

# Detection and Follow-up of Cardiovascular Disease and CVD Risk Factors in the Southern Cone of Latin America: CESCAS

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# Institutions

- Universidad del Comahue, Bariloche, Argentina
- Municipalidad de Marcos Paz, Pcia. de Buenos Aires, Argentina
- Universidad de la Frontera, Temuco, Chile
- Universidad de la República, Montevideo, Uruguay
- Tulane University, New Orleans, USA.
- Centro Coordinador: IECS, Buenos Aires, Argentina



# Research Team

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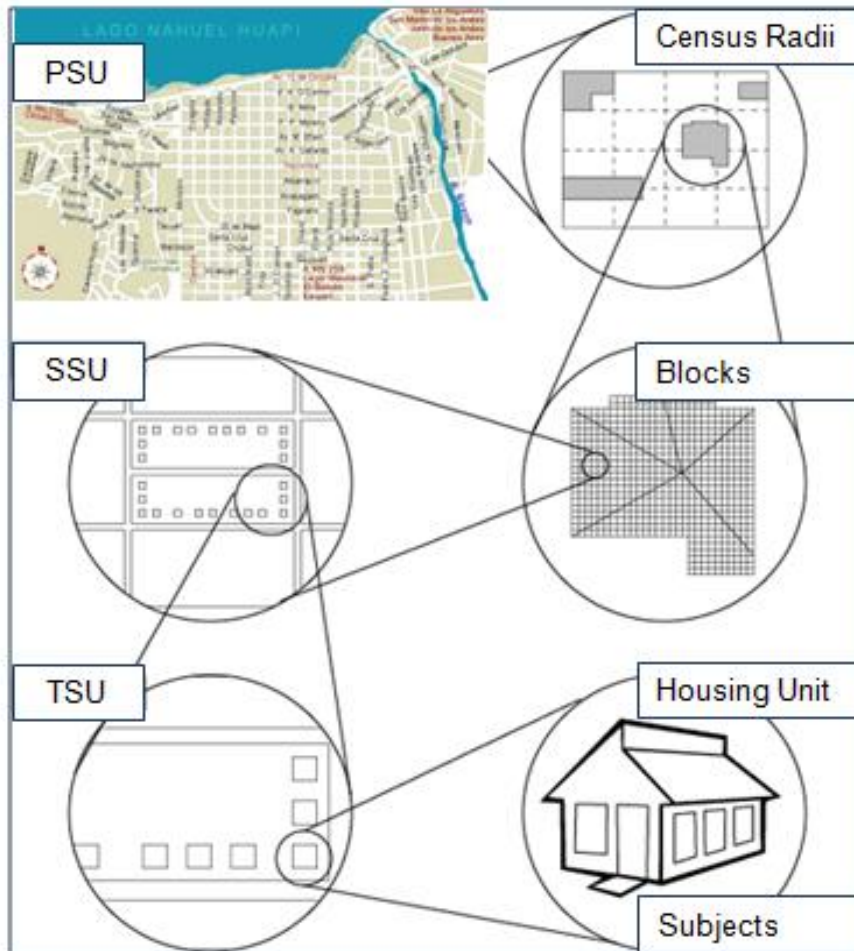
# Population and sample

- N = 7,524 participantes
- Age 35-74
- Four cities in the Southern Cone of LA:
  - Bariloche, Argentina
  - Marcos Paz, Argentina
  - Temuco, Chile
  - Canelones, Uruguay



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# Population and sample



## Multistage Random Sampling

Stage 1: Census Radii

Stage 2: Blocks within Radii

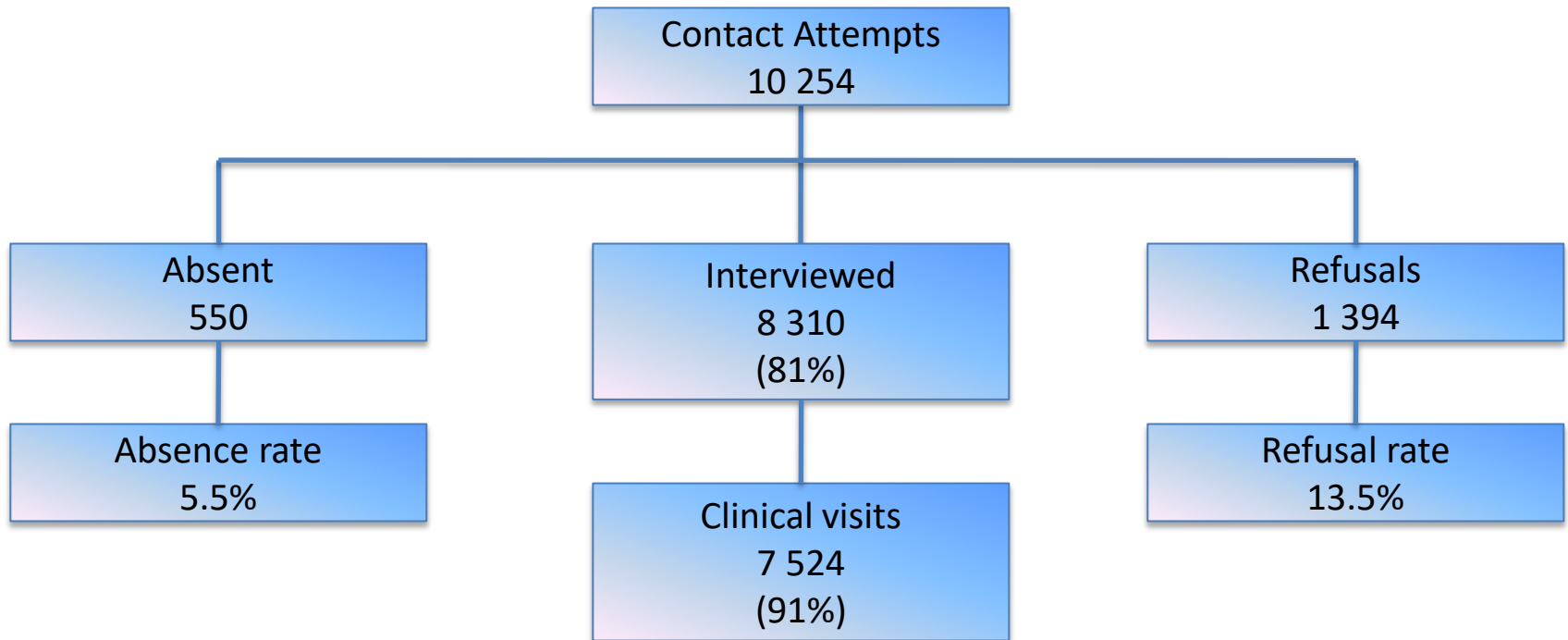
Stage 3: Households within Blocks

Stage 4: Subjects within Households



CSU

# Population and sample



# Characteristics of the study population

	No. of study participants	Less than high school, %	Unemployed, %
Overall	7524	52.3 (50.9, 53.7)	6.0 (5.3, 6.7)
<i>Sex</i>			
Men	3165 (42%)	52.4 (50.3, 54.5)	5.1 (4.2, 6.1)
Women	4359 (58%)	52.2 (50.4, 54.1)	6.8 (5.7, 7.8)
<i>Location</i>			
Marcos Paz, Argentina	1991	77.0 (74.9, 79.1)	8.5 (7.1, 9.9)
Bariloche, Argentina	1999	61.5 (59.2, 63.8)	3.4 (2.5, 4.3)
Temuco, Chile	1950	34.9 (32.7, 37.1)	7.3 (5.9, 8.6)
Barros Blancos, Uruguay	1584	73.8 (71.5, 76.1)	5.1 (3.9, 6.3)
<i>Age groups, year</i>			
35–44	1716	40.8 (38.2, 43.4)	8.7 (7.2, 10.3)
45–54	2072	52.0 (49.5, 54.5)	6.4 (5.2, 7.6)
55–64	2114	61.6 (59.2, 64.0)	3.8 (2.9, 4.8)
65–74	1622	71.9 (69.4, 74.4)	0.5 (0.1, 0.8)

# Prevalencia de FR cardiometabólicos

Rates		Current Cigarette Smoking (%)	Low Physical Activity(%)	Heavy Drinking(%)	Low intake of fruit and vegetable(%)
Overall, %, (CI 95%)		29.7 [28.4; 31.0]	35.2 [33.8;36.5]	4.2 [3.6;4.7]	85.5 [84.6;86.5]
By sex	Male	33.3	28.3	6.2	89.8
	Female	26.5	41.3	2.3	81.7
By Age-group	35-44	33.9	32.3	3.7	88.0
	45-54	35.8	34.5	4.4	87.2
	55-64	24.2	35.6	4.2	82.8
	65-74	12.6	44.6	4.7	79.0
By Education	Primary	26.5	33.3	4.4	87.2
	Secondary	31.4	34.9	3.8	84.3
	University	32.0	38.4	4.5	78.4

# Prevalencia de FR cardiometabólicos

Rates (%)		HTN	DM	High Chol	Obesity	Central Obesity	Met Syn
Overall (CI 95%)		40.8 [39.5;42.2]	12.4 [11.5;13.3]	24.4 [23.3;25.6]	35.7 [34.4;37.0]	52.9 [51.6;54.3]	37.4 [36.0;38.7]
By sex	Male	44.7	9.4	23.1	31.9	35.7	34.5
	Female	37.3	11.1	25.6	39.1	68.4	40.0
By Age Group	35-44	22.5	4.1	13.5	32.4	46.0	25.8
	45-54	38.8	9.2	24.2	35.2	51.7	37.7
	55-64	57.2	16.1	35.6	39.4	57.2	48.5
	65-74	72.4	21.5	39.2	40.6	60.2	53.0
By Edu	Primary	50.6	13.5	27.0	40.9	56.6	42.9
	Second	38.3	10.6	22.7	35.2	50.5	36.7
	Univers.	31.3	7.7	23.7	29.4	45.6	29.9



## MESA REDONDA 1. POBLACIÓN Y MUJERES

# Cohorte CESCAS Chile

Dr. Fernando Lanás, PhD  
Universidad de La Frontera  
Temuco, Chile



# CESCAS Cohort- Chile

- Population source: general population. Urban Temuco
- Sampling: A four-stage stratified sampling method
  - 1° Census radii stratified by socio-economic level were randomly selected.
  - 2<sup>nd</sup> Number of blocks proportional to the radius size were randomly selected.
  - 3<sup>rd</sup> Households within each block were selected by systematic random sampling.
  - 4<sup>th</sup> In the households one listed member was randomly selected.
- Inclusion/exclusion criteria
  - Age 35 to 74 years old
  - No plans to moved away if the future years
- Response rate: 73.4%

# Cross Sectional Sampling

Probabilistic, 4 stages & stratified



# CESCAS Cohort- Chile

- Sample size:
  - Planned 2,000 in Chile (8.000 all CESCAS)
  - Achieved (1.954)
- Cohort composition (age, gender)
  - Age  $54.1 \pm 11$  years
  - Gender; Female: 55.9%
- Dynamic Cohort.
  - Recruitment between February 2010 to December 2011
- Community participation: no

# CESCAS Cohort- Chile

## Recommendations:

- Multidisciplinary team
- Clear individual task assignments
- Frequent investigator & staff conferences
- Involve post graduate students & young faculty
- Additional studies nested in the cohort

