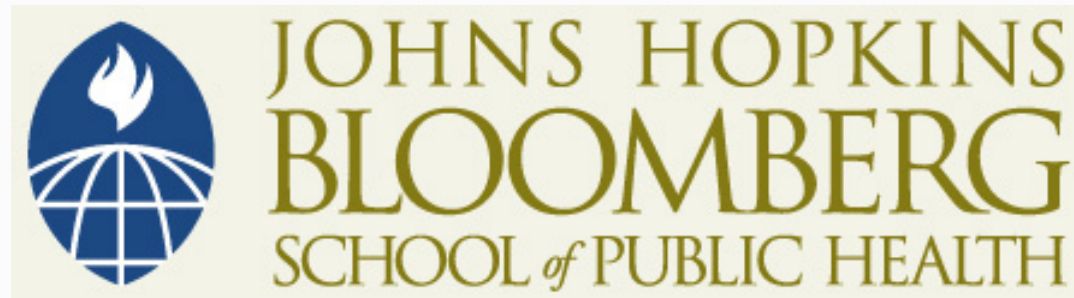


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JOHNS HOPKINS  
BLOOMBERG  
SCHOOL *of* PUBLIC HEALTH

## Section D

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More Examples of Comparing Two Proportions

## Example: GI Outbreak in Maryland

- Outbreak of Gastroenteritis in Maryland high school
- Sample of 263 students who bought lunch on single day: some ate sandwiches, others ate other meals

		Ate Sandwich		
		Yes	No	
Sick	Yes	109	4	113
	No	116	34	150
		225	38	263

# Example: GI Outbreak in Maryland

- Sample proportions and 95% CIs of proportions with illness for sandwich and non-sandwich group (Stata)

```
. cii 225 109
```

Variable	Obs	Mean	Std. Err.	-- Binomial Exact -- [95% Conf. Interval]	
	225	.4844444	.0333172	.4175076	.5517965

```
. cii 38 4
```

Variable	Obs	Mean	Std. Err.	-- Binomial Exact -- [95% Conf. Interval]	
	38	.1052632	.0497845	.0294345	.2480494

# Example: GI Outbreak in Maryland

- Results from comparison of proportions

```
. csi 109 4 116 34
```

	Exposed	Unexposed	Total	
Cases	109	4	113	
Noncases	116	34	150	
Total	225	38	263	
Risk	.4844444	.1052632	.4296578	
	Point estimate		[95% Conf. Interval]	
Risk difference	.3791813		.2617709	.4965917
Risk ratio	4.602222		1.803663	11.74302
Attr. frac. ex.	.7827137		.4455728	.914843
Attr. frac. pop	.755007			
		chi2 (1) =	19.07	Pr>chi2 = 0.0000

# Insurance Status, Dialysis Patients by Country

- Proportion of dialysis patients with national insurance in 12 countries (only six shown)

## EXHIBIT 1

### Descriptive Measures Of The Prevalent Cross-Sectional Patient Sample, Dialysis Patients In Twelve Countries, 2002-2004

	A/NZ (n = 561)	BEL (n = 468)	CAN (n = 503)	FRA (n = 481)	GER (n = 524)	ITA (n = 540)
Mean age (years)	59.9 (14.7)	66.2 (13.4)	62.1 (14.7)	64.1 (14.5)	61.7 (14.1)	64 (13.7)
Minority <sup>a</sup>	21.5%	5.3%	18.7%	7.1%	0.4%	0.4%
Income (\$US)						
<\$20,000	85.0%	73.4%	71.8%	67.0%	59.7%	78.3%
\$20,000-\$39,000	9.1	17.5	20.8	21.8	27.1	17.4
≥\$40,000	5.9	9.1	7.4	11.2	13.1	4.2
Insurance type						
National only	69.8%	74.1%	79.6%	45.5%	95.4%	99.6%
Private only	5.4	0.4	0.2	0.2	2.9	0.0
Mean number of comorbid conditions <sup>b</sup>	3.7 (2)	3.9 (2.1)	4.1 (2.1)	3.1 (1.9)	3.4 (2.1)	2.7 (1.9)
Mean number of prescribed medications	8.7 (3.6)	9.9 (4.1)	12.6 (4.8)	7.7 (3.5)	9.7 (3.5)	6.4 (3.6)

# Insurance Status, Dialysis Patients by Country

- Observed proportions and 95% CI for Canada and France, respectively

- Canada

```
. cii 503 361
```

Variable	Obs	Mean	Std. Err.	-- Binomial Exact -- [95% Conf. Interval]	
	503	.7176938	.0200699	.6761616	.7566455

- France

```
. cii 481 219
```

Variable	Obs	Mean	Std. Err.	-- Binomial Exact -- [95% Conf. Interval]	
	481	.4553015	.0227068	.4101514	.5010042

# Insurance Status, Dialysis Patients by Country

- 2x2 table setup

		Country		
		CAN	FR	
Insurance	Yes	361	219	503
	No	142	262	481
		503	481	984



# Insurance Status, Dialysis Patients by Country

- Comparison of proportions

```
. csi 361 219 142 262
```

	Exposed	Unexposed	Total
Cases	361	219	580
Noncases	142	262	404
Total	503	481	984
Risk	.7176938	.4553015	.5894309
	Point estimate		[95% Conf. Interval]
Risk difference	.2623924		.2029955 .3217893
Risk ratio	1.576305		1.409195 1.763232
Attr. frac. ex.	.3656049		.2903748 .4328596
Attr. frac. pop	.2275575		
chi2 (1) = 69.95 Pr>chi2 = 0.0000			