# **International Agency for Research on Cancer**



## Cancer in Central and South America

### **BOLIVIA**

This country profile for the Cancer in Central and South America project provides, for each participating cancer registry tables and graphics showing numbers of cases and rates by year, sex and age group for major sites of cancer together with a population pyramid. A country summary is also provided based on aggregated registry data and national mortality data from the WHO mortality database: (<a href="http://www.who.int/healthinfo/statistics/mortality\_rawdata/en/index.html">http://www.who.int/healthinfo/statistics/mortality\_rawdata/en/index.html</a>)

Citation of any of these data should be in the following format:

"Sierra MS, Abriata MG, Barrios E, Bravo LE, Cueva P, Fernandez L, Pineros M, Rebelo M, de Vries E, Forman D. Editors on behalf of the Cancer in Central and South America Working Group (2016). Cancer in Central and South America. Lyon: International Agency for Research on Cancer. Available from: <a href="http://www-dep.iarc.fr/CSU">http://www-dep.iarc.fr/CSU</a> resources.htm accessed [date]."

# **Country's Summary Tables and Figures**

BOLIVIA<sup>1,2</sup> (2011)

<sup>&</sup>lt;sup>1</sup> Country's incidence rates were estimated using data from the population-based cancer registry of La Paz

No National mortality data available from the WHO mortality database: http://www.who.int/healthinfo/statistics/mortality\_rawdata/en/index.html

## **Registry Summary Tables and Figures**

# **BOLIVIA, LA PAZ (2011)**

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<sup>\*</sup>Director and staff as notified at time of call for data in 2013. Current contact information for cancer registries in the region can be found at: <a href="http://www.iacr.com.fr/index.php?option=com\_comprofiler&task=usersList&listid=5">http://www.iacr.com.fr/index.php?option=com\_comprofiler&task=usersList&listid=5</a>.

# BOLIVIA, LA PAZ (2011) Number of Cases in Major Diagnosis Groups per Calendar Year

	YEAR	
SITE	2011	TOTAL
	n (%)	n (%)
MALES		
Lip, oral cavity, and pharynx (C00-C14)	19 (3.9)	19 (3.9)
Digestive organs (C15-C26)	156 (31.8)	156 (31.8)
Respiratory organs (C30-C39)	23 (4.7)	23 (4.7)
Bone, cartilage, and skin (C40-C44)	72 (14.7)	72 (14.7)
Breast (C50)	1 (0.2)	1 (0.2)
Male genitalia (C60-C63)	94 (19.2)	94 (19.2)
Urinary organs (C64-C68)	25 (5.1)	25 (5.1)
Eye, brain, and thyroid (C69-C75)	12 (2.4)	12 (2.4)
Hematopoietic (C81-C96)	62 (12.7)	62 (12.7)
Other and unspecified	26 (5.3)	26 (5.3)
All sites	490 (100.0)	490 (100.0)
FEMALES		
Lip, oral cavity, and pharynx (C00-C14)	18 (1.8)	18 (1.8)
Digestive organs (C15-C26)	181 (18.5)	181 (18.5)
Respiratory organs (C30-C39)	40 (4.1)	40 (4.1)
Bone, cartilage, and skin (C40-C44)	79 (8.1)	79 (8.1)
Breast (C50)	161 (16.4)	161 (16.4)
Female genitalia (C51-C58)	371 (37.9)	371 (37.9)
Urinary organs (C64-C68)	14 (1.4)	14 (1.4)
Eye, brain, and thyroid (C69-C75)	47 (4.8)	47 (4.8)
Hematopoietic (C81-C96)	37 (3.8)	37 (3.8)
Other and unspecified	32 (3.3)	32 (3.3)
All sites	980 (100.0)	980 (100.0)
BOTH SEXES		
Lip, oral cavity, and pharynx (C00-C14)	37 (2.5)	37 (2.5)
Digestive organs (C15-C26)	337 (22.9)	337 (22.9)
Respiratory organs (C30-C39)	63 (4.3)	63 (4.3)
Bone, cartilage, and skin (C40-C44)	151 (10.3)	151 (10.3)
Urinary organs (C64-C68)	39 (2.7)	39 (2.7)
Eye, brain, and thyroid (C69-C75)	59 (4.0)	59 (4.0)
Hematopoietic (C81-C96)	99 (6.7)	99 (6.7)
Other and unspecified	58 (3.9)	58 (3.9)
All sites	1470 (100.0)	1470 (100.0)

BOLIVIA, LA PAZ (2011) Age Standardized Incidence Rate (World Population) per 100,000 in Major Diagnosis Groups per Calendar Year

	YEAR	
SITE	2011	TOTAL
	ASR (%)	ASR (%)
MALES		
Lip, oral cavity, and pharynx (C00-C14)	1.6 (4.0)	1.6 (4.0)
Digestive organs (C15-C26)	12.9 (32.8)	12.9 (32.8)
Respiratory organs (C30-C39)	1.9 (4.7)	1.9 (4.7)
Bone, cartilage, and skin (C40-C44)	5.7 (14.5)	5.7 (14.5)
Breast (C50)	0.1 (0.2)	0.1 (0.2)
Male genitalia (C60-C63)	7.2 (18.4)	7.2 (18.4)
Urinary organs (C64-C68)	2.0 (5.1)	2.0 (5.1)
Eye, brain, and thyroid (C69-C75)	0.8 (2.1)	0.8 (2.1)
Hematopoietic (C81-C96)	5.0 (12.6)	5.0 (12.6)
Other and unspecified	2.2 (5.6)	2.2 (5.6)
All sites	39.4 (100.0)	39.4 (100.0)
FEMALES		
Lip, oral cavity, and pharynx (C00-C14)	1.4 (1.9)	1.4 (1.9)
Digestive organs (C15-C26)	13.9 (18.4)	13.9 (18.4)
Respiratory organs (C30-C39)	3.1 (4.1)	3.1 (4.1)
Bone, cartilage, and skin (C40-C44)	5.3 (7.1)	5.3 (7.1)
Breast (C50)	12.7 (16.8)	12.7 (16.8)
Female genitalia (C51-C58)	29.2 (38.7)	29.2 (38.7)
Urinary organs (C64-C68)	1.0 (1.4)	1.0 (1.4)
Eye, brain, and thyroid (C69-C75)	3.6 (4.7)	3.6 (4.7)
Hematopoietic (C81-C96)	2.6 (3.5)	2.6 (3.5)
Other and unspecified	2.6 (3.4)	2.6 (3.4)
All sites	75.5 (100.0)	75.5 (100.0)
BOTH SEXES		
Lip, oral cavity, and pharynx (C00-C14)	1.5 (2.6)	1.5 (2.6)
Digestive organs (C15-C26)	13.4 (23.2)	13.4 (23.2)
Respiratory organs (C30-C39)	2.5 (4.3)	2.5 (4.3)
Bone, cartilage, and skin (C40-C44)	5.5 (9.6)	5.5 (9.6)
Urinary organs (C64-C68)	1.5 (2.6)	1.5 (2.6)
Eye, brain, and thyroid (C69-C75)	2.2 (3.9)	2.2 (3.9)
Hematopoietic (C81-C96)	3.8 (6.5)	3.8 (6.5)
Other and unspecified	2.4 (4.1)	2.4 (4.1)
All sites	57.9 (100.0)	57.9 (100.0)

# BOLIVIA, LA PAZ (2011) Incidence per 100,000 by Age Group (years) Males

ICD10	C00-14	C15	C16	C18	C19-20	C18-20	C21	C18-21	C22	C23-24	C25	C30-31	C32	C33-34	C43	C45	C46	C50	090	C61	C62	C64	C67	C70-72	C73	C81	C82-85,C96	C88+C90	C91	C92-94	C95	C91-95	080	ALLbC44	ALL
Rank‡	9	Ξ	4			7	25		10	2	19	23	22	7	13	27	27	24	14	_	16	တ	12	20	18	17	က	21				15	œ		
000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
(%)	100	83	100	96	100	86	100	86	62	82	25	100	100	94	100			100	100	96	88	92	91	100	100	100	100	100	100	100		100	93	94	95
CUM. RATE (0-74)†	0.17	0.13	0.41	0.24	0.25	0.48	0.00	0.48	0.10	0.36	0.02	0.03	0.04	0.14	0.13	0.00	0.00	0.02	0.09	08.0	0.05	0.11	0.10	0.02	0.04	90.0	0.34	0.03	0.04	0.01	0.00	90.0	0.16	4.15	4.66
ASR (W)	1.6	1.0	3.3	2.2	2.0	4.2	0.1	4.2	1.0	2.7	0.4	0.2	0.3	1.4	0.7	0.0	0.0	0.1	0.7	5.9	9.0	1.1	0.8	0.3	9.0	9.0	3.4	0.3	0.5	0.1	0.0	0.7	1.3	34.9	39.4
CRUDE	1.4	6.0	2.9	2.0	1.8	3.9	0.1	3.9	1.0	2.5	0.3	0.2	0.2	1.4	9.0	0.0	0.0	0.1	9.0	5.8	0.7	1.0	0.8	0.3	9.0	9.0	3.2	0.2	0.5	0.2	0.0	0.7	1.7	32.7	37.1
75+	11.4	9.8	14.3	14.3	8.6	22.9	2.9	25.7	5.7	25.7	٠			20.0	٠	٠	٠	٠	2.9	88.6	•	2.7	14.3	٠	9.8	5.7	14.3		٠		٠	٠	5.7	257.1	317.1
70-74	4.4	4.4	13.1	8.7	8.7	17.5		17.5		43.6		4.4	4.4		13.1		٠	4.4	4.4	100.4			13.1			4.4	8.7		٠	٠	٠	٠	13.1	257.5	301.1
62-69	6.5	9.7	29.2	9.7	9.7	19.5		19.5	3.2		6.5			16.2	9.7				6.5	32.5		6.5					6.5		3.2			3.2	6.5	175.4	201.3
60-64	7.4	4.9	14.8	7.4	14.8	22.2	٠	22.2	2.5	14.8	2.5		٠	4.9						12.3	٠	7.4	4.9	٠	٠	2.5	14.8	2.5	٠	٠	٠	٠	4.9	125.5	132.9
55-59	6.5	4.3	9.8	9.8	6.5	15.1		15.1	6.5	4.3			2.2		2.2				2.2	10.8	2.2	4.3	2.2	٠	2.2		10.8	2.2	٠	٠			2.2	8.96	105.4
50-54	1.7	1.7	5.2	3.4	3.4	6.9		6.9	3.4	5.2	1.7			1.7	1.7					1.7	1.7	1.7			3.4	1.7	9.8		1.7			1.7	1.7	9.99	65.4
45-49	4.6		4.6	1.5	1.5	3.1		3.1		3.1		1.5		3.1			٠		3.1	1.5							10.8						1.5	40.1	44.7
40-44			2.6	2.6	1.3	3.9		3.9	1.3				1.3	1.3					٠			1.3	٠		٠	2.6		1.3					1.3	21.0	24.9
35-39	2.4		2.4	2.4	2.4	4.8		4.8	1.2						٠		٠		1.2				٠	1.2	1.2		٠		٠	1.2	٠	1.2		15.5	16.7
30-34			1.0	2.0	1.0	3.0		3.0	1.0	1.0					٠		٠	٠	٠	1.0	3.0		٠	2.0	٠	1.0	3.0		٠					16.1	16.1
25-29			٠	1.0	٠	1.0		1.0	1.0					٠	٠		٠	٠	٠	٠	1.9		٠	1.0		٠	1.9	٠	1.0	1.0	٠	1.9	1.0	10.6	10.6
20-24			٠		٠										٠		٠		٠	٠	8.0	8.0	٠				1.6		8.0			8.0		4.9	4.9
15-19																			-		8.0				8.0		8.0		8.0			8.0	0.8	3.8	3.8
10-14			٠		٠		٠		٠		٠				٠		٠						٠	٠			0.7		1.4			1.4		3.6	3.6
5-9	•						-				-		٠								٠						0.7		٠	٠		٠		0.7	0.7
0-4			-						٠				٠				-		-	-		8.0			٠		-		٠	٠		٠		0.8	8.0
UNK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ALL	19	12	38	27	24	51	_	52	13	33	4	2	က	18	∞	0	0	_	∞	77	တ	13	=	4	∞	∞	42	က	7	2	0	တ	15	432	490
SITE	Lip, oral cavity, and pharynx (C00-14)	Oesophagus (C15)	Stomach (C16)	Colon (C18)	Rectum (C19-20)	Colorectal (C18-20)	Anus (C21)	Colon, rectum and anus (C18-21)	Liver (C22)	Gallbladder (C23-24)	Pancreas (C25)	Nose, sinuses (C30-31)	Larynx (C32)	Lung, trachea and bronchus (C33-34)	Melanoma of skin (C43)	Mesothelioma (C45)	Kaposi sarcoma (C46)	Breast (C50)	Penis (C60)	Prostate (C61)	Testis (C62)	Kidney (C64)	Bladder (C67)	Brain, CNS (C70-72)	Thyroid (C73)	Hodgkin disease (C81)	Non-Hodgkin lymphoma (C82-85,C96)	Multiple myeloma (C88+C90)	Lymphoid leukaemia (C91)	Myeloid leukaemia (C92-94)	Leukaemia unspecified (C95)	Leukaemia (C91-95)	Other and unspecified (O&U)	All sites but C44 (ALLbC44)	All sites (ALL)

UNK, Unknown; ASR (W), Age Standardized Rate (World Population); CUM., Cumulative; MV, Microscopic Verification; DCO, Death Certificate Only †Percent ‡Rank based on highest ASR excluding: All sites but C44 and All sites

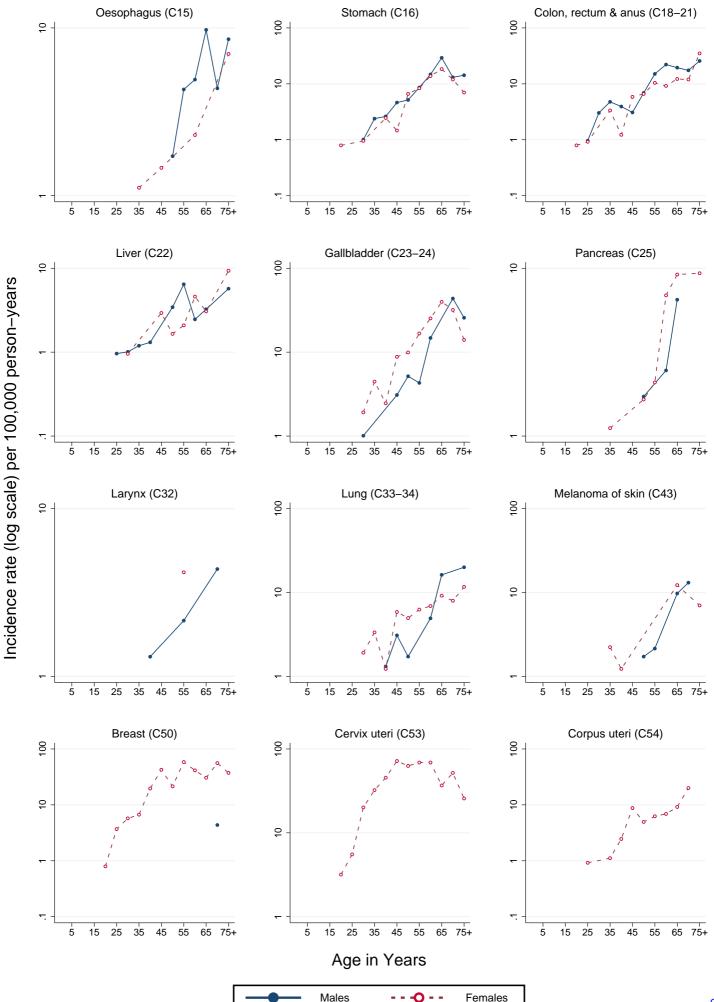
# BOLIVIA, LA PAZ (2011) Incidence per 100,000 by Age Group (years) Females

: ICD10	C00-14	C15	C16	C18	C19-20	C18-20	C21	C18-21	C22	C23-24	C25	C30-31	C32	C33-34	C43	C45	C46	C20	C53	C54	C56	C64	C67	C70-72	C73	C81	C82-85,C96	C88+C90	C91	C92-94	C95	C91-95	080	ALLbC44	ALL
Rank‡	10	21	7			4	24		15	က	13	19	23	മ	16	27	27	2	_	∞	9	20	18	17	2	25	12	22				14	Ξ		
(%) (%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(%)	100	100	91	100	100	100	100	100	83	73	46	100	100	100	90	•	•	96	86	100	97	83	100	78	100	100	92	29	100	100	100	100	69	94	94
CUM. RATE (0-74)†	0.18	0.02	0.33	0.09	0.20	0.29	0.02	0.31	0.08	0.71	0.10	0.07	0.02	0.24	0.08	0.00	0.00	1.43	2.34	0.30	0.27	0.03	0.07	0.05	0.26	0.00	0.13	0.02	90.0	0.02	0.00	0.08	0.16	7.85	8.26
ASR (W)	4.1	0.4	2.6	<del>[</del>	1.9	3.0	0.2	3.2	0.9	5.3	1.0	9.0	0.2	2.2	0.7	0.0	0.0	12.7	22.2	2.3	2.6	0.4	9.0	9.0	2.7	0.1	1.3	0.2	0.7	0.2	0.1	1.0	1.3	71.4	75.5
CRUDE RATE	1.3	0.4	2.4	1.	2.1	3.2	0.1	3.3	6.0	4.9	1.0	0.5	0.1	2.1	0.7	0.0	0.0	11.9	20.9	2.0	2.4	0.4	9.0	0.7	2.6	0.1	1.4	0.2	0.7	0.1	0.1	1.0	1.2	8.79	72.4
75+	4.7	7.0	7.0	11.7	23.4	35.0	٠	35.0	9.3	14.0	9.3	٠	٠	11.7	7.0	٠	٠	37.4	25.7	٠	2.3	4.7	4.7	4.7	4.7	2.3	14.0	2.3	2.3		٠	2.3	2.3	228.9	301.2
70-74	4.0		12.0	٠	12.0	12.0	٠	12.0		31.9	٠		٠	8.0		٠	٠	55.8	51.8	19.9	4.0	٠	4.0	٠	4.0	٠	8.0		4.0	٠	٠	4.0	4.0	243.3	271.2
69-99	12.2	٠	18.4	6.1	6.1	12.2	٠	12.2	3.1	39.8	9.5	3.1		9.5	12.2			30.6	36.7	9.2	9.2	3.1	٠		6.1	٠	3.1		٠				15.3	247.9	272.3
60-64	11.5	2.3	13.8	4.6	4.6	9.5	٠	9.2	4.6	25.3	6.9	2.3		6.9				41.4	0.69	6.9	4.6		6.9		9.2		4.6			2.3	٠	2.3	4.6	259.8	273.6
55-59	2.1		8.3	٠	8.3	8.3	2.1	10.4	2.1	16.7	2.1	6.3	4.2	6.3	٠	٠	٠	58.4	68.9	6.3	4.2	٠	2.1	2.1	2.1	٠	2.1	٠	٠	2.1	٠	2.1	٠	210.8	219.2
50-54	1.7		9.9	1.7	3.3	5.0	1.7	9.9	1.7	6.6	1.7	1.7		2.0				21.5	62.8	5.0	13.2		1.7	3.3	11.6		3.3	1.7	1.7		٠	1.7	2.0	176.9	178.5
45-49	1.5	1.5	1.5	4.4	1.5	5.9	٠	5.9	2.9	8.8				5.9	٠			42.5	71.8	8.8	8.8	1.5	٠	2.9	4.4			1.5					1.5	186.1	190.5
40-44	1.2		2.5	٠	1.2	1.2	٠	1.2		2.5				1.2	1.2			19.7	45.4	2.5	4.9	2.5	٠		4.9		2.5				٠	٠		92.8	95.8
35-39	-	1.1		7:	2.2	3.3	٠	3.3		4.5	<del>[</del> :			3.3	2.2	٠	٠	6.7	32.3	<del>[</del> :	2.2	٠		1.	٠		1.		1.1			1:1	<del>[</del> :	63.6	64.7
30-34	1.9		1.0	٠			٠		1.0	1.9	٠		٠	1.9		٠	٠	5.7	20.1	٠	1.9	٠		1.0	3.8	٠	1.0		٠	٠	1.0	1.0	٠	46.9	47.8
25-29	-			0.9	•	6.0	٠	6.0	•				٠		•	٠	٠	3.7	5.5	0.9	•	٠			4.6	٠	٠		٠	٠		٠		16.6	16.6
20-24	-		8.0	٠	8.0	0.8	٠	8.0			٠		٠			٠	٠	8.0	3.2		8.0	٠		٠	8.0	٠	0.8		0.8	٠	٠	0.8	٠	11.1	11.1
15-19		٠					٠			٠							٠				٠		٠		0.8	٠			1.5			1.5	1.5	4.6	4.6
10-14			٠		٠				٠		٠	٠	٠		٠	٠			٠	٠	0.8			٠			٠		٠					8.0	0.8
5-9			٠		٠		•		٠			٠			٠				٠										1.5			1.5		2.3	2.3
0-4					٠	٠	•		٠			0.8			٠		٠						٠			0.8			0.8			0.8		2.3	2.3
UNK AGE	0	0	<del>-</del>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	_
ALL	18	9	32	15	28	43	2	45	12	99	13	7	2	29	10	0	0	161	283	27	33	9	∞	6	35	2	19	က	10	2	_	13	16	918	086
SITE	Lip, oral cavity, and pharynx (C00-14)	Oesophagus (C15)	Stomach (C16)	Colon (C18)	Rectum (C19-20)	Colorectal (C18-20)	Anus (C21)	Colon, rectum and anus (C18-21)	Liver (C22)	Gallbladder (C23-24)	Pancreas (C25)	Nose, sinuses (C30-31)	Larynx (C32)	Lung, trachea and bronchus (C33-34)	Melanoma of skin (C43)	Mesothelioma (C45)	Kaposi sarcoma (C46)	Breast (C50)	Cervix uteri (C53)	Corpus uteri (C54)	Ovary (C56)	Kidney (C64)	Bladder (C67)	Brain, CNS (C70-72)	Thyroid (C73)	Hodgkin disease (C81)	Non-Hodgkin lymphoma (C82-85,C96)	Multiple myeloma (C88+C90)	Lymphoid leukaemia (C91)	Myeloid leukaemia (C92-94)	Leukaemia unspecified (C95)	Leukaemia (C91-95)	Other and unspecified (O&U)	All sites but C44 (ALLbC44)	All sites (ALL)

UNK, Unknown; ASR (W), Age Standardized Rate (World Population); CUM., Cumulative; MV, Microscopic Verification; DCO, Death Certificate Only †Percent ‡Rank based on highest ASR excluding: All sites but C44 and All sites

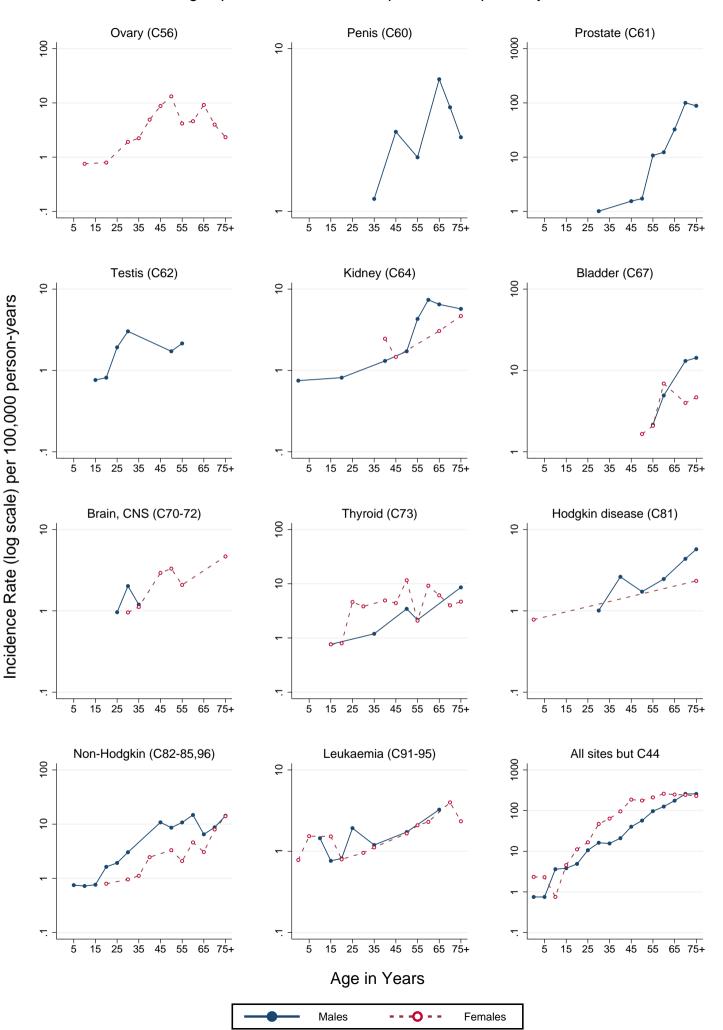
# BOLIVIA, LA PAZ (2011)

## Age-specific incidence rates per 100,000 person-years



# BOLIVIA, LA PAZ (2011)

## Age-specific incidence rates per 100,000 person-years



## BOLIVIA, LA PAZ (2011)

### Average annual person-years

