

# Impact of a bundle of hand hygiene-related interventions in nursing homes on the infectious risk.

<b>Submission date</b> 08/07/2015	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
<b>Registration date</b> 20/07/2015	<b>Overall study status</b> Completed	<input type="checkbox"/> Protocol
<b>Last Edited</b> 24/07/2020	<b>Condition category</b> Infections and Infestations	<input type="checkbox"/> Statistical analysis plan
		<input checked="" type="checkbox"/> Results
		<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims

In nursing homes, the infectious risk for residents is high, making infection control using approaches such as hand hygiene (HH) a major issue. However, the effectiveness of HH to reduce the infectious risk in nursing home settings is not well documented and compliance with HH recommendations often remains low. The objective of this study is to investigate how HH may lower the risk of infections among nursing home residents.

### Who can participate?

All residents and staff in the nursing homes participating in the study.

### What does the study involve?

The participating nursing homes are randomly allocated to two groups. In the first group, standard infection control practices are used. In the other group, a bundle of interventions related to HH are implemented, including staff education, HH promotion and increased availability of hand-rub solution. Antibiotic prescriptions, as well as glove and hand-rub solution use, are monitored in all participating nursing homes over the study period.

### What are the possible benefits and risks of participating?

Nursing homes from the intervention group will benefit from free access to hand-rub solution, as well as material for HH promotion and staff education. There are no risks to participating.

### Where is the study run from?

Nursing homes in France run by the Korian group.

### When is the study starting and how long is it expected to run for?

January 2014 to March 2015

### Who is funding the study?

Funding was provided by Institute of Ageing Well Korian and Korian Medica (France)

Who is the main contact?

Laura Temime

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## Contact information

### Type(s)

Scientific

### Contact name

Prof Laura Temime

### Contact details

Laboratoire MESuRS

Conservatoire national des Arts et Métiers

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Paris

France

75003

## Additional identifiers

## Study information

### Scientific Title

Impact of a multifaceted intervention for hand-hygiene in nursing homes: a cluster randomized controlled trial.

### Study objectives

It is hypothesised that increasing compliance to hand hygiene recommendations among the staff and residents in nursing homes may lead to a reduction in the infectious risk for residents.

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

No ethics approval required, as the study did not change patient care, include new drugs or medical devices or add any procedure for patients. In addition, no sensitive data was collected.

### Primary study design

Interventional

### Study design

Clustered randomized controlled trial

### Study type(s)

Prevention

### Health condition(s) or problem(s) studied

Epidemics of acute respiratory infections and acute gastro-enteritis; hospitalizations; deaths

## **Interventions**

Nursing homes are randomly assigned to the intervention or control arm.

1. Control arm: nursing home use standard infection control practices
2. Intervention arm: a multifaceted hand-hygiene intervention is implemented. The key elements of the multifaceted intervention are the following:
  - 2.1. Increased availability of alcohol-based hand-rub for the staff as well as for residents and visitors
  - 2.2. An educational program for the staff based on e-learning
  - 2.3. The creation of a work group within each nursing home which will propose a list of local recommendations
  - 2.4. A hand hygiene promotion campaign aimed at the staff, as well as at residents and visitors

## **Intervention Type**

Behavioural

## **Primary outcome(s)**

1. Total number of cases of acute respiratory infections and acute gastro-enteritis that are reported to regional health agencies (ARS) in the context of clustered cases episodes
2. Episodes of clustered cases are defined as at least 5 cases over 4 days

## **Key secondary outcome(s)**

1. Number of antibiotic prescriptions for 1000 resident-days (measured at 0, 6 and 12 months)
2. Mortality rate (measured at 0, 6 and 12 months)
3. Hospitalization rate (measured at 0, 6 and 12 months)
4. Hand hygiene compliance assessed by direct observation at 0, 6 and 12 months

## **Completion date**

31/03/2015

# **Eligibility**

## **Key inclusion criteria**

1. For the primary outcome: all residents in the participating nursing homes
2. For the secondary outcomes and the intervention: all residents and staff in the participating nursing homes

## **Participant type(s)**

Patient

## **Healthy volunteers allowed**

No

## **Age group**

Senior

## **Sex**

All

**Key exclusion criteria**

Anyone not a resident or staff member in any of the participating nursing homes.

**Date of first enrolment**

01/01/2014

**Date of final enrolment**

01/03/2014

**Locations****Countries of recruitment**

France

**Study participating centre****Korian Les Jardins d'Alesia**

187 bis Avenue du Maine

Paris

France

75014

**Study participating centre****Korian Hameau du Roy**

16 Boulevard Saint-Antoine

Le Chesnay

France

78150

**Study participating centre****Korian L'Age Bleu**

7 Grande Rue

Roubaix

France

59100

**Study participating centre****Korian La Goélette**

34 Rue Surcouf

Équeurdreville-Hainneville

France

50120

**Study participating centre**  
**Korian Reine Mathilde**  
4 Rue des Hauts Vents  
Grainville-sur-Odon  
France  
14120

**Study participating centre**  
**Korian Le Castelli**  
Rue des Lauriers  
L'Huisserie  
France  
53970

**Study participating centre**  
**Korian Les Meunières**  
Place Denfert Rochereau  
Lunel  
France  
34402

**Study participating centre**  
**Korian Les Blés d'or**  
Lieu dit La Mouline  
Castelnau-de-Lévis  
France  
81150

**Study participating centre**  
**Korian Mas de Lauze**  
17 Chemin du Puits de Louiset  
Nîmes  
France  
30900

**Study participating centre**  
**Korian Frontenac**  
Rue Diderot

Bram  
France  
11150

**Study participating centre**  
**Korian Les Annabelles**  
1 Rue du Diapason  
Lyon  
France  
69003

**Study participating centre**  
**Korian L'Astrée**  
26-28 Rue de Molina  
Saint-Etienne  
France  
42000

**Study participating centre**  
**Korian Vill'alizé**  
2 Rue des Chenevières  
Thisé  
France  
25220

**Study participating centre**  
**Korian Villa Victoria**  
Le Clos -Vincent  
20 Rue du Dr Jean Vaquier  
Noisy-le-Grand  
France  
93160

**Study participating centre**  
**Korian Les Arcades**  
116 Avenue Daumesnil  
Paris  
France  
75012

**Study participating centre**  
**Korian Hauts de Jardy**  
1 Allée des Lauriers  
Vaucresson  
France  
92420

**Study participating centre**  
**Korian Au Fil du Temps**  
2 Rue de Condé  
Meaux  
France  
77100

**Study participating centre**  
**Korian Nymphéas Bleus**  
15 Avenue Pierre Mendès  
Vernon  
France  
27200

**Study participating centre**  
**Korian Le Jardin**  
121 Avenue des Martyrs de la Résistance  
Rouen  
France  
76100

**Study participating centre**  
**Korian Catalogne**  
18 Cours Lazare Escarguel  
Perpignan  
France  
66000

**Study participating centre**  
**Korian Lo Solelh**  
46 Avenue Enseigne Albertini

Béziers  
France  
34500

**Study participating centre**  
**Korian Les Alpilles**  
Centre Urbain, Rue Hilaire Touche  
Vitrolles  
France  
13127

**Study participating centre**  
**Korian Les Parents**  
22 Rue Vandiel  
Marseille  
France  
13008

**Study participating centre**  
**Korian Sorgentino**  
52 Rue Auguste Gal  
Nice  
France  
06300

**Study participating centre**  
**Korian Villa Janin**  
9 Rue du Treyve  
Saint-Etienne  
France  
42000

**Study participating centre**  
**Korian L'isle Verte**  
50 Rue de Mortillet  
Grenoble  
France  
38000

**Study participating centre**  
Korian Villa d'Albon  
13 Avenue Gambetta  
Roanne  
France  
42300

## Sponsor information

### Organisation

National Conservatory of Arts and Crafts (Conservatoire National des Arts et Métiers)

### ROR

<https://ror.org/0175hh227>

## Funder(s)

### Funder type

Industry

### Funder Name

Institute of Ageing Well Korian (Institut du bien vieillir Korian)

### Funder Name

Korian Medica

## Results and Publications

### Individual participant data (IPD) sharing plan

### IPD sharing plan summary

Not expected to be made available

### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>	results	01/02/2018	24/07/2020	Yes	No