

DECEMBER 2009

Report on the measures taken at Nuutania Penitentiary (Tahiti) during the outbreak of pandemic influenza A (H1N1) 2009 (September 2009)

As part of the response to pandemic influenza A (H1N1) 2009, French Polynesia's Health Office and the French High Commission's Civil Defence and Safety Office met on 14 August 2009, at the request of prison authorities, in order to propose strategies to control influenza in the prison setting.

Background

- The detention centre has about 390 inmates in a space designed for 135, i.e. an occupancy rate of 289%.
- The facility has about 130 staff.
- The centre hosts about 800 visitors each week.
- Until a recent agreement with the French Polynesia Hospital (CHPF), medical care was provided by a private-sector doctor for a few hours each day Monday to Friday. The pandemic arrived right in the middle of the transition between working methods. For after-hours emergencies, the authorities call on S.O.S. Médecins or the SAMU ambulance, when necessary
- Two nursing staff provide care Monday through Friday from 7:30 a.m. to 3:30 p.m.
- At the time of the meeting (14 August 2009), prison officials reported that about 30 inmates had developed febrile syndromes since the beginning of that week (the 33rd week of the year). According to the doctor, this weekly number of febrile syndromes (all aetiologies combined) was within the norm. However, it appeared that in Week 33 influenza-like illnesses were predominant.
- The doctor assessed the number of prisoners with risk factors at 12, i.e. about 3% of the prison population. We should recall that in models of the overall population, the percentage of people with risk factors is estimated at 5% of the overall population.
- During Week 33, the flu outbreak was spreading widely in the overall population and the peak would be reached in Week 34.
- On the day of the meeting, the Health Department and High Commission were sure that the prison was free of flu and were prepared to propose measures designed to limit introduction of the virus into the facility. However, reports of suspected cases discussed during the meeting led them to reorient these strategies.

Issues

Overpopulation at the prison increases the risks of problems in the facility. Given this, any changes in the inmates' daily routines may generate discontent and violence, along with anxiety and a sense of disorientation.

For all of these reasons, proposals had to take into account the specific nature of prison life and the overpopulation of the facility to avoid any disturbances.



Objectives

The objectives of the measures implemented were the same as those for the overall population:

- slow the spread of the epidemic to ensure proper medical care for patients and limit disruptions to services;
- protect those with risk factors to limit the number of severe forms; and
- limit absenteeism among staff to ensure continued services under the best possible conditions.

Proposals

In the overall population, the strategies chosen to reach the objectives are based, for the most part, on respiratory isolation of people with the flu.

Given the facility's overpopulation, this measure could not be enforced and a 'reverse' strategy was chosen, i.e. fragile people were isolated.

Measures chosen¹:

- **Recommendation no. 3: screen staff for febrile syndromes** when they arrive on-site with a view to limiting introduction of the virus to the facility.
- **Recommendation no. 4: have visitors with flu-like symptoms wear surgical masks** during trips to the visiting room.

Having non-qualified staff check peoples' temperatures is not possible. In addition, cancelling visits because of the flu could be very poorly accepted and lead visitors to hide their symptoms by taking antipyretics.

- **Recommendation no. 5: put all patients with suspected cases of flu under antiviral treatment.**

Daily doctor visits make it possible to begin treatment within 24 hours of the appearance of clinical symptoms.

It should be noted that this recommendation was in conflict with that in effect in French Polynesia during the same period. In fact, the most recent recommendations (as at 1 August 2009) stated that only patients who were hospitalised or flu patients with risk factors should be given antivirals. In this instance, the use of antivirals was designed to reduce transmission of the virus within the facility. It should be noted that testing for the virus in nasopharyngeal samples is not recommended.

- **Recommendation no 6: have inmates who are under antiviral treatment wear masks** whenever they are in contact with other inmates and have the prescribing doctor provide patients with information.
- **Recommendation no 7: isolate inmates who have risk factors** in a specific ward with their meals served inside their cells, ensure that exercise times for this group are

¹ Recommendations no. 1 and 2 were not chosen.

different from those for other inmates and have them wear masks in the event they cross paths with other inmates.

- **Recommendation no. 8: increase the availability of health staff** at the facility, with hours extended to the weekends.

Early screening for flu symptoms by health staff and the rapid prescription of treatment are two important factors in containing the epidemic.

- **Recommendation no.9: have staff who come in contact with inmates wear FFP2 masks.**

This measure is designed to limit transmission of the virus to staff and, in this way, prevent absenteeism which, if it grew too high, could disturb the work and force prison authorities to use teams from the gendarmerie.

- **Recommendation no. 10: provide a stock of antivirals and surgical masks** for patients to allow early preventative and therapeutic care.

Chronology

Week 33

14 August: three-party meeting on proposed recommendations and validation.

15 August: implemented recommendations 5, 6 and 7.

Approximately 20 inmates with influenza-like illness were given treatment.

Approximately 12 inmates with risk factors were isolated.

Week 34

Implemented recommendations 3, 4, 8, 9 and 10.

Another 8 inmates were given treatment.

Week 35

Another 4 inmates were given treatment.

Week 36

Discontinued recommendation 9. This measure, which was well accepted by staff, would have been very inconvenient over time. As none of the inmates were ill, the measure was lifted, which made it possible to simplify procedures and make them more acceptable. It will go back into effect if one or more cases are found.

Week 37

One inmate was given treatment.

Week 38

Overview of the measures implemented.

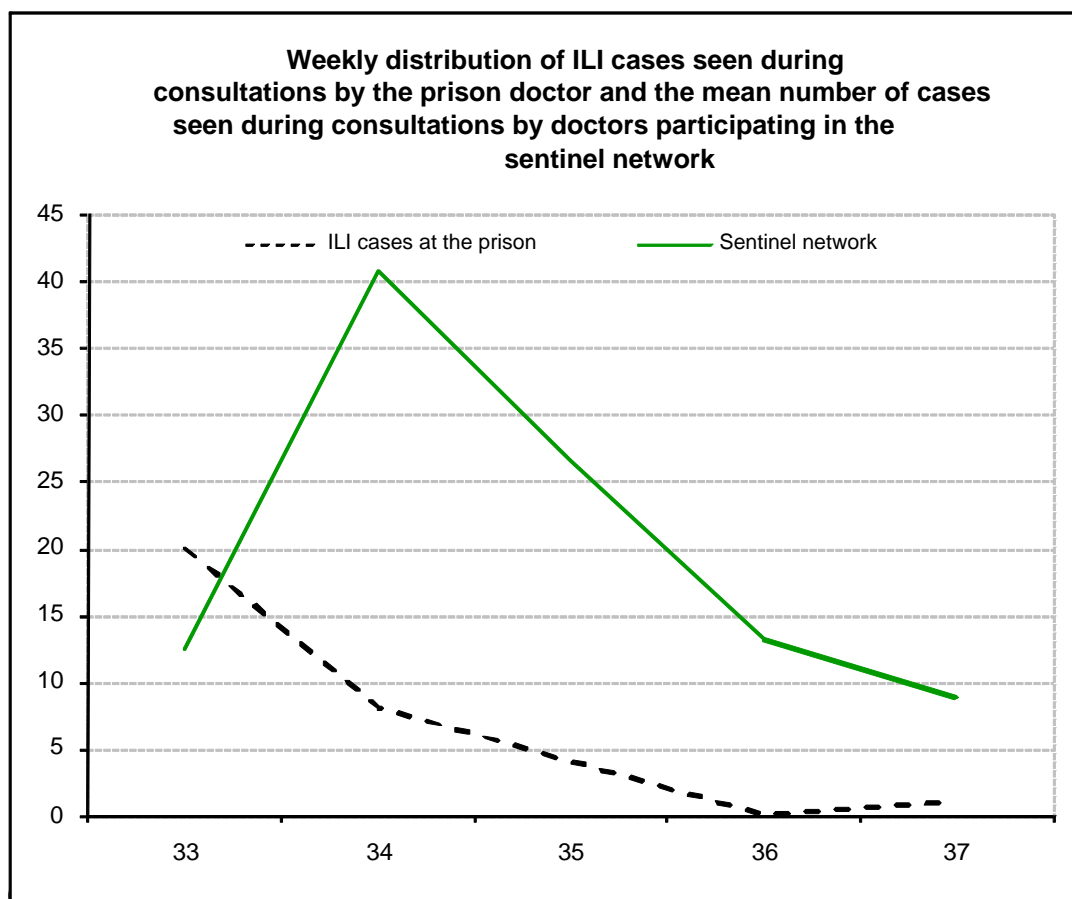
Epidemiological data

In terms of the outbreak's dynamics in the prison population, a peak was noted in Week 33. According to the prison's doctor, although the number of cases of influenza-like illness (ILI) in Week 32 was not recorded, it was lower than the number reported during Week 33.



Beginning in Week 34, the number of cases decreased. There was no increase over the following weeks.

A comparison of data from the penitentiary with data from the sentinel network indicated that the outbreak in the prison occurred about one week before that in the overall population.



The Nuutania Penitentiary reported a total of 33 inmates with suspected cases of influenza A (H1N1) treated over a period of five weeks, i.e. an attack rate of 8.5%. None of the patients developed severe forms.

Of the 130 staff members, only three were put on sick leave due to suspected cases of flu.

A total of 12 inmates with risk factors were placed in isolation. One of them was given antivirals for ILI caught before being put in isolation.

Discussion

Without a model to compare the results, it is difficult to assess, in any precise way, the effects of the measures implemented. However, the number of cases decreased as soon as these measures were put into effect.

The positive points highlighted were the following:

- the health crisis was short-term and had a moderate impact;
- no security crisis followed treatment of the health crisis;
- levels of absenteeism among staff remained low and there were no disturbances to work;
- the measures were well accepted by both inmates and staff;
- there was overall satisfaction on the part of inmates, who felt the problem was dealt with rapidly and efficiently;
- the medical team was strengthened, with hours extending to the weekends – a measure that will become permanent; and
- the costs of the measures implemented were deemed very acceptable by the various administrations involved.

It would be worthwhile to compare, as soon as possible, the results of the measures taken at various French detention facilities (in overseas territories and dependencies, and in metropolitan France) so as to propose, over the long run, a set of recommendations that have proven their effectiveness.

Finally, good cooperation on the part of the various services made it possible to take well-informed decisions that proved to be effective since they were well adapted to the special context of prison life and its difficulties, which are sometimes not fully grasped by those outside the system.

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