muscle
movement

Communication

Clear, effective communication with the parents can reduce the impact of the distress caused by the delivery of a very preterm infant <23 weeks. Parents should be informed about the signs of life and duration that are used to determine if the infant is a live birth.

Words matter. It is important to take cues from parents regarding preferred language when discussing their infant. It is important to include the parents' observations in any discussion about the presence of signs of life.

Bereavement Services

Irrespective of whether the infant was live born or not, parents will need appropriate bereavement care and support. Referrals should be made at local level to bereavement services. For further information and resources: www.pregnancyandinfantloss.ie

	Definition	Documentation
Pre-viable intrauterine death (second trimester miscarriage)	Intrauterine fetal death < 24 weeks gestation with a birth weight < 500grams. ⁽¹⁾	<ul style="list-style-type: none"> ● Document the miscarriage in the woman's chart. ● There is no legal requirement or facility to register these births.
Pre-viable live born infant	An infant who is born alive before 23 weeks gestation and shows signs of life as per the above criteria for more than 1 minute.	<ul style="list-style-type: none"> ● Document the birth, care and the death including potential causes in the woman's/baby's chart. ● Complete the birth notification. ● Report the death to the Coroner ⁽²⁾. ● Medical certification of death will be undertaken after completion of any post-mortem investigation process, coronial or consented. <p><i>Once the medical certificate is signed and made available to the parents the baby's death can be registered at the civil registration office.</i></p>
Stillbirth	Intrauterine death which occurs ≥ 24 weeks gestation and/or with a birth weight ≥500grams. ⁽¹⁾	<ul style="list-style-type: none"> ● Document the care and stillbirth including potential causes in the woman's chart. ● Complete the birth notification. ● Report the stillbirth to the Coroner ⁽²⁾. ● Medical certification of death will be undertaken after completion of any post-mortem investigation process, coronial or consented. <p><i>Once the medical certificate is signed and made available to the parents the baby's death can be registered at the civil registration office.</i></p>
Neonatal death	Death following a live birth up to 7 days of life.	<ul style="list-style-type: none"> ● Document the birth, care and the death including potential causes in the woman's/baby's chart. ● Complete the birth notification. ● Report the death to the Coroner ⁽²⁾. ● Medical certification of death will be undertaken after completion of any post-mortem investigation process, coronial or consented. <p><i>Once the medical certificate is signed and made available to the parents the baby's death can be registered at the civil registration office.</i></p>

(1) Stillbirths Registration Act, 1994. Available <http://www.irishstatutebook.ie/eli/1994/act/1/enacted/en/print>

(2) Coroners (Amendment) Act 2019. Available: <http://www.irishstatutebook.ie/eli/2019/act/29/enacted/en/html>