

CHAPTER 15

Late deaths

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Introduction

Late maternal deaths are defined as deaths occurring in women more than 42 days but less than 1 year after miscarriage, abortion or delivery. The International Classification of Maternal Deaths (ICD10) only classifies *Late* deaths due to *Direct* or *Indirect* maternal causes, whereas this report also includes *Late Coincidental* (*Late Fortuitous*) deaths from which educational, public health or other messages and recommendations may also be drawn. For this reason all *Late* deaths reported to the Enquiry for 1997–99 are counted, and some are discussed, in this chapter, but none is included in the overall maternal mortality rate as defined in Chapter 1.

Some *Late Direct* deaths may occur in women who have received prolonged care in an intensive care unit, following the initial event. It is possible that this Enquiry may have missed some of these deaths because the immediate cause of death, as given on the death certificate, is not usually directly related to the pregnancy related event but relates to the final cause of death. These are therefore not currently picked up on death certificate data or currently notified by intensive care staff who may be unaware of this Report. The Enquiry is currently working with the Office for National Statistics (ONS) on a new record linkage system to enable these deaths to be picked up more readily. Details of this are given in Chapter 1.

Late deaths often contain important messages for maternal health. For example, the majority of maternal deaths from suicide occur in this period and there are a number of other *Direct* and *Indirect* causes, for example from pulmonary embolism, cardiac disease and malignancies. These cases, although the deaths are counted in this chapter, are discussed in more depth in the relevant chapters of this Report to consolidate the key messages and recommendations in a more appropriate manner. Thus, for example, *Late* deaths from pulmonary embolism are discussed in Chapter 2, heart disease in Chapter 10, suicide and drug misuse in Chapter 11 and malignancies in Chapter 13.

The record linkage system described later in this chapter, and also in Chapter 1, identified a further 211 women who died within a year of giving birth. Apart from those women who died from suicide and have been counted as *Late Indirect* deaths, almost all of the others died of causes unrelated to their previous pregnancy and would be classified as *Late Coincidental* deaths.

Summary of findings for 2000–02

A total of 94 *Late* deaths were reported in this triennium compared with 107 in the last Report. Thirteen of these are discussed in Chapter 13 Deaths from cancer. Completed reports were available for all but ten cases. *Late* deaths are further classified as *Direct*,

Table 15.1 Interval between delivery and maternal death, *Late* cases reported to the Enquiry; United Kingdom 2000–02

Days after delivery	<i>Direct</i>	<i>Indirect</i>	<i>Coincidental</i>	Total
43–91	3	27	9	39
92–182	1	13	15	29
183–273	–	3	9	12
274–365		2	12	14
Total	4	45	45	94

Indirect or *Coincidental (Fortuitous)* although, as has already been stated, these are not included in the numerators for determining maternal mortality rates.

The interval between delivery and death for all *Late* deaths is shown in Table 15.1.

Direct causes

Four *Late* deaths were considered to be directly related to maternal causes and are discussed in the relevant chapters but counted here. There was one case each of thromboembolism, eclampsia, sepsis and volvulus of the bowel. A very late death, the antecedent events of which occurred before this triennium, is discussed in Chapter 9 Anaesthesia but not counted here.

Indirect causes

Table 15.2 shows the largest category of *Late Indirect* deaths are those due to mental illness (Table 15.2). In this triennium, 18 cases of suicide were reported and are discussed in full in Chapter 11 Deaths from psychiatric causes, where recommendations for the management of women suffering from postnatal mental illness are made. The ONS birth/maternal death record linkage study described in Chapter 1 identified that the majority of *Late* deaths from psychiatric illness and also deaths from substance misuse or due to accidental or violent means that might have been possibly due to suicide were not reported to this Enquiry. These data are also shown in Figure 15.1. This under-reporting is understandable in that these deaths, which occurred in the community, were not been recognised by this Enquiry until the last Report and the relevant health professionals or coroners are not used to reporting to this Enquiry. With the new ONS record linkage system in place in future, this degree of under-ascertainment should be

Table 15.2 *Late* deaths, *Indirect* causes; United Kingdom 2000–02

Cause of death	Deaths (<i>n</i>)
Neoplastic disease (see Chapter 13)	9
Suicide (see Chapter 11)	18
Cardiac causes (see Chapter 10)	13
Other causes:	
Epilepsy	2
Cytomegalovirus	1
Sudden adult death syndrome	1
Subarachnoid	1
Total	45

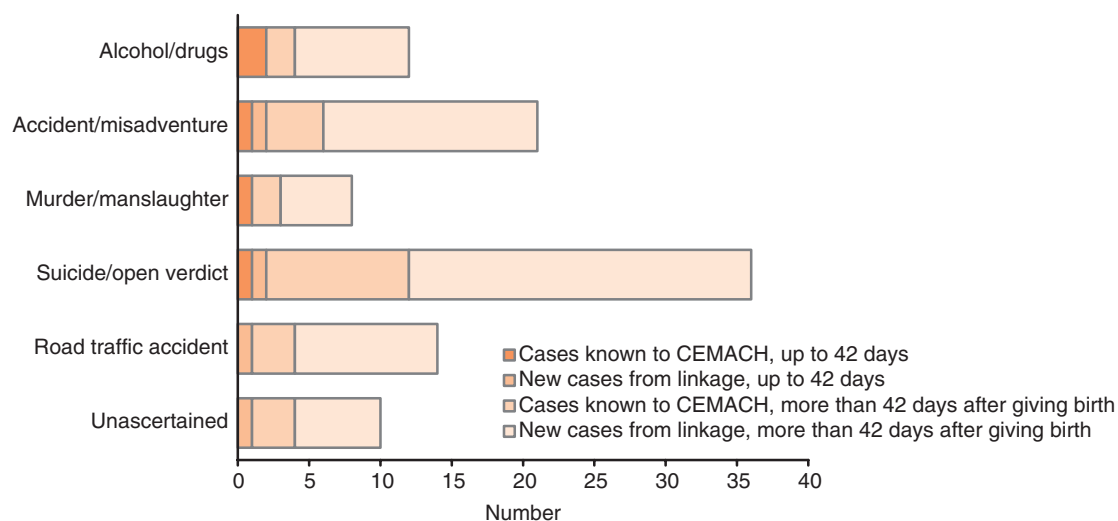


Figure 15.1 Maternal deaths identified by the ONS record linkage study from psychiatric, accidental, violent or unascertained causes; England and Wales 2000–02

reduced. It is hoped that a joint study might be undertaken with the National Inquiry into Death from Suicide and Homicide (NCISH) on these cases in the near future.

Lessons from deaths from cardiac disease or malignancies are discussed in Chapter 10 and Chapter 13, respectively. There appeared to be no cases of substandard care in the other causes of *Late Indirect* deaths.

Late Coincidental deaths

The causes of the 46 *Late Coincidental* deaths reported to this Enquiry are listed in Table 15.3. Six are also included in Chapter 13 Deaths from cancer. As with *Late Indirect*

Table 15.3 *Late deaths, Coincidental causes; United Kingdom 2000–02*

Cause of death	Deaths (n)
Neoplastic disease	6
Diseases of circulatory system:	
Subarachnoid	7
Myocardial infarction	3
Diseases of respiratory system:	
Asthma	3
Infectious diseases:	
TB	2
Pneumonia	2
Intracranial cyst	1
Haemophagocytosis	1
Other	2
Unascertained	2
Other	
Epilepsy	1
Scleroderma	2
Sudden unnatural deaths	
Road traffic accidents	6
Murder	1
Drug overdose in known drug users	4
Not stated	2
Total	45

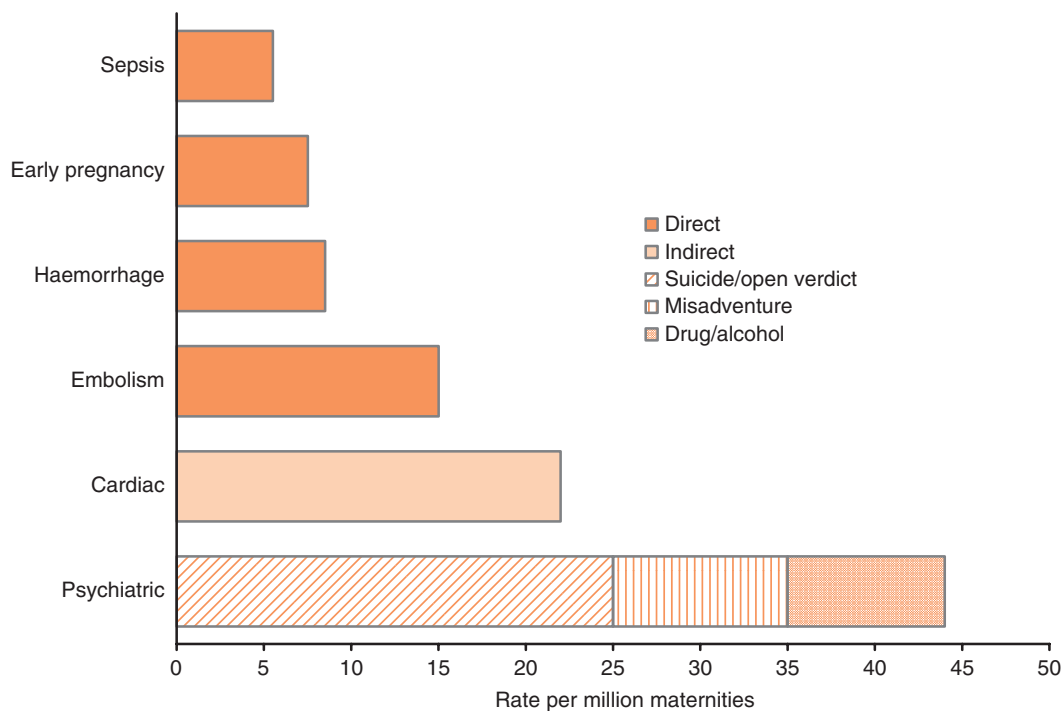


Figure 15.2 Maternal deaths from other *Indirect* or *Coincidental*, including *Late*, causes identified by the ONS record linkage study; England and Wales 2000–02

deaths, the vast majority of these cases were also unreported, as shown in Figure 15.2. The leading cause of death was, by far, malignancy.

It is worth noting, however, that the study described in Chapter 20, on the protective effects of pregnancy, showed that pregnant women or women who had delivered less than a year previously were five times less likely to die of all causes of mortality than women who were not pregnant.