Environmental contact and self-contact patterns of healthcare workers: Implications for infection prevention and control

**Supplemental Online Materials**

Linh T. Phan, PhDa

Dayana Maita, MDb

Donna C. Mortiz, MDb

Susan C. Bleasdale, MDb

Rachael M. Jones, PhD, CIHa\*

for the CDC Prevention Epicenters Program

aSchool of Public Health, University of Illinois at Chicago, Chicago, IL, USA

b College of Medicine, University of Illinois at Chicago, Chicago, IL, USA

\* Corresponding Author: Rachael M. Jones, School of Medicine, University of Utah, 391 Chipeta Way Suite C, Salt Lake City, UT 84108, 801-585-0451 (phone), 801-581-7224 (fax)

Supplemental Online Material 1: Fomite contact patterns of patients (N= 156)

|  |  |  |  |
| --- | --- | --- | --- |
| **Fomite Contacted** | **Median****(Min, 75th, Max)** | **No. (%) with contact**  | **Negative binomial distribution parameter\*** |
| *Near patient zone* |  |
| Bed surface | 1 (0; 1; 2) | 143 (92%) | \*\* |
| Bed rail | 0 (0; 0; 2) | 25 (20%) | \*\* |
| Call button | 0 (0; 0; 2) | 8 (10%) | \*\* |
| Chair | 0 (0; 0; 3) | 27 (16%) | \*\* |
| Phone | 0 (0; 0; 1) | 16 (10%) | \*\* |
| Tray table | 0 (0; 0; 5) | 34 (26%) | \*\* |
| Bedside table | 0 (0; 0; 1) | 3 (7%) | \*\* |
| **Total**  | **1 (1; 2; 7)** | **0 (0%)** | **\*\*** |
| *Far patient zone* |  |
| Toilet | 0 (0; 0; 1) | 22 (14%) | \*\* |
| Bathroom door | 0 (0; 0; 3) | 15 (10%) | \*\* |
| IV pole | 0 (0; 0; 2) | 9 (6%) | \*\* |
| Light switch | 0 (0; 0; 0) | 0 (0%) | \*\* |
| Room door | 0 (0; 0; 0) | 0 (0%) | \*\* |
| Computer station | 0 (0; 0;0) | 0 (0%) | \*\* |
| Sink | 0 (0; 0; 0) | 0 (0%) | \*\* |
| IV monitor | 0 (0; 0; 0) | 0 (0%) | \*\* |
| **Total**  | **0 (0; 0; 4)** | **16 (10%)** | **\*\*** |
| **Grand Total** | **1 (1; 2; 8)** | **0 (0%)** | **\*\*** |

*\*\* Fit testing was not statistically significant for poison, negative binomial, or lognormal distribution so no distribution is reported*

Supplemental Online Material 2: Healthcare Worker Observation Form

|  |  |
| --- | --- |
| **HCW Record of Contact Frequency Form** | **Observation Form** |
| **Experiment Code** | **HCW Record of Activities** |
| **HCW code** | **Observation Code** | **Date** | **HCW type** |
| Mark with a “|” for every contact | Physical exam |  | BIPAP/CPAP |  |
| HCW Contact with themselves | HCW hand contact with the environment and patient | Blood draw |  | Nasal swabbing |  |
| Image result for body |  |  | IV Medication |  | Suctioning |  |
|  | IV line placement |  | Intubating |  |
| Dialysis |  | Bagging |  |
| Helping patient to bathroom |  | Respiratory treatment |  |
| Room cleaning |  | Dressing change/location |  |
| Flushing toilet |  | PT/OT |  |
| Bed making |  | Oral medication |  |
| Vital signs |  | Resuscitation |  |
| Other |  |  |  |

Supplemental Online Material 3: Patient Observation Form

|  |
| --- |
| **Patient Contact Frequency Observation Form** |
| **Experiment Code**  | **Date** |
| **Observation Code** |
| Mark with a | for every contact in the order it occurred |
| **Clinical appearance/Symptoms and signs** |
| **Respiratory** | **Check if yes** | **GI** | **Check if yes** |
| Coughing/# of times |  | Vomiting/# of times |  |
| Sneezing/# of times |  | Diarrhea/# of times |  |
| Blowing nose/ # of times |  | Walking |  |
| In bed |  | Other |  |
| **Checklist**  | **Check if Yes** | **Initial** |
| **Activity and clinical appearance observed and marked** |  |  |