**num-cliques** (range 1-20) [slider]

**clique-size** (range 1-35) [slider]

**avg-num-friends** (range 2- 1-cliquesize) [slider]

**social-butterflies?** [switch] Enable to initialize a limited number of inter-group links between "clique leaders".

**infection-chance** (0-100) [slider] The chance out of 100 that an infected person will transmit infection during one week of couplehood if they have unsafe/unprotected sex (without a condom) (infectivity)

**symptomatic?:** [chooser] Specify which genders (if any) show symptoms of the infection

**Thorough description/explanation of Agent Parameters:**

**had-unsafe-sex?:** Whether this person had sex without a condom on the last tick

**infected?:** If true, the person is infected (and infectious)

**known?:** The person is infected and knows it (due to being symptomatic)

Note: The agent will not "know" they are infected (and set the known? to true) until check-infected is called…and even then, they will only be aware of their infected state if his/her gender is symptomatic. ……An agent will not ever know if they are infected (their known? variable never = true) if they are not symptomatic/of a symptomatic gender, which may enable an STI to more easily spread through a population \*\*\*\*\*\*

Note: In this model, agents that know they are infected always use condoms to protect their sexual partners

**coupled?:** If true, the person is in a sexually active couple.

**partner:** The person that is our current partner in a couple.

**couple-length:** How long the person has been in a couple.

**friendship-tendency:** How likely this person is to make a new friend. (doesn't change)

**coupling-tendency:** How likely the person is to join a couple. (doesn't change)

**commitment:**  How long the person will stay in a couple/relationship. (doesn't change)

**num-friends:** The ideal/goal number of friends that an agent wants to have

Friendships can only break if the friend was of an opposite sex, they formed a sexual relationship, and then they broke up, which breaks all links between them. Setting this parameter allows agents to try to keep their desired number of friend connections. Sexual partners are not counted in the friend count. This value is set to the initial number of friends/links an agent has, which is generated randomly on a normal distribution at setup….???

**group-membership:** which cluster/friend group the friends and leaders are mainly part of

This still applies to social butterflies - assume they have a core friend group

in addition to more out-group links than others

**assign-normally-distributed-member-variables:** Individual agent variables are assigned randomly following a normal distribution based on slider or global values

**talk-to-peers**:

* Agents talk to their friends and sexual partner (if any), which might impact their personal likelihood of practicing safe sex
* Agents talk to their friends (indicated with blue links), and potentially update their opinions about safe sex (and consequently likelihood to practice safe sex).

**couple**: kjal;kdfjs

**make-friends**: Agents make friends. ~~This gives everyone (coupled or not) a chance to make a friend.~~

If this agent has not reached their maximum limit of friends (and random chance permits), they try to make a friend (regardless of it they are coupled or not)

As long as they have not reached their maximum limit of friends, every agent (coupled or not) gets a chance to make a friend on each tick.

Otherwise, all the sexual partner links break, then it becomes single-sex clusters (don’t think this actually could happen anymore… possibly reword)

If this agent has not reached their maximum limit of friends, they try to make a friend

If this agent has not reached their maximum limit of friends (and random chance permits), they try to make a friend.

every agent, coupled or not, gets a chance to make a friend on each tick, as long as they have not reached their maximum limit of friends.

;; If this agent already has reached their maximum limit of friends,

;; they don't try to create any more friend links

make friends (will only be called if the turtle has not reached their maximum friend limit) and their tendency is acceptable 🡪 everyone should attempt to make friends on each tick as well, because otherwise, all the sexual partner links break, then it becomes single-sex clusters and nothing cool happens

**uncouple**:

Agents that (currently) have a sexual partner can potentially uncouple ~~or potentially break up~~.

Agents will uncouple if the length of the relationship reaches the commitment threshold for one of the partners.

**have-sex**: If agents are coupled (have a sexual partner), still in/part of a couple, ~~each tick,~~ they have sex/ they will have sex on each tick ~~and have the potential of spreading an STI if they have unprotected sex…. and one of them doesn’t know they are infected??~~. The likelihood that the couple will engage in safe sex depends on the **safe-sex-likelihood** of both [check code!!] participants

**check-infected:** asdfasdf