

CALCULATION OF FISHER'S EXACT TEST Form L2				Complaint no.	Place of outbreak	Vehicle
<u>Step 5</u> (Consider only if steps 3 and 4 are not performed on Form L1)				Formula for calculation = $\frac{(a+b)! (c+d)! (a+c)! (b+d)!}{(n!) (a!) (b!) (c!) (d!)}$		
One-tailed test <i>p</i> 1.1 Observed table				vi $p_{1.1} = \frac{(\quad)! (\quad)! (\quad)! (\quad)!}{(\quad)! (\quad)! (\quad)! (\quad)! (\quad)!}$		
Exposure	Ill	Well	Attack Rate	vii Cancel any possible factorial (!) values List individual values from factorials		
Ate/drank	a	b	a+b(<i>i</i>)	viii Cancel any possible remaining values		
Did not eat/drink	c	d	c+d(<i>ii</i>)	ix Calculate <i>p</i> 1.1 from the remaining values		
Total	a+c(<i>iii</i>)	b+d(<i>iv</i>)	n(<i>v</i>)			
<i>p</i> 1.2 Table				vi $p_{1.2} = \frac{(\quad)! (\quad)! (\quad)! (\quad)!}{(\quad)! (\quad)! (\quad)! (\quad)! (\quad)!}$		
Exposure	Ill	Well	Attack Rate	vii Cancel any possible factorial (!) values List individual values from factorials		
Ate/drank	a+1	b-1	a+b(<i>i</i>)	viii Cancel any possible remaining values		
Did not eat/drink	c-1	d+1	c+d(<i>ii</i>)	ix Calculate <i>p</i> 1.2 from the remaining values		
Total	a+c(<i>iii</i>)	b+d(<i>iv</i>)	n(<i>v</i>)			
<i>p</i> 1.3 Table				vi $p_{1.3} = \frac{(\quad)! (\quad)! (\quad)! (\quad)!}{(\quad)! (\quad)! (\quad)! (\quad)! (\quad)!}$		
Exposure	Ill	Well	Attack Rate	vii Cancel any possible factorial (!) values List individual values from factorials		
Ate/drank	a+2	b-2	a+b(<i>i</i>)	viii Cancel any possible remaining values		
Did not eat/drink	c-2	d+2	c+d(<i>ii</i>)	ix Calculate <i>p</i> 1.3 from the remaining values		
Total	a+c(<i>iii</i>)	b+d(<i>iv</i>)	n(<i>v</i>)			
Etc. continue for all other <i>p</i> -value needed				x <i>p</i> 1-value = <i>p</i> 1.1 + <i>p</i> 1.2 + <i>p</i> 1.3 + <i>p</i> 1.x for one-tailed test		

Interpretation: If the *p*-value is less than or equal to 0.05, then there is evidence to suggest that the food/beverage under investigation is related to the observed illness; if it is 0.005 or less, there is strong evidence for this relationship.