

Caption: Detailed description of included hip fracture incidence studies.

- A: **Non-residents** (patients who reside outside the study area but received treatment in the study area)
- B: **Pathological fractures** (fractures resulting from underlying diseases, including one or some of, but not limited to: Paget’s disease, neoplasms, metastases, bone cysts)
- C: **Second fracture** (patients with previous record of hip fracture, patients presenting with a second hip fracture)
- D: **Transfers** (patients transferred from another hospital/health institution (only one instance of the record kept))
- E: **Aftercare/complications/late effects** (diagnosis relating to orthopedic aftercare or complications from prior hip fracture surgery)
- F: **Trauma** (fractures resulting from (severe) trauma)

Author, Year [reference]	Region, Country	Study Period	Data Source	Definition of Hip Fracture	Exclusions						Number of Cases Over Study Period	Age Range
					A	B	C	D	E	F		
North America												
Fang, 2001 [18]	New York City, United States	1988 – 2002	New York Department of Health’s acute-care discharge database	ICD-9 820.0 – 820.9							Whites: 53,125 women 14,576 men; Blacks: 4,258 women 1,794 men; Hispanics: 3,062 women 1,073 men; Asian: 1,203 women 545 men	≥ 50
Jaglal, 1996 [19]	Ontario, Canada	1981 – 1992	From Hospital Medical Records Institute (hospital discharge data in Ontario)	ICD-9 820.0 – 820.9				✓			93,660	≥ 50
Levy, 1995 [20]	Québec, Canada	1981 – 1992	From province-wide database of hospital discharge information	ICD-9 820.0 – 820.9						✓	33,796 women 11,923 men	≥ 45

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Ross, 2000 [21]	Oahu, Hawaii, United States	1991 – 1995	Hospital discharge data	ICD-9-CM 820.0 – 820.9	✓		✓			✓	Japanese Americans: 427 women 166 men; Caucasians: 248 women 133 men	≥ 45
Latin America												
Bagur, 1994 [22]	La Plata, Argentina	1989 – 1990	Prospective survey of all major public and private hospitals with orthopedic facilities	Hip fracture (above the lesser trochanter)	✓	✓					164 women 31 men	≥ 50
Castro da Rocha, 2004 [23]	Sobral, Brazil	1996 – 2000	Medical records from the Santa Casa de Misericórdia de Sobral	Proximal femoral fracture	✓	✓			✓		50 women 29 men	≥ 20
Clark, 2005 [24]	Mexico City, Mexico	2000	Medical charts – initial diagnosis verified by surgical reports and/or x-rays	ICD-10 S72.0, S72.1, S72.2	✓						748 women 319 men	≥ 50
Morosano, 2005 [25]	Rosario, Argentina	2001 – 2002	Admission and discharge registers, and medical and surgery department records	Fracture of the proximal femur (cervical and trochanteric)	✓	✓			✓		608 women 155 men	≥ 50
Schwartz, 1999 [26]	Porto Alegre, Brazil	1990 – 1992	Hospital discharge list and surgical department records	ICD-9 820, 821	✓			✓			Estimated 472	≥ 20
Europe (excluding Scandinavia)												
Beringer, 2000 [27]	Northern Ireland, United Kingdom	1985, 1991, 1994, 1997	Theatre records of hospitals	Proximal femoral fracture							4,364 women 1,127 men	≥ 50

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Scandinavia												
Bjørgul, 2007 [35]	Østfold, Norway	1998 – 2003	All hip fractures treated at treated at Østfold Hospital Fredrikstad	Hip fracture (trochanteric and intracapsular)							1,270 women 460 men	≥ 40
Finsen, 2004 [36]	South Trøndelag and southern part of North Trøndelag, Norway	1992 – 1993; 1997 – 1998	Hand written surgery, radiology and hospital discharge reports	Trochanteric (intertrochanteric, pertrochanteric) or cervical (subcapital, transcervical, or basicervical) fracture	✓						1,821 women 680 men	> 50
Giversen, 2006 [37]	Viborg County, Denmark	1978; 1987 – 1997	From National Patient Register	ICD-8 820.00 – 820.03 ICD-10 S72.0 – S72.2	✓		✓			✓		> 50
Löfman, 2002 [38]	Östergötland, Sweden	1982 – 1996	Computerized registers of radiologic investigations	ICD-8 820.00 – 820.01 ICD-9 820A – 820D		✓		✓			483 women 178 men in 1982; 604 women 257 men in 1996	≥ 50
Lofthus, 2001 [39]	Oslo, Norway	1996 – 1997	Electronic diagnosis registers	ICD-9 820.X		✓					1,024 women 292 men	All ages
Lönnroos, 2006 [40]	Central Finland, Finland	2002 – 2003	Hospital discharge register, register from the Department of Anesthesiology and handwritten lists of emergency operations	ICD-10 S72.0 – S72.2	✓						412 women 165 men	≥ 55
Nymark, 2006 [41]	Funen County, Denmark	1996 – 2003	From Central Patient Administrative System	ICD-10 S72.0, S72.1, S72.2, T84.1, T93.1			✓				6676 verified 1 st fracture 520 subsequent fractures	≥ 50
Rogmark, 1999 [42]	Malmö, Sweden	1992 – 1995	Computer-based clinical and operating room reports	Hip fracture	✓						1,724 women 544 men	≥ 50

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Schwartz, 1999 [26]	Reykjavik, Iceland	1990 – 1992	Hospital discharge list	ICD-9 820, 821	✓			✓			Estimated 579	≥ 20
Africa												
El Maghraoui, 2005 [43]	Rabat, Morocco	2002	Hospital registers and medical records	ICD-9 820, 820.0, 820.2, 820.8 (closed hip fractures)	✓	✓			✓		83 women 67 men	≥ 50
Zebaze, 2003 [44]	Cameroon	1996 – 1998	Surgical and radiologic evidence from patients admitted to two hospitals.	Hip fracture							26 women 29 men	≥ 35
Asia												
Al-Nuaim, 1995 [45]	Riyadh, Saudi Arabia	1990 – 1991	Case records cross checked with Emergency room, Orthopedic department, and Medical Record departments	Proximal femur fracture	✓	✓					51 women 52 men	≥ 40
Baddoura, 2001 [46]	Beirut, Lebanon	1996	Questionnaires completed by all orthopaedic surgeons	Fracture trait of the proximal femur that could be sub-capital, in the femoral neck or in the trochanteric and intertrochanteric area	✓						40 women 23 men	≥ 30 < 100
Hagino, 2005 [47]	Tottori Prefecture, Japan	1998 – 2001	Survey registration according to hospital records	Hip fracture	✓						2,170 women 544 men	≥ 35
Huang, 2000 [48]	Kaohsiung City, Taiwan	1996	From the National Health Insurance program	ICD-9-CM 820.0 – 820.9		✓				✓	319 women 261 men	All ages
Iga, 1999 [49]	Hiigata Prefecture, Japan	1994	Medical records and radiographs	Hip fracture (cervical or trochanteric)	✓	✓					1,090 women 378 men	≥ 20

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Ikeda, 1994 [50]	Nagasaki Prefecture, Japan	1989 – 1990	Questionnaires completed by medical institutions	Fracture of the neck of the femur							1989: 801 women 203 men; 1990 814 women 195 men	≥ 20
Koh, 2001 [51]	Singapore	1985 – 1998	From the National Patient Master Index and the Central Claims Processing System	ICD-9 820, 820.0, 820.2, 820.89			✓	✓			9406	≥ 50
Lau, 2001 [52]	Hong Kong, Singapore, Malaysia, Thailand	1997	Hospital discharge records	Hip fracture	✓	✓					2,914 women 1,145 men; 1,380 women 445 men; 1,565 women 707 men; 266 women 125 men	≥ 50
Lim, 2008 [53]	Korea	2001; 2004	From Health Insurance Review Agency	ICD-10 S72.0, S72.1							20,830 2001 23,307 2004	> 50
Memon, 1998 [54]	Capital, Hawali and Farwania, Kuwait	1992 – 1995	Clinical and radiological evidence	Cervical, trochanteric or subtrochanteric	✓	✓					205 women 308 men	≥ 10
Moayyeri, 2006 [55]	Iran	2003	From the Iranian Multicenter Study on Accidental Injuries (questionnaires that were radiographically confirmed)	Proximal femur fractures							271 women 284 men	> 50

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Orimo, 2000 [56]	Japan	1997	Questionnaires from sample of hospitals	Hip fracture							36,730 women 10,826 men (extrapolated to entire nation)	All ages
Rowe, 2005 [57]	Gwangju City and Chonam Province, Korea	2001	From the Health Insurance Review Agency	Hip fracture							730 women 422 men	≥ 50
Schwartz, 1999 [26]	Beijing, China	1990 – 1992	Discharge reports and operating room log review	ICD-9 820, 821	✓			✓			Estimated 5,881	≥ 20
Schwartz, 1999 [26]	Hong Kong	1991	Discharge list and operating room logs	ICD-9 820, 821	✓			✓			Estimated 3,266	≥ 20
Shukla, 2008 [58]	South Sharqiya, Oman	2002 – 2007	Hospital records and case records from the Health Information and Management System	Fracture trait of the proximal femur (sub-capital, in the femoral neck or in the trochanteric and intertrochanteric area)					✓		77 women 70 men	> 40
Soveid, 2005 [59]	Shirz, Iran	2000 – 2003	Operating room logs	Hip fracture	✓	✓	✓	✓		✓	1,070 women 763 men	> 50
Yan, 1999 [60]	Shenyang, China	1994	Hospital registers and original medical records	ICD-9 820	✓	✓		✓		✓	206 women 247 men	> 50
Zhang, 2000 [61]	Tangshan, China	1994	Medical records and radiographs	Hip fracture (cervical or trochanteric)	✓	✓					57 women 127 men	≥ 20
Australia												
Boufous, 2004 [62]	New South Wales, Australia	1990 – 2000	Inpatient Statistics Collection	ICD-9 820 ICD-10 S72.0 – S 72.2							7,305 women 2,562 men	≥ 50

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Sanders, 1999 [63]	Southern Victoria, Australia	1994 – 1996	Radiological reports	Computerized keyword search of all radiological reports from the two medical imaging practices.	✓	✓					1,380 women 804 men	≥ 35