

## Surgical Atlas 1994-2002

Linking to the  
Cancer Registry

## Total Oncology Surgery 1994-2002

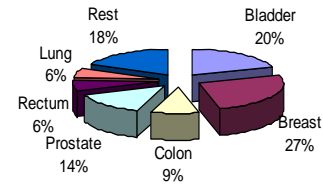
Year	Oncology Surgery*
1994	10642
1995	10663
1996	10964
1997	11325
1998	11207
1999	12369
2000	12211
2001	11489
2002	11899

\* ICES definition

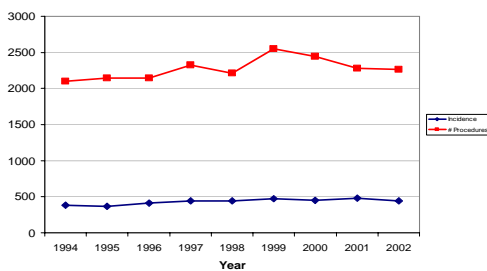
## Oncology Surgery BC residents treated outside of the province

Health Service Area	#
East Kootenay	199
Northeast	55
Northern Interior	15
Okanagan	10
Kootenay Boundary	9
Thomson Cariboo/Shuswap	5
Fraser East	5
Vancouver	5
South Vancouver Island	4
BC Unspecified	4
Northwest	3
Fraser North	1
Central Vancouver Island	1
Total	316

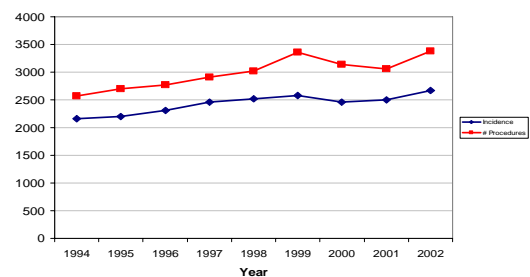
## Oncology Surgery by Tumour Site



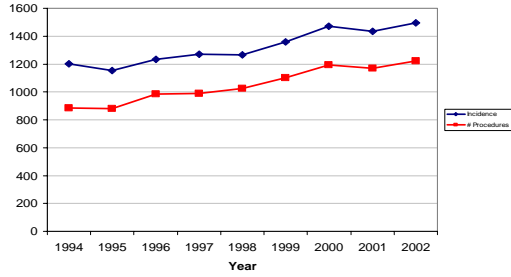
## Incidence and Interventions by Year Bladder



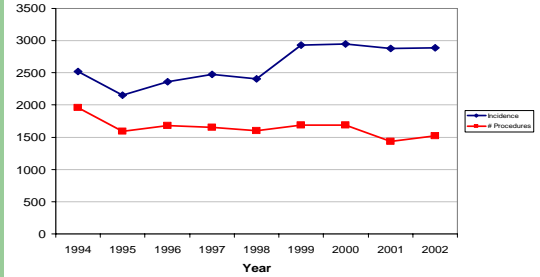
## Incidence and Interventions by Year Breast



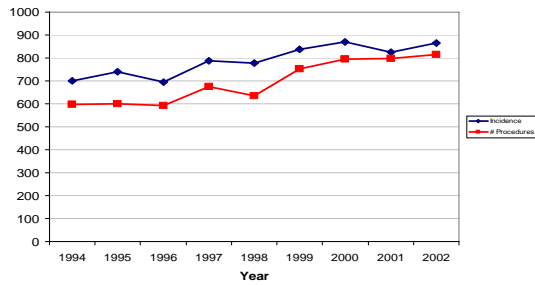
### Incidence and Interventions by Year Colon



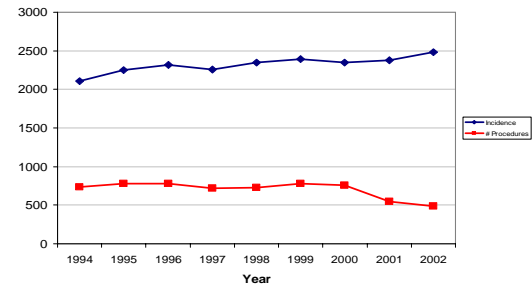
### Incidence and Interventions by Year Prostate



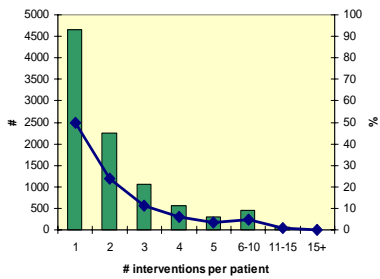
### Incidence and Interventions by Year Rectum



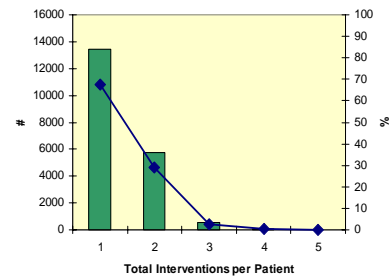
### Incidence and Interventions by Year Lung



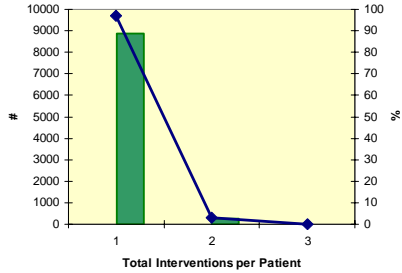
### Number of Interventions per Patient Bladder



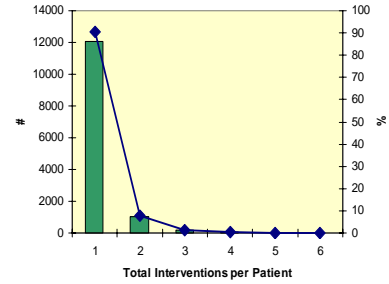
### Number of Interventions per Patient Breast



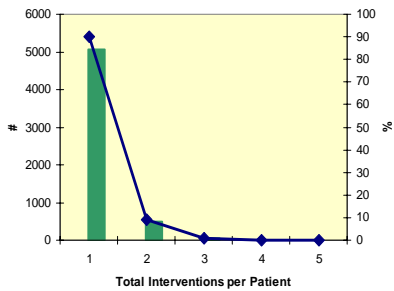
### Number of Interventions per Patient Colon



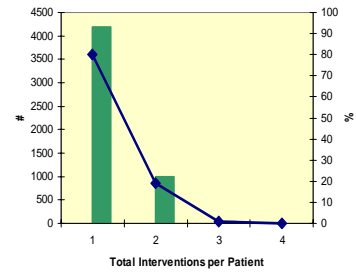
### Number of Interventions per Patient Prostate



### Number of Interventions per Patient Rectum



### Number of Interventions per Patient Lung



### % of Oncology Surgery admitted on Urgent or Emergency Basis

RHA	All	Bladder	Breast	Colon	Prostate	Rectum	Lung
IHA	42.5	32.7	32.9	64.8	45.6	52.1	47.6
FHA	15.5	11.6	5.5	39.3	15.4	16.9	10.4
VCHA	43.9	23.4	28.3	54.3	44.1	33.9	80.4
VIHA	69.5	52.1	73.8	82.9	60.8	79.2	91
NHA	16.1	12.3	9.2	37.4	16.5	26.6	15.7

### Where patients are treated (%) All cancers

Patient Residency	Location of Treatment						N=
	IHA	FHA	VCHA	VIHA	NHA	PHSA	
IHA	93.0	0.6	5.2	0.1	0.8	0.2	21967
FHA	0.1	77.7	21.4	0.1	0.0	0.7	31673
VCHA	0.2	5.2	92.3	0.6	0.0	1.7	23175
VIHA	0.0	0.3	4.7	94.7	0.0	0.3	20593
NHA	4.4	0.9	14.6	0.4	79.2	0.4	5212
Unspecified	16.1	13.4	34.9	25.5	8.7	1.3	149

### Where patients are treated (%) Bladder

Patient Residency	Location of Treatment						N=
	IHA	FHA	VCHA	VIHA	NHA		
IHA	94.8	0.8	2.2	0.1	2.1		4487
FHA	0.1	82.2	17.6	0.1	0.0		6245
VCHA	0.1	5.7	92.8	1.4	0.0		4270
VIHA	0.0	0.2	2.7	97.1	0.0		4653
NHA	2.6	0.5	11.7	0.4	84.7		793
Unspecified	22.7	0.0	40.9	22.7	13.6		22

### Where patients are treated (%) Breast

Patient Residency	Location of Treatment							N=
	IHA	FHA	VCHA	VIHA	NHA	PHSA		
IHA	97.6	0.5	1.7	0.1	0.1	0.0		5597
FHA	0.1	82.9	16.1	0.0	0.0	0.9		8264
VCHA	0.3	4.4	91.5	0.1	0.0	3.8		6292
VIHA	0.1	0.2	1.4	98.1	0.0	0.1		5173
NHA	2.6	1.2	3.7	0.2	92.3	0.1		1557
Unspecified	14.7	5.9	20.6	50.0	8.8	0.0		34

### Where patients are treated (%) Colon

Patient Residency	Location of Treatment						N=
	IHA	FHA	VCHA	VIHA	NHA		
IHA	98.0	0.4	1.5	0.1	2.1		1892
FHA	0.1	89.4	10.5	0.0	0.0		2806
VCHA	0.2	5.0	94.6	0.2	0.0		2219
VIHA	0.0	0.1	1.0	98.8	0.1		2114
NHA	2.0	0.7	4.2	0.7	92.4		406
Unspecified	11.1	44.4	11.1	33.3	0.0		9

### Where patients are treated (%) Prostate

Patient Residency	Location of Treatment						N=
	IHA	FHA	VCHA	VIHA	NHA		
IHA	91.7	0.7	5.7	0.1	1.8		3602
FHA	0.2	80.2	19.5	0.2	0.0		4700
VCHA	0.1	8.0	89.6	2.1	0.2		2889
VIHA	0.0	0.5	4.6	94.9	0.0		2842
NHA	1.7	0.9	14.9	0.0	82.5		760
Unspecified	33.3	20.8	25.0	12.5	8.3		24

### Where patients are treated (%) Rectum

Patient Residency	Location of Treatment							N=
	IHA	FHA	VCHA	VIHA	NHA	PHSA		
IHA	95.8	0.7	3.3	0.0	0.1	0.2		1348
FHA	0.1	83.4	15.1	0.0	0.0	1.4		1895
VCHA	0.2	6.8	89.3	0.1	0.0	3.6		1494
VIHA	0.0	0.5	3.1	95.9	0.0	0.5		1200
NHA	2.6	2.2	12.3	1.3	79.7	1.9		310
Unspecified	10.0	40.0	40.0	0.0	10.0	0.0		10

### Where patients are treated (%) Lung

Patient Residency	Location of Treatment							N=
	IHA	FHA	VCHA	VIHA	NHA	PHSA		
IHA	92.4	0.5	6.4	0.1	0.4	0.3		1667
FHA	0.3	51.2	47.9	0.1	0.0	0.5		1893
VCHA	0.3	3.4	95.1	0.0	0.0	1.1		1312
VIHA	0.4	0.1	15.9	82.8	0.0	0.8		1049
NHA	28.2	0.5	50.3	0.0	20.0	1.0		380
Unspecified	16.7	16.7	41.6	25.0	0.0	0.0		12

## Survival Status

- 95% of cases linked to Cancer Registry - all cancers
- Has been steadily increasing from 91.1% in 1994 to a high of 96.2% in 2001
- Varies by tumor site from a low of 89.2% for bladder cancers to 99.0% for breast
- Not adjusted for stage/age/etc

## Survival status since year of 1<sup>st</sup> Surgical Intervention - All cancers

Year	Dead	Alive
1994	53.9	46.1
1995	50.2	49.8
1996	46.8	53.2
1997	42.5	57.5
1998	39.3	60.7
1999	34.6	65.4
2000	32.1	67.9
2001	25.7	74.3
2002	20.9	79.1

## Survival status since year of 1<sup>st</sup> Surgical Intervention - Bladder

Year	Dead	Alive
1994	59.3	40.7
1995	56.0	44.0
1996	53.6	46.4
1997	47.7	52.3
1998	45.2	54.8
1999	38.9	61.1
2000	36.9	63.1
2001	32.1	67.9
2002	29.5	70.5

## Survival status since year of 1<sup>st</sup> Surgical Intervention - Breast

Year	Dead	Alive
1994	38.4	61.6
1995	34.0	66.0
1996	30.9	69.1
1997	27.8	72.2
1998	23.3	76.7
1999	19.2	80.8
2000	16.3	83.7
2001	11.6	88.4
2002	8.9	91.9

## Survival status since year of 1<sup>st</sup> Surgical Intervention - Colon

Year	Dead	Alive
1994	62.9	37.1
1995	65.1	34.9
1996	61.5	38.5
1997	57.5	42.5
1998	51.5	48.5
1999	49.1	50.9
2000	46.5	53.5
2001	37.2	62.8
2002	32.5	67.5

## Survival status since year of 1<sup>st</sup> Surgical Intervention - Prostate

Year	Dead	Alive
1994	57.4	42.6
1995	53.9	46.1
1996	48.7	51.3
1997	40.1	59.9
1998	39.2	60.8
1999	32.0	68.0
2000	25.1	74.9
2001	15.9	84.1
2002	14.7	85.3

### Survival status since year of 1<sup>st</sup> Surgical Intervention - Rectum

Year	Dead	Alive
1994	63.9	36.1
1995	58.6	41.4
1996	56.1	43.9
1997	55.4	44.6
1998	49.2	50.7
1999	42.6	57.4
2000	44.6	55.4
2001	34.0	66.0
2002	24.5	75.5

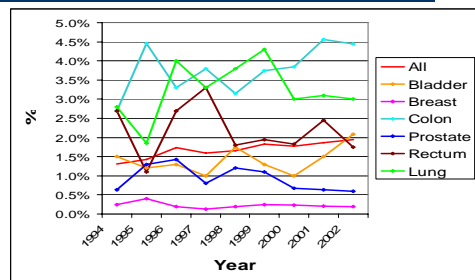
### Survival status since year of 1<sup>st</sup> Surgical Intervention - Lung

Year	Dead	Alive
1994	80.7	19.3
1995	78.1	21.9
1996	72.9	27.1
1997	70.8	29.2
1998	70.3	29.7
1999	68.9	31.1
2000	66.2	33.8
2001	54.4	45.6
2002	39.2	60.8

### Death with 30 days of receiving a Surgical Intervention – all cancers

Year	# of patients that died	# linked patients	%
1994	108	8241	1.3%
1995	119	8345	1.4%
1996	157	9004	1.7%
1997	148	9294	1.6%
1998	155	9344	1.7%
1999	184	10032	1.8%
2000	175	9906	1.8%
2001	177	9498	1.9%
2002	190	9789	1.9%

### Death with 30 days of receiving a Surgical Intervention – by cancer site



### Individual Surgeon Reports: The would be Surgeon “Dr Barbara Poole”

- Table 1 Number of Interventions by year (ICES definition of oncology surgery only)

Year	# of interventions
2003	1
2004	5
2005	2
Total	8

### Individual Surgeon Reports: Table 2: Number of interventions by Tumour site

Rectum	2
Breast	2
GI	1
Prostate	1
Lung	2
	8

**Individual Surgeon Reports:  
Table 3: Number by year and tumour site**

		2003	2004	2005
Rectum	#	1	1	0
	% of PHSA cases	100.0%	100.0%	n/a
Breast	#	0	2	0
	% of PHSA cases	0.0%	0.8%	0.0%
GI	#	0	1	0
	% of PHSA cases	0.0%	3.2%	0.0%
Prostate	#	0	0	1
	% of PHSA cases	0.0%	0.0%	1.1%
Lung	#	0	1	1
	% of PHSA cases	0.0%	1.3%	1.2%

**Individual Surgeon Reports:  
Table 4&5 Residency of Patients**

Vancouver	4	VCHA	5
Richmond	1	FHA	2
Fraser South	2	VIHS	1
Central Vancouver Island	1		8
	8		

**Individual Surgeon Reports:  
Table 6 Status of Patients**

		Surgeon			BC Avg.	
		Dead	Alive	Total	% Dead	% Alive
Rectum	<50	0	0	0	25.2%	74.8%
	50-74	2	0	2	38.0%	62.0%
	75+	0	0	0	52.5%	47.5%
Breast	<50	1	1	2	28.1%	71.9%
	50-74	0	0	0	22.4%	77.6%
	75+	0	0	0	32.8%	67.2%
GI	<50	1	0	1	35.0%	65.0%
	50-74	0	0	0	42.3%	57.7%
	75+	0	0	0	52.0%	48.0%
Prostate	<50	0	0	0	15.2%	84.8%
	50-74	1	0	1	26.8%	73.4%
	75+	0	0	0	35.1%	64.9%
Lung	<50	0	0	0	65.8%	34.2%
	50-74	1	0	1	72.4%	27.6%
	75+	1	0	1	85.3%	14.7%

**Individual Surgeon Reports:  
Table 7: Cause of Death**

Cardiac Arrest	7	87.5%
Fatal Haemorrhage	1	12.5%