February 10, 2012

Dear Manufacturer,

As many of you know, US Lacrosse has not reviewed stick specifications for women’s lacrosse in nearly 10 years. With the rising popularity of the sport has come a new era of equipment and technology. While you as manufacturers deserve praise and congratulations for your innovation, we as the governing body must continue to do our due diligence and ensure the ongoing safety of players. This spring, US Lacrosse will be conducting a flexibility study on all USL approved women’s lacrosse sticks.

Each manufacturer will be required to send one (1) strung head with the shaft intended for use with each specific head attached as a single assembly to Dave Paller at RIH labs, no later than March 1, 2012. If one shaft is intended for use with more than one head, please indicate for the lab. Any stick that you as a manufacturer would expect to be listed as legal for play for 2013 MUST be included in your shipment. Any stick omitted from testing will not be approved for play in 2013.

Any stick that is in the development stages and not yet ready to be tested will be tested by RIH at a later date but will not be legal for play in 2013 until tested. Additionally, RIH will send your samples back to you if you would like as long as you provide a return address and inventory list. Alternatively, if you do not need your sticks back, RIH and USL will make arrangements for those sticks to be donated to a youth program.

Below is a detailed description of the test:

In essence, RIH is assessing lateral and posterior to anterior (P-A) Crosse stiffness. They completed some preliminary work prior to running this test for FIL where a number of current and former lacrosse players (5 males and 5 females) performed a stick check on a device with a mounted accelerometer. Impact force was calculated for each check. The mean impact force for both the men and women was 101.9 ± 46.9 N. The force of 100 N (22.5 lb.) assess deflection of the Crosse in a (P-A orientation) was chosen as a realistic value. The value of 45 N (10 lb.) was used for the lateral test as the Crosse would deform beyond the capacity of the testing frame. These values and testing methods will be replicated for US Lacrosse.

RIH compiled the data for each Crosse and built a data base and quantified the average deflection values. The idea would be that a Crosse outside of the normal
distribution either 1.5 (86% of a normal distribution) or 2.0 (95% of a normal distribution) standard deviations would be considered non-compliant with current rules.

**Here are some pictures of the setup**

*Figure 1: Crosse tested in anterior to posterior and lateral orientation.*

![Figure 1](image1)

*Figure 2: Crosse tested in posterior to anterior orientation.*

![Figure 2](image2)

Should you have any further questions, please do not hesitate to contact me at any time. Finally, please remember that the comment period for manufacturers is open until May 1, 2012.

Thank you,

**Melissa Coyne**
Women's Game Director
US Lacrosse
113 W. University Parkway
Baltimore, Maryland 21210
P: (410) 235-6882 x194
F: (410) 366-6735
mcoyne@uslacrosse.org