Stat 22 Oct 19
Quiz 1 due Fri night 25 Oct
Quiz 2 due Wed night 30 Oct

This design:
time: probability
next time:

population
we want to generalize to all subjects
have
good

An experimental design is valid if it's unbiased.

Homework 2 due Wed night 30 Oct

Completely randomized design

Randomized controlled trial (RCT)

2. h

like
at random
at random

CRD

20
def: $Z$ is a PCF if and only if
(a) $Z$, $E$ could be associated
(b) $E_i$, $F$
It is more likely to get a PCT if your body is not at its maximum temperature. To achieve this, you need to:

1. Use a fever to help your body adjust.
2. Ensure your body temperature is not at a fever level.
3. Ensure your body's temperature is at a level where it can be adjusted.

In this process:

- Measure your body's temperature at different times.
- Record the differences in temperature.
- Use these differences to adjust your body's temperature.

Example:

<table>
<thead>
<tr>
<th>Time</th>
<th>Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:00</td>
<td>69.0°F</td>
</tr>
<tr>
<td>2:00</td>
<td>65.9°F</td>
</tr>
<tr>
<td>3:00</td>
<td>65.2°F</td>
</tr>
<tr>
<td>4:00</td>
<td>63.8°F</td>
</tr>
</tbody>
</table>

These measurements are taken at 1-hour intervals to ensure accurate results.
Can CRD kill PCR by hoping randomization has made 0, 0
since similar to PCR

A2: Yes, because paired design
kills PCR by holding it constant.

new X - Y

if X, Y associated, is it always true that either
X is causing Y or Y is causing X

rephrase: is association = causation?
association ≠ causation

why isn't assoc. = caus?  

A. PCs

outcome dataset  
1 = failure  
0 = not failures

if obs. study
then vary a lot
about PCs
if we don't hold age constant ("control for the pcf \( \bar{z} \) = age"), this would bias results to make pill look less harmful than it really is after controlling for age, pill use associated with \( \delta \) mult.

\( \Delta \) is this difference practically significant? \( \checkmark \) no if short (time) pill use; yes if long use