





## TACT<sup>3</sup>

### Tackling Ageing Continence through Tools, Theory and Technology

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## Incontinence

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**Urinary Incontinence 'is a condition in which involuntary urine loss is a social or hygienic problem and is objectively demonstrable'.**

*International Continence Society definition of incontinence*

## Continence difficulties

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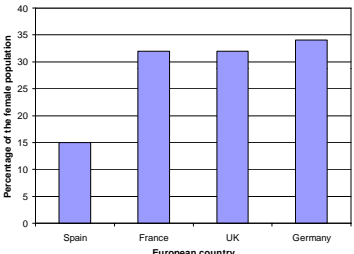
- Loss of bladder control
  - Stress (Weakened pelvic floor muscles, Childbirth injuries)
  - Urge (Complications of Stroke, Parkinson's disease)
  - Neurogenic bladder (nerve damage, pelvic surgery)
  - Psychological (Stress)
  - Damage (Spinal injuries)
  - Side effects of medication
- Mobility problems (Arthritis)
- You can't pee (Spinal injuries, prostate problems)
- You have inadequate access to continence facilities



## Prevalence of incontinence

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Percentage of women who had symptoms of urinary incontinence in the previous 30 days



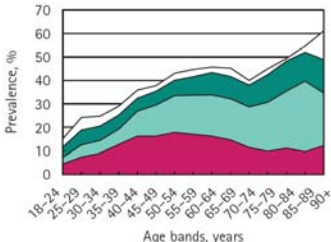
European country	Percentage of the female population
Spain	~15%
France	~32%
UK	~32%
Germany	~34%

Hunskaar, S., Lose, et al. (2003) Prevalence of Stress Urinary Incontinence in Women in Four European Countries, 2002.

## Prevalence with age

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FIG. 3. Type of incontinence by age band (other, white; urge, green; mixed, light green; stress, red).

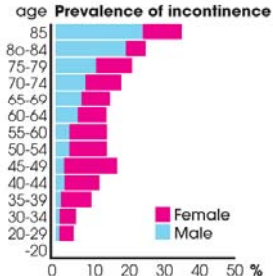


Age bands, years

## Prevalence with gender in Canada

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age Prevalence of incontinence



Age Group	Female (%)	Male (%)
85	~35	~25
80-84	~30	~20
75-79	~25	~15
70-74	~20	~10
65-69	~15	~8
60-64	~10	~5
55-59	~8	~4
50-54	~6	~3
45-49	~4	~2
40-44	~3	~1
35-39	~2	~1
30-34	~1	~0.5
20-29	~0.5	~0.2

### Continence management options for men



Bladder  
Urethra  
Urine flows down catheter



Condom catheters



Pads



Urinals



Pouches



Penile clamps

### Continence management options for women



Foley catheter



Pads



Female urinals

### Available AT in the field of continence technology



Kegel pelvic floor stimulator



Pad wetness sensor

### TACT<sup>3</sup> Tackling Ageing Continence through Tools, Theory and Technology

- Environmental barriers to continence
- Interventions and services
- Assistive devices

### TACT<sup>3</sup> Environmental barriers to continence for older people

**Aims**


- Explore the current environmental barriers
- Develop a design tool for designers and service providers for public lavatory provision



### TACT<sup>3</sup> Interventions and services

**Aims**

- To compare specialist versus standard incontinence care
- To investigate older peoples', carers' and health and social care professional's views on care approaches

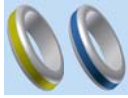


"Would you stop leaving incontinence leaflets  
Lying about! I've told you, I don't have a problem!"

## TACT<sup>3</sup> Assistive devices

### Aims

- Develop assistive devices to improve the confidence of older people



Colour change odour detector



Wetness alerting underwear

## TACT<sup>3</sup> Collaborators and Partners

Collaborators  
Bristol University  
Dalarna Research Institute (Sweden)  
The University of Sheffield  
The University of Manchester  
Birkbeck HEC  
Royal College of Art  
University of the West of England  
SmartLife Technology Ltd

Partners  
Age Concern, Barnsley  
Centre for Accessible Environments  
Devices for Dignity  
Help the Aged  
Technology Sounding  
The British Toilet Association  
The Gail Trust  
The National Trust  
The Simons Foundation  
The Relatives and Residents Association

Canadian Linked project  
University of Ottawa

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The New Dynamics of Ageing programme