



National Public Health
Service for Wales
Gwasanaeth Iechyd Cyhoeddus
Cenedlaethol Cymru

Welsh Healthcare Associated Infections Programme (WHAIP)
Rhaglen Heintiau sy'n Gysylltiedig a Gofal Iechyd Cymru (RHGGIC)

ALL WALES

**CAESAREAN SECTION SURGICAL SITE
INFECTION SURVEILLANCE**

SUMMARY REPORT

2006



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Introduction

In September 2004, the Welsh Assembly Government launched 'Healthcare Associated Infections – 'A Strategy for Hospitals in Wales', stating that current mandatory surgical site infection surveillance involving orthopaedic surgery would be extended to other specialities (section 5.8, page 30). Consequently, the Welsh Healthcare Associated Infection Programme (WHAIP) was instructed to develop and support the implementation of surveillance of infections following Caesarean section procedures undertaken in NHS trusts in Wales. A Welsh Health Circular was issued to Chief Executives informing them of this (WHC (2005) 093). Before being made mandatory, surveillance of infections following C-sections in Wales was undertaken voluntarily by three hospital Trusts.

Surgical Site Infection (SSI) is an important area for surveillance and remains an important complication of surgery with both human and financial costs being high. SSI is the second most common infection following a C-section within a group of patients who are generally considered to be young, fit and well females.

The surveillance scheme for SSI in C-sections was made mandatory in Wales in January 2006. The data presented here is a summary of information provided by the Trust in the calendar year 2006 and includes data captured both during the hospital stay and post-discharge within the community. The surveillance incorporates data collected by clinical teams and uses internationally agreed definitions, allowing Welsh data to be compared with and be incorporated into other international databases, such as the HELICS European SSI database. The purpose of the surveillance in the first year of data collection is to provide an initial baseline infection rate to assist Trusts in monitoring both their system of data collection and to aid with reducing infection over time.

Results

Table 1 (a) Overall Surgical Site Infection rate (%) for Caesarean section surgery in Wales for 2006

	No. of procedures	% of forms analysed*	No. of SSI	Overall SSI rate (%)*(95% CI**)
All Wales	3624	65.0 (2352/3624)	505	21.5 (19.6-23.4)

* Only procedures with either an SSI field completed on both the main and post-discharge form or incomplete records that could be updated on completion of the post-discharge form were included in the calculations. The overall SSI rate calculated is based on total number of SSI and total number of procedures captured within the surveillance for all Wales.

** 95% CI (confidence intervals) is a way of expressing, statistically, the certainty about the precision of the findings from a study / surveillance. The 95% confidence interval represents the range of measurements, calculated from a study / surveillance, within which people can be 95% certain that the true value lies.

Table 2 SSI rate broken down by type of SSI for all Wales 2006

	SSI type		
	<i>Superficial infection</i>	<i>Deep seated infection (deep, organ / space)</i>	<i>Unknown</i>
All Wales	16.0	3.2	2.3

Table 1 above provides the all Wales overall infection rate for 2006 whilst Table 2 above breaks down the infection rate by SSI type. Superficial infections make up the majority of the overall infection rate in Wales over the one year period. The infection rates should however be interpreted with caution since this surveillance is in the early stage of development. There are some concerns with the number of procedures that are not being reported via this surveillance scheme and from those returned many are incomplete and cannot be utilised. Data from the Patient Episode Database Wales (PEDW) shows that in Wales a considerable proportion of C-section procedures have not been captured via this surveillance scheme. Table 3 provides an all Wales compliance of 52%. Further, only 65% of the questionnaires received could be used for data analysis.

Table 3 Coverage of C-section SSI Surveillance compared to procedures reported to the PEDW database at HSW for all Wales in 2006

	No of questionnaires returned to WHAIP	No. of C sections reported to HSW	% Compliance^{***}
All Wales	3623	6960	52.0

^{***} Figure calculated from the month the hospital Trust first participated in the surveillance

Summary

- The all Wales overall infection rate is 21.5%
- The overall all Wales SSI rate broken down into the type of infection showed superficial infections to account for 16.0% of the overall rate and deep seated infections 3.2% of the overall rate
- 52% of the C-section procedures were captured in the mandatory surveillance scheme in Wales for 2006, however only 65% of the total forms surveyed could be utilised in calculating the overall SSI rate