

Male Barrier Model

Week 14: 4/24/09 – 5/1/09

Team Members: Whitney Johnson – BSAC
John Cheadle - BWIG
Terra Gahlman – Communicator
Nick Balge – Team Leader

Advisor: Prof. Pamela Kreeger

Client: Prof. Marge Sutinen

Next meeting: 5/8/09, 12:05pm

Problem Statement:

To design a portable teaching tool to demonstrate the strength of polyurethane and latex barriers, using weights and a scale.

Team Goals:

Finalize fabrication, finish testing, finalize poster and prepare for the final poster presentation.

Individual Goals:

John Finish testing and prepare section for poster presentation.

Whitney Fabricate wooden pegs to add length to device.

Terra Assist with testing and prepare for poster presentation.

Nick Find additional materials for the device.

Summary of Accomplishments:

We finished the device, making a variety of changes. We added rubber to the clamp for a better fit against the condom, we added wooden pegs to the end of the aluminum poles to add length, and finished gluing the funnel and tubing mechanism to the back of the scale. Finally, we coated the PVC pipe that will hold the condom with a material that will make it easier to adhere. We also finished our testing, which led to some unforeseen results; the condoms stretched longer than we thought and held more weight – that was the reason for the extra pegs. We also had to acquire a graduated cylinder for our poster presentation in order to prevent scattering during the presentation – the condom broke too inconsistently to use our bowl lined with canvas.

Difficulties:

Some with technical aspects with saving the poster presentation, barriers behaving differently than previously tested, leading to some last minute modifications of the device itself and the catching mechanism.

Activities:

4/17/09	Team	Glued funnel/tubing to back of scale, coated PVC pipe	4.00h
4/21/09	Team	Testing of the male barrier model	6.00h
4/22/09	Whitney	Cut and painted extra pegs	2.00h
	John	Acquired tubing and graduated cylinder	1.00h
4/22/09	Terra	Acquired condoms, attended meeting with Ms. Sutinen's Class	2.50h
4/22/09	Nick	Acquired rubber bands, glue, wire	1.00h
4/23/09	Team	Creation of poster and preparation for the presentation	4.00h

	John	Terra	Whitney	Nick	Team
Past Week	1.00h	2.50h	2.00h	1.00h	14.00h
Previous Total	30.00h	30.50h	30.00h	30.50h	26.50h
Total	31.00h	33.00h	32.00h	31.50h	40.50h

Expenses:

Item/work done	Price	Quantity	Shipping/Tax	Total
Alum. poles	\$7.99	2	\$8.64	\$24.62
Analog scale	\$33.39	1	\$6.87	\$40.26
10 lb lead pellets	\$33.69	1	\$9.26	\$42.95
L bracket	\$15.17	1	\$0.83	\$16.00
	\$2.29	1	\$0.13	\$3.42
Total				\$111.25