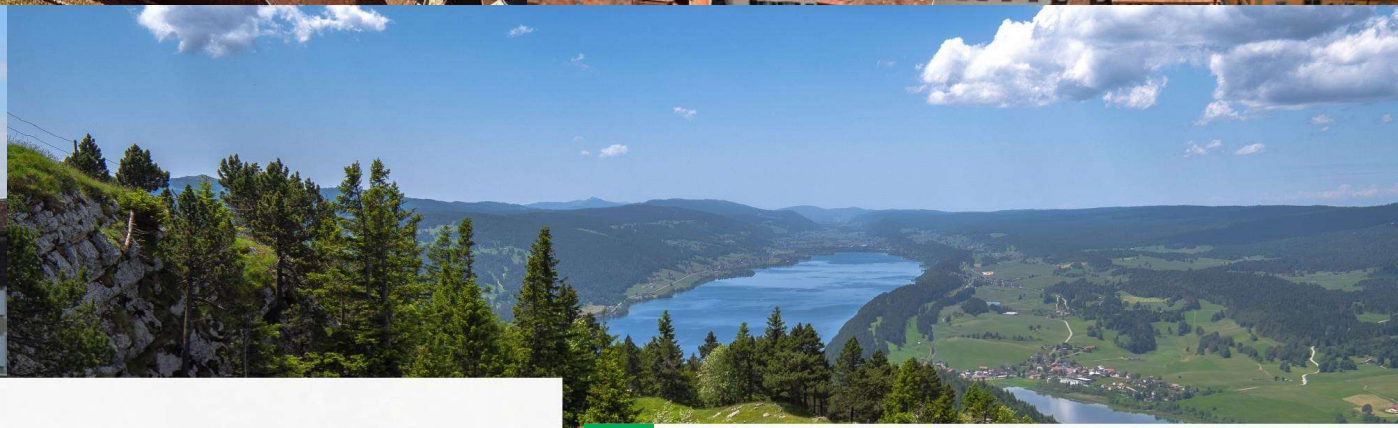


Résultat d'une collaboration efficace dans la campagne contre la grippe entre l'unité HPCi Vaud et les EMS

canton de vaud

Office du médecin cantonal
HPCi | hygiène, prévention et contrôle de l'infection

Cuiña Iglesias, Patricia
Infirmière régionale HPCI

Date 16.05.2024

ORDRE DU JOUR

1. Unité cantonale HPCi Vaud
2. Collaboration avec les institutions
3. Exemple d’une collaboration: Campagne grippe
4. Analyse de l’efficacité de la campagne grippe
5. Collaboration future
6. Conclusion

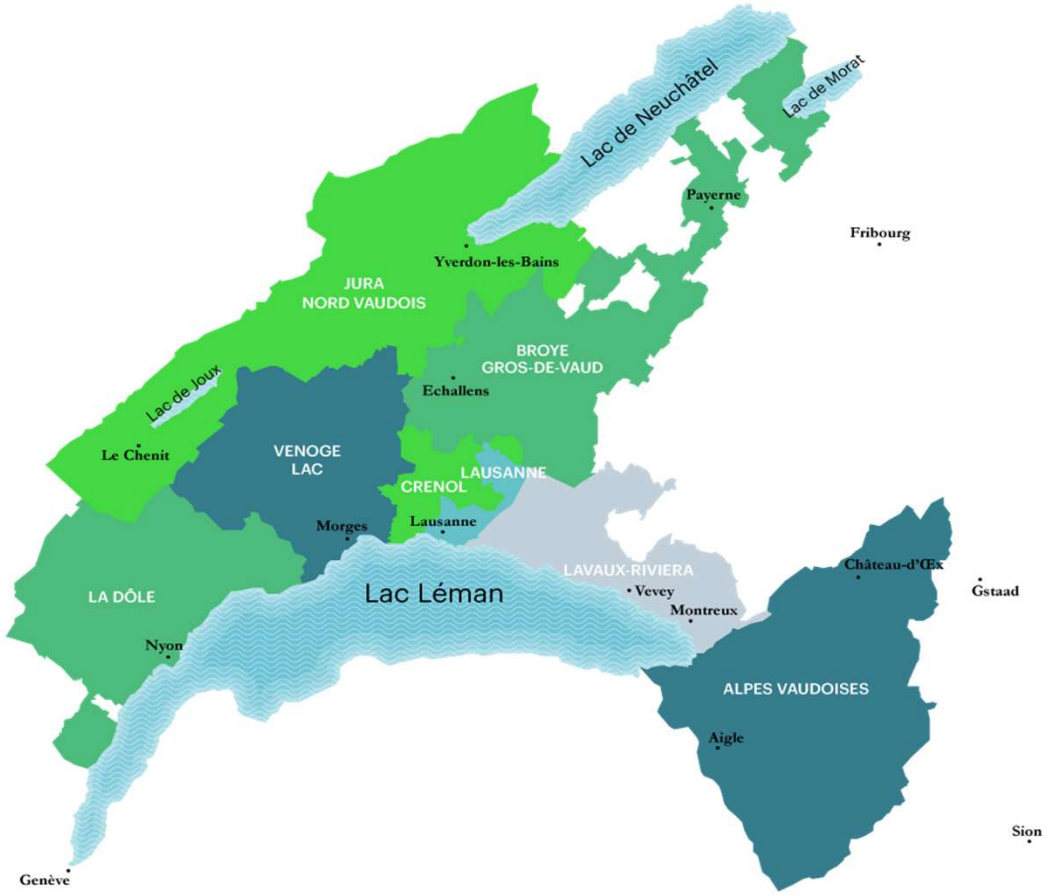
1

UNITE CANTONALE HPCI VAUD

Canton de Vaud

Repéré à www.gonthier.ch

- > 840.000 habitants (fin 2023)
- 3ème plus grand des 26 cantons
- Chef-lieu : Lausanne
- 121 EMS > 6800 lits
- 38 EPSM > 1300 lits
- 21 ESE > 900 lits



Repéré à www.vd.ch

Répartition des infirmier(e)s régionaux

Mme Béatrix SOBGOUI
Référente région Nord

Mme Patricia CUIÑA IGLESIAS
Référente région Centre

Mme Coralie RICCIO
Référente région Ouest et Centre

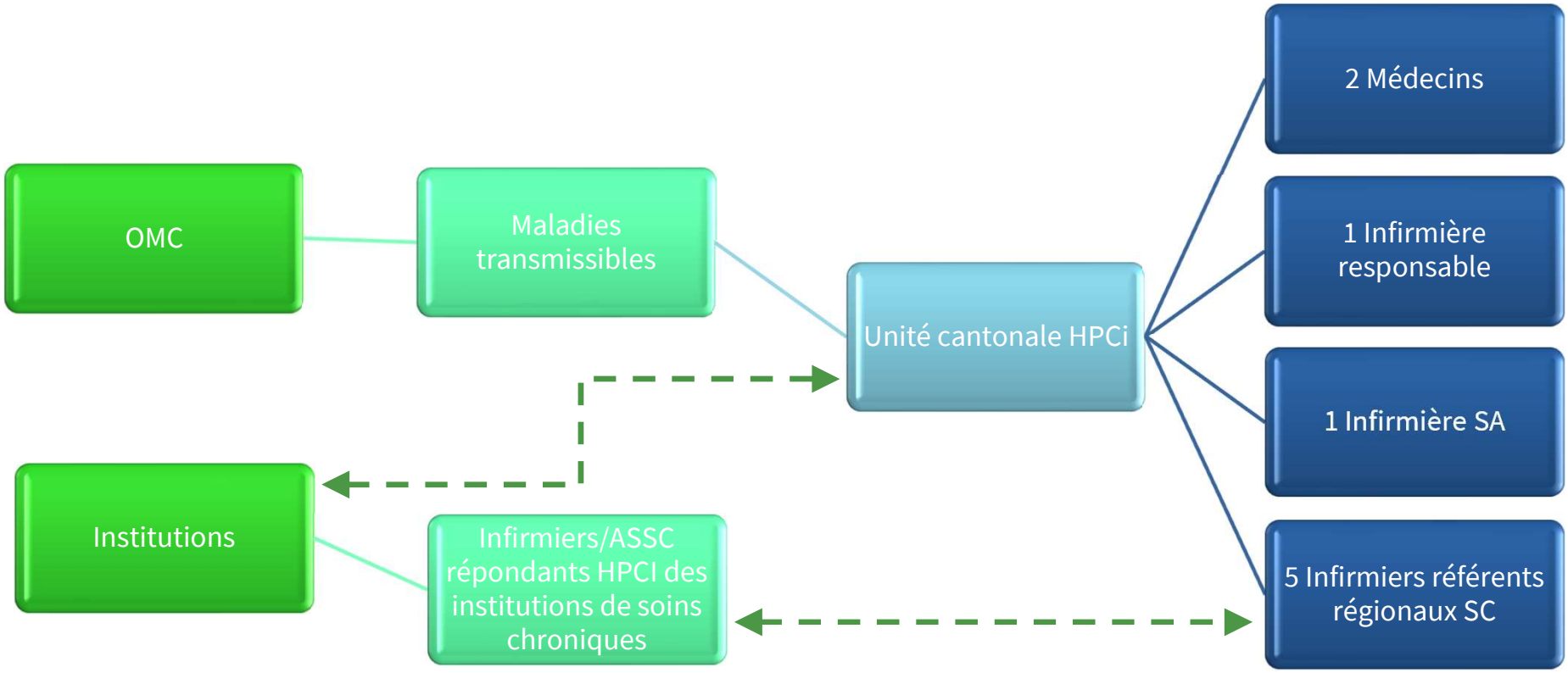
M. F Javier GARCIA SANCHEZ
Référent région Est

M. Firmino Battistella
Infirmier régional

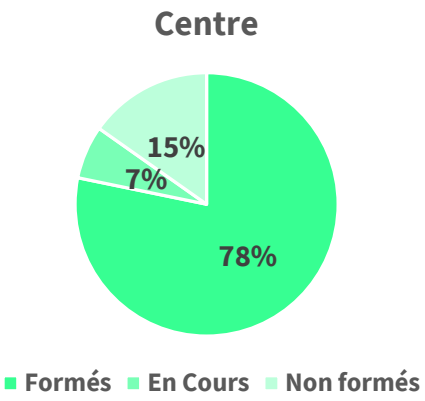
2

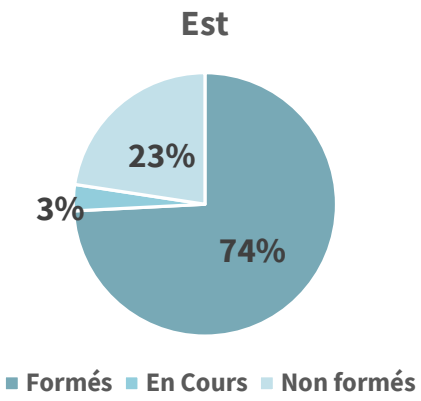
COLLABORATION AVEC LES INSTITUTIONS

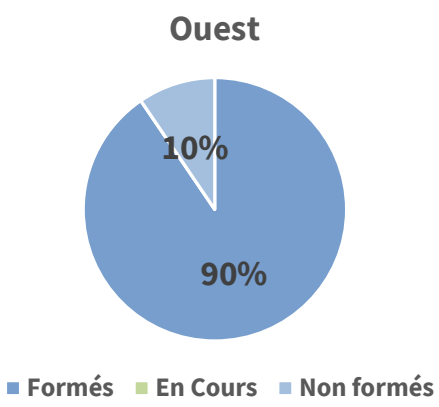
Notre organisation cantonale

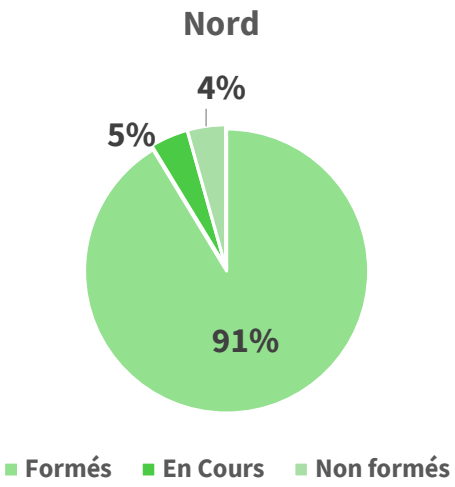


Réseau de répondants HPCI en EMS









Comment collaborons-nous?

Campagne de promotion de la vaccination contre la grippe

Campagne de promotion de l'hygiène des mains

Formations continues gratuites pour le personnel des institutions

Site HPCi.ch

Suivis, consultations, visites terrain, audits

Surveillances annuelles

3

EXEMPLE D’UNE COLLABORATION: CAMPAGNE GRIPPE

Campagne Grippe

Conception et distribution d'affiches et de flyers de promotion de la vaccination gratuits pour les EMS

5000 vaccins gratuits à disposition pour les collaborateurs en EMS

Campagne Grippe 2023/24

4

ANALYSE DE L'EFFICACITÉ DE LA CAMPAGNE GRIPPE

Données :

Données vaccination grippe:

- **Quand?** Entre janvier-février
- **Qui?** Répondants HPCI des EMS

Données cas de grippe:

- Consultations
- Déclarations de flambées de cas

Participation à la campagne

HPCi | hygiène, prévention et contrôle de l'infection | Questionnaire vaccination Grippe dans les EMS du canton de Vaud

VACCINATION GRIPPE SAISON 2023 / 2024

NOM DE L'ÉTABLISSEMENT :		DATE :	

VACCINATION CONTRE LA GRIPPE SAISONNIÈRE			
1. Avez-vous vacciné vos résidents cette saison ?		non ☐	oui* ☐
*Si oui :			
Nombre résidents vaccinés :		Nombre total résidents :	
2. Avez-vous vacciné votre personnel cette saison ?		non ☐	oui* ☐
*Si oui :			
Nombre collaborateurs vaccinés :		Nombre total collaborateurs :	

En vous remerciant pour votre collaboration.

Questionnaire à retourner par e-mail ou courrier
À votre infirmier-ère HPCI régional

HPCI_W_QUE_GRIPPE EMS V. 1.2 du 27.12.2022 Page 1 / 1

POSTER PUBLIE EN 2023

Périodes

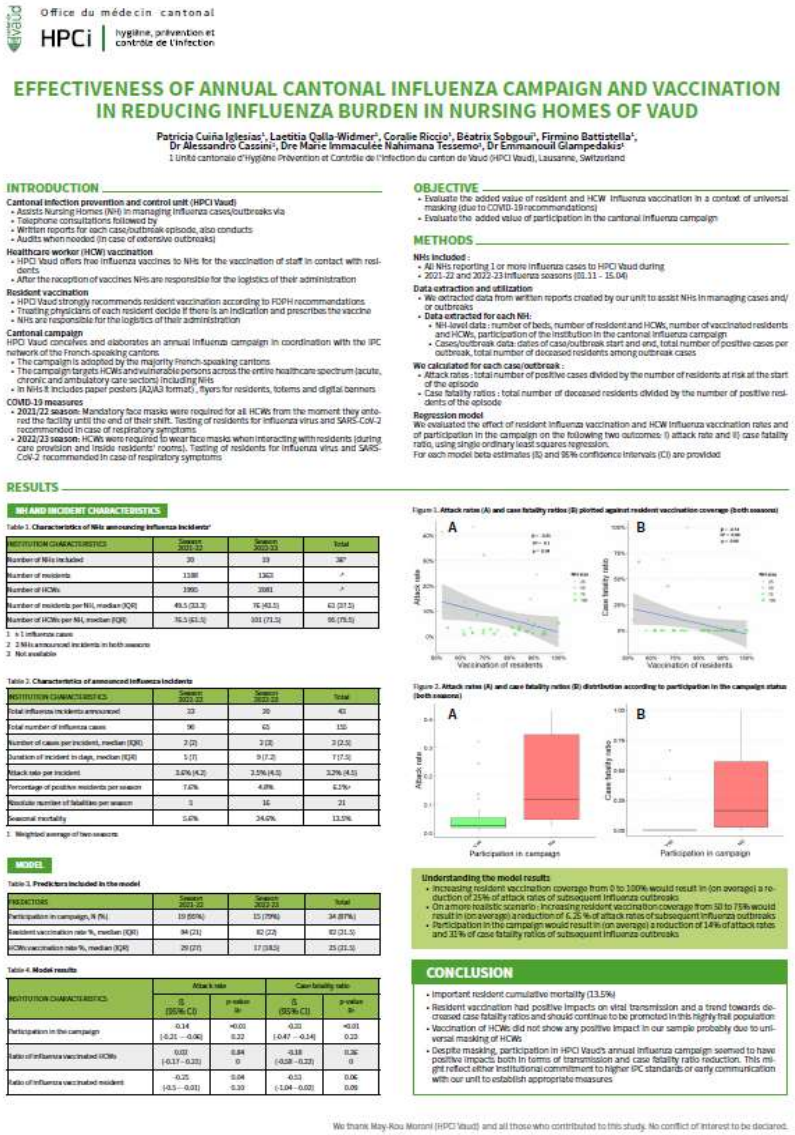
- 2021-2022
- 2022-2023

Particularités

- Pandémie SARS-CoV-2
- Tests grippe + CoVID-19
- Mesures d'hygiène renforcées
- Contacts avec HPCi Vaud

Données utilisées

- Taux Vaccination résidents
- Taux vaccination professionnels
- Participation «campagne vaccination grippe»
- Taux d'attaque
- Taux mortalité



Office du médecin cantonal
HPCi | hygiène, prévention et contrôle de l'infection

EFFECTIVENESS OF ANNUAL CANTONAL INFLUENZA CAMPAIGN AND VACCINATION IN REDUCING INFLUENZA BURDEN IN NURSING HOMES OF VAUD

Patricia Cuiña Iglesias[1], Laetitia Qalla-Widmer[1], Coralie Riccio[1], Béatrix Sobgoui[1], Firmino Battistella[1], Dr Alessandro Cassini[1], Dre Marie Immaculée Nahimana Tessemo[1], Dr Emmanouil Glampedakis[1]
1 Unité cantonale d'Hygiène Prévention et Contrôle de l'infection du canton de Vaud (HPCi Vaud), Lausanne, Switzerland

INTRODUCTION

Cantonal infection prevention and control unit (HPCi Vaud)
- Assists Nursing Homes (NH) in managing influenza cases/outbreaks via
- Telephone consultations followed by
- Written reports for each case/outbreak episode, also conducts
- Audits when needed (in case of extensive outbreaks)

Healthcare worker (HCW) vaccination
- HPCi Vaud offers free influenza vaccines to NHs for the vaccination of staff in contact with residents
- After the reception of vaccines NHs are responsible for the logistics of their administration

Resident vaccination
- HPCi Vaud strongly recommends resident vaccination according to FOPH recommendations
- Treating physicians of each resident decide if there is an indication and prescribes the vaccine
- NHs are responsible for the logistics of their administration

Cantonal campaign
HPCi Vaud conceives and elaborates an annual influenza campaign in coordination with the IPC network of the French-speaking cantons
- The campaign is adopted by the majority French-speaking cantons
- The campaign targets HCWs and vulnerable persons across the entire healthcare spectrum (acute, chronic and ambulatory care sections) including NHs
- In NHs it includes paper posters (A2/A3 format) , flyers for residents, totems and digital banners

COVID-19 measures
- 2021/22 season: Mandatory face masks were required for all HCWs from the moment they entered the facility until the end of their shift. Testing of residents for influenza virus and SARS-CoV-2 recommended in case of respiratory symptoms
- 2022/23 season: HCWs were required to wear face masks when interacting with residents (during care provision and inside residents' rooms). Testing of residents for influenza virus and SARS-CoV-2 recommended in case of respiratory symptoms

OBJECTIVE
- Evaluate the added value of resident and HCW Influenza vaccination in a context of universal masking (due to COVID-19 recommendations)
- Evaluate the added value of participation in the cantonal influenza campaign

METHODS

NHs included :
- All NHs reporting 1 or more influenza cases to HPCi Vaud during
- 2021-22 and 2022-23 influenza seasons (01.11 - 15.04)

Data extraction and utilization
- We extracted data from written reports created by our unit to assist NHs in managing cases and/or outbreaks
- Data extracted for each NH:
  - NH-level data : number of beds, number of resident and HCWs, number of vaccinated residents and HCWs, participation of the institution in the cantonal influenza campaign
  - Cases/outbreak data: dates of case/outbreak start and end, total number of positive cases per outbreak, total number of deceased residents among outbreak cases

We calculated for each case/outbreak :
- Attack rates : total number of positive cases divided by the number of residents at risk at the start of the episode
- Case fatality ratios : total number of deceased residents divided by the number of positive residents of the episode

Regression model
We evaluated the effect of resident influenza vaccination and HCW influenza vaccination rates and of participation in the campaign on the following two outcomes: i) attack rate and ii) case fatality ratio, using single ordinary least squares regression.
For each model beta estimates (β) and 95% confidence intervals (CI) are provided

RESULTS

NH AND INCIDENT CHARACTERISTICS

Table 1. Characteristics of NHs announcing influenza incidents[1]

INSTITUTION CHARACTERISTICS	Season 2021-22	Season 2022-23	Total
Number of NHs included	20	19	38[2]
Number of residents	1188	1363	^
Number of HCWs	1990	2081	^
Number of residents per NH, median (IQR)	49.5 (33.3)	76 (43.5)	63 (37.5)
Number of HCWs per NH, median (IQR)	76.5 (61.5)	101 (71.5)	95 (75.5)

1 ≥ 1 influenza cases
2 2 NHs announced incidents in both seasons
3 Not available

Table 2. Characteristics of announced influenza incidents

INSTITUTION CHARACTERISTICS	Season 2021-22	Season 2022-23	Total
Total influenza incidents announced	13	20	41
Total number of influenza cases	96	65	155
Number of cases per incident, median (IQR)	2 (2)	2 (3)	2 (2.5)
Duration of incident in days, median (IQR)	5 (7)	9 (7.2)	7 (7.5)
Attack rate per incident	3.4% (4.2)	2.5% (4.5)	3.2% (4.1)
Percentage of positive residents per season	7.6%	4.8%	6.1%[1]
Absolute number of fatalities per season	3	16	21
Seasonal mortality	1.6%	14.0%	13.5%

1 Weighted average of two seasons

MODEL

Table 3. Predictors included in the model

PREDICTORS	Season 2021-22	Season 2022-23	Total
Participation in campaign, N (%)	19 (95%)	15 (79%)	34 (87%)
Resident vaccination rate %, median (IQR)	84 (21)	82 (22)	82 (21.5)
HCWs vaccination rate %, median (IQR)	29 (27)	17 (18.5)	25 (21.5)

Table 4. Model results

INSTITUTION CHARACTERISTICS	Attack rate		Case fatality ratio	
	β (95% CI)	p-value in	β (95% CI)	p-value in
Participation in the campaign	-0.14 (-0.21 - -0.06)	<0.01 0.22	-0.20 (-0.47 - -0.14)	<0.01 0.23
Ratio of influenza vaccinated HCWs	0.02 (-0.17 - 0.21)	0.84 0	-0.18 (-0.58 - 0.22)	0.36 0
Ratio of influenza vaccinated resident	-0.25 (-0.5 - -0.01)	0.04 0.10	-0.12 (-1.04 - 0.02)	0.06 0.09

Figure 1. Attack rates (A) and case fatality ratios (B) plotted against resident vaccination coverage (both seasons)

Figure 2. Attack rates (A) and case fatality ratios (B) distribution according to participation in the campaign status (both seasons)

Understanding the model results:
- Increasing resident vaccination coverage from 0 to 100% would result in (on average) a reduction of 25% of attack rates of subsequent influenza outbreaks
- On a more realistic scenario : increasing resident vaccination coverage from 50 to 75% would result in (on average) a reduction of 6.25 % of attack rates of subsequent influenza outbreaks
- Participation in the campaign would result in (on average) a reduction of 14% of attack rates and 31% of case fatality ratios of subsequent influenza outbreaks

CONCLUSION
- Important resident cumulative mortality (13.5%)
- Resident vaccination had positive impacts on viral transmission and a trend towards decreased case fatality ratios and should continue to be promoted in this highly frail population
- Vaccination of HCWs did not show any positive impact in our sample probably due to universal masking of HCWs
- Despite masking, participation in HPCi Vaud's annual influenza campaign seemed to have positive impacts both in terms of transmission and case fatality ratio reduction. This might reflect either institutional commitment to higher IPC standards or early communication with our unit to establish appropriate measures

We thank May-Kou Moroni (HPCi Vaud) and all those who contributed to this study. No conflict of interest to be declared.

Efficacité de la campagne annuelle «grippe» et de la vaccination sur la diminution du fardeau grippe chez les résidents en EMS

EMS	20	19	**36**
Flambées	23	20	**43**
Cas influenza cumulatifs annoncés	90	65	**155**
N cas/cluster, médiane (EI)	2 (2)	2 (3)	2 (2.5)
Durée de l'épidémie, médiane (EI)	5 (7)	9 (7.2)	7 (7.5)
Taux d'attaque par cluster, médiane (EI)	3.6% (4.2)	2.5% (4.5)	3.2% (4.5)
% Résidents atteints	7.6%	4.8%	**6.1%**
N décès	5	16	21
Mortalité	5.6%	24.6%	**13.5%**

Efficacité de la campagne annuelle «grippe» et de la vaccination sur la diminution du fardeau grippe chez les résidents en EMS

Participation in campagne, N (%)	19 (95%)	15 (79%)	34 (87%)
% Vaccination résidents, médiane (EI)	84 (21)	82 (22)	82 (21.5)
% vaccination professionnels, médiane (EI)	29 (27)	17 (18.5)	25 (21.5)

Prédicteur	**Taux d'attaque**		**Taux de mortalité**	
	β (95% CI)	p-valeur R^2	β (95% CI)	p-valeur R^2
Participation à la campagne	-0.14 (-0.21 – -0.06)	**<0.01** 0.22	-0.31 (-0.47 – -0.14)	**<0.01** 0.23
Taux de professionnels vaccinés	0.02 (-0.17 – 0.21)	0.84 0	-0.18 (-0.58 – 0.22)	0.36 0
Taux de résidents vaccinés	-0.25 (-0.5 – -0.01)	**0.04** 0.10	-0.51 (-1.04 – 0.02)	0.06 0.09

Efficacité de la campagne annuelle «grippe» et de la vaccination sur la diminution du fardeau grippe chez les résidents en EMS

Important **taux de mortalité** grippe (13.5%)

Vaccination des résidents : effet bénéfique sur la transmission de la grippe, mortalité diminuée

Augmentation de la couverture vaccinale des résidents de 0 à 100% → diminution des taux d'attaque de 25%

Augmentation de la couverture vaccinale des résidents 50 à 70% → diminution des taux d'attaque de 6.25%

Vaccination des professionnels de la santé: semble ne pas avoir de valeur ajoutée dans le contexte des mesures renforcées

Impact de la participation à la campagne grippe

Diminution des taux d'attaque de 14%

Diminution de la mortalité dans les clusters de 31%

Hypothèse

Institutions mieux informées des mesures à mettre en place

Alerte précoce à l'unité cantonale HPCi

5

FUTURE COLLABORATION

Webinar

- Infirmières de l'Unité cantonale HPCi Vaud
- Infirmières répondants HPCI
- Sujet d'actualité HPCI
- 15 minutes

6 CONCLUSION

Politique

OFSP développe un programme fédéral pour les EMS

Exigences minimales HPCI

Institutions

Importance du rôle du répondant sur le terrain

Relais-communication-formation-déclaration

Canton Vaud:

Importance de maintenir ce réseau

Formations

Campagnes

Soutien terrain

La dynamique du travail est favorisée par l'étroite collaboration avec les institutions

Remerciements

- Aux collègues de l'unité HPCi Vaud
- Aux institutions et particulièrement aux répondants HPCI
- Aux partenaires

Merci,

WWW.HPCI.CH

Office du médecin cantonal
HPCi | hygiène, prévention et contrôle de l'infection

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