

**MEGAComfort CLUE Pilot Program  
February 28 2004**

**Dept 41 Hasbro Games - East Longmeadow, MA**

Subject #	Initial Pain Level	2 Wks Post	4 Wks Post	Pain Area	Footwear
1	9	4	1	knees	shoes
2	6	8	4	back	shoes
3	6	2	4	knees	boots
4	9	4	7	back	shoes
5	5	4	1	back	boots
6	4	2	1	feet	boots
7	5	2	0	feet	sneakers
8	6	4	3	feet	sneakers
9	5	5	4	feet	sneakers
10	5	4	5	knees	shoes
11	8	5	6	hips	boots
12	5	4	5	knees	boots
13	8	7	5	feet	boots
14	3	6	0	feet	boots
15	6	2	0	back/feet	sneakers
16	6	3	4.5	feet	boots
17	4	3	2.5	feet	boots
18	9	5.5	5.5	feet	sneakers
19	4	3	2	knees	boots
20	5	2	1	feet	boots
21	5	5	5	back	sneakers
22	9	7	7	knees	shoes
23	8	6	6	feet	sneakers
24	5	8	8	knees	boots
25	5	4	4	back	sneakers
26	5	4	9	ankle	sneakers
27	5	5	2	feet	boots
28	2	3	1	ankle	shoes
29	0	0	0	none	boots
30	0	5	0	feet	boots
31	5	7	9	feet	sneakers
32	8	5.5	4.5	feet	boots
33	4	5	4	back	boots
34	8	5	2	feet	sneakers
35	6	6.5	4.5	back	sneakers
36	3	4	3	feet	sneakers
37	8	5	5	hips	sneakers
38	4	3	2.5	neck	boots
39	5	6	7	feet	boots
40	0	0	0	feet	boots
41	6	0	0	feet	boots
<b>TOTAL</b>	<b>219</b>	<b>173.5</b>	<b>145</b>	<b>56% Feet</b>	<b>50% Boots</b>
<b>RAGE RESPC</b>	<b>5.341463415</b>	<b>4.231707317</b>	<b>3.536585366</b>		
<b>PERCENT CHANGE</b>		<b>20.8%</b>	<b>33.8%</b>		
<b>Wilcoxon signed rank test one tail paired</b>		<b>0.023334926</b>	<b>0.001481213</b>		

**Discussion - 33.8 % Overall Reduction in Perceived Foot, Knee and Back Pain**

Hasbro is one of the world's leading puzzle, toy and game manufacturer making such games as Monopoly, Scrabble, GI Joe, Trivial Pursuit, Pokemon Cards and Mr. Potato Head to name a few. Hasbro's main manufacturing facility covers over 20 acres in East Longmeadow MA and employs over 1500 workers.

The purpose of the CLUE Pilot Program was to assess the effectiveness of the MEGAComfort Personal Anti-Fatigue Mat Insole in helping to reduce perceived foot, knee and back pain. All employees taking part in the study filled out a questionnaire before receiving the PAM Insoles and then again 2 and 4 weeks later. The surface the workers were standing on remained a constant as did the floor mats they were currently standing on. The only variable that changed was replacing the insoles currently in the employee's footwear with the MEGAComfort Insole.

As a general rule all the employee test subjects routinely stood on their feet on concrete between 75% to 100% of their working day. Overall, 56% complained of foot pain with a surprising number of employee complaining of or have experienced diagnoses related to knee arthritis or other chronic pathology of the knee at 17%. A disturbing pattern was apparently developing that indicated knee pain was about equal to those complaints related to back pain.

The statistical reference implies that the 2 week data collection revealed a 20.8% improvement of overall discomfort related to all areas with a 97% confidence that the improvement was due to the influence of the safety initiative for utilizing MEGAComfort PAM insoles.

The most important data was collected at the 4 week data collection period that revealed an impressive 33.8% improvement in perceived discomfort in the Dept 41 workers. The data's statistical reference indicates that the positive improvement was with a 99% confidence level that the safety initiative was due to the implementation of the MEGAComfort P.A.M insoles for these areas.

January-February 2004

Prof. Pat Carley