TITLE: National Health and Nutrition Examination Survey (NHANES) of Fecal Incontinence: Characteristics of Incontinent Stools

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ABSTRACT BODY: Background: Fecal incontinence (FI) occurs in 7-9% of US adults. Its impact on quality of life ranges from minimal to severe and may include admission to a nursing home. This impact likely depends on the frequency and type of stool lost. Aims: Characterize the prevalence of FI according to the frequency and type of stool lost. Methods: Ouestions from the Fecal Incontinence Severity Index (Dis Colon Rectum 1999;42:1525), which asks about the frequency of accidental bowel leakage during the last month separately for mucus, liquid, and solid stool, were included in the NHANES survey in 2005 and 2006. FI was defined as any involuntary loss of mucus, liquid, or solid stool; this definition of FI does not include gas. NHANES over-samples minorities and the elderly for increased precision; it provides weights for each subject's data to obtain estimates for the national population. Subjects were 2079 males and 2229 females aged 20 or older. Prevalence estimates (percents) for the national population and 95% confidence intervals are reported. Results: See tables. The estimated prevalence of FI is 8.8% [CI 7.1, 10.4%] of adult women and 7.7% [CI 6.0, 9.4%] of adult men, which correspond to 8.4 million women and 6.9 million men in the USA. Of those with FI, loss of liquid stool is reported by 72% of women and 77% of men, and solid stool incontinence by 23% of women and 15% of men. Also, 67% of women and 69% of men with FI report the frequency of FI as 1-3 times per month. FI is a daily occurrence for 8.5% of women and 10.5% of men with FI. Conclusions: Most FI consists of liquid stool. In 2/3 of cases with FI, it occurs infrequently, but at least weekly FI is reported by an estimated 2.7% of women and 2.6% of men, corresponding to 2.6 million women and 2.4 million men in the USA. At least daily FI is reported by 0.9% of women and 0.7% of men, corresponding to 0.9 million women and 0.6 million men. Correlation with quality of life impact is needed. [Supported by NICHD and NIH Office of Research on Women's Health grants U01 HD41249, U10 HD41250, U10 HD41261, U10 HD41267, U10 HD54136, U10 HD54214, U10 HD54215, U10 HD54241]

Proportion of women and men who have different forms of FI			
	Females (%)	Males (%)	
Mucus	2.9 [2.3-3.5]	3.2 [2.2-4.3]	
Liquid	6.3 [4.8-7.8]	6.0 [4.6-7.4]	
Solid	2.0 [1.3-2.7]	1.2 [0.7-1.7]	

Proportion of women and men who have different frequencies of FI		
	Females (%)	Males (%)
1-3/month	6.0 [4.6-7.4]	5.2 [3.9-6.5]
1/week	0.4 [0.1-0.7]	0.7 [0.2-1.2]
2-6/week	1.4 [0.7-2.1]	1.2 [0.7-1.7]
≥1/day	0.9 [0.6-1.2]	0.7 [0.3-1.0]