



Directorate of Health Services, Kerala

H1N1 Influenza

(adapted from the GoI- MoHFW guidelines, and updated 2017 Feb)

Clinical features of an ILI (Influenza Like Illness)

(Any combination of the following is suggestive)

- Fever > 100 deg F,
- Upper respiratory symptoms
- Cough
- Sore throat.
- Head ache, body ache, fatigue diarrhea and vomiting have also been observed

ABC GUIDELINES

1. Categorization

Category A- mild fever plus cough / sore throat with or without body ache, headache, diarrhoea and vomiting

Category-B (Bi) Category-A **plus** high grade fever and severe sore throat

(Bii) Category- Any **mild ILI** in people with co-morbidities like

- Pregnant women ★ ★ ★
- Lung/ heart / liver/ kidney / neurological disease, blood disorders/ diabetes/ cancer /HIV- AIDS
- On long term steroids, or those with immunosuppression due to drugs, radiation or HIV, etc
- Children -- **mild illness** but **with predisposing risk factors**.
- Age 65 years+.

Category-C

- . Breathlessness, chest pain, drowsiness, fall in blood pressure, haemoptysis, cyanosis
- . Children with ILI (influenza like illness) with **red flag signs**
 - (Somnolence, high/persistent fever, inability to feed well, convulsions, dyspnoea /respiratory distress, etc).
- . Worsening of underlying chronic conditions.

2. H1N1 Testing

ILI- Cat- A- *No testing* needed routinely , but only for district's sentinel surveillance**

ILI -Cat-B- *No testing* for Category-B (i) and (ii) routinely but only for district's sentinel surveillance**

Cat-C- Test may be needed in some circumstances**, **but do not wait for test results** .

** (Only **Sentinel type testing** now needs to be done regularly **for epidemiological purposes, for a constant monitoring of the prevalence in a District / region, keeping watch on swab positivity rates etc etc**) Other than this, testing may sometimes be indicated in unusual presentation, failure to respond even after 5 days extension of Oseltamivir therapy, institutional spread, etc)

If **testing is felt indicated ,contact your DSO** (or hospital Nodal MO, / Nodal MO of the District Hospital)

Specimen required - 1 throat swab and 1 nasal swab, using Dacron swab, and immersed in VTM (Viral Transport Medium) tube, immediately put in cold chain/ refrigerated till dispatch at 2-8 deg C .

Specimen should be Triple packed and dispatched through the DMO/DSO of the district. Never send parcels directly/ through bystanders.

Testing centres – *Two** authorized testing centres for Kerala,*

1. Virology Division, MCVR, KMC Hospital, Manipal, Karnataka State.
2. NIV Unit, Medical College, Alappuzha

** At any point in time some lab may not be active due to materials /supplies issues. Details from time to time will be available with DSO/DMO of your district

3. Management:

ILI- Category- A- **No** Oseltamivir required

--Symptomatic treatment

--Good supportive measures

- Plenty of warm nourishing oral fluids,
- Good food intake
- Complete rest

--Monitor progress

--Reassess . at 24 to 48 hours

--Self isolation at home, and telephone follow up for the next 2-3 days

--Any suggestion of deterioration / failure to improve?-- report in person immediately to treating doctor.

ILI Category-B

(B-i) ----- Home isolation

---Oseltamivir may often need to be started as per clinical assessment and the availability of patient for direct follow up ;

(B-ii) -----**Start Oseltamivir immediately**

-----Self isolation at home, and telephone follow up for the next 2-3 days

--Any suggestion of deterioration/ failure to improve?-- report in person immediately to treating doctor.

ILI Category-C

- Hospitalization immediately
- **START OSELTAMIVIR IMMEDIATELY, WITHOUT WAITING FOR TEST RESULTS**
This has to be done as co prescription along with all other intensive measures and drugs being used.
- Intensive supportive management is usually necessary.

4. H1N1 in Pregnancy (Ante natal and early Post natal)

Pregnancy is an extreme high risk category

Any Influenza Like Illness (ILI) in pregnancy (*both antenatal and post natal*) – **suspect H1N1, START OSELTAMIVIR IMMEDIATELY at standard dose.**

Early referral to appropriate centre to start Oseltamivir / If any delay in transit expected, **start Oseltamivir, then refer.**

Oseltamivir in pregnancy is considered safe

“Counseled prescription” should be given.

5.Oseltamivir dosage schedule

- Dose for treatment is as follows:
 - By Weight:
 - For weight <15kg 30 mg BD for 5 days
 - 15-23kg 45 mg BD for 5 days
 - 24-<40kg 60 mg BD for 5 days
 - >40kg 75 mg BD for 5 days
 - For infants:
 - < 3 months 12 mg BD for 5 days
 - 3-5 months 20 mg BD for 5 days
 - 6-11 months 25 mg BD for 5 days
 - It may also be available as syrup (12mg per ml)

- In case suspension is not in stock, the contents of the capsule can be divided and administered in powdered sugar, sugar syrup, or honey.
- SPECIAL DOSE---If needed dose & duration can be modified as per clinical condition Eg, in Cat C cases only, where the response is assessed as 'not enough' by the treating team dose may be increased to 150 mg BD one a one to one basis.

***Dose for chemoprophylaxis (only in special circumstances-see section 2) is similar, except that it is Once daily, for 10 days (see section 6)

6.Community spread- MOHFW guidelines...

"If there are 25 or more epidemiologically linked suspect cases of Pandemic Influenza A H1N1 of which at least one or more are laboratory confirmed for Pandemic Influenza A H1N1, in two or more cities, over a period of two weeks, then the State would be considered to be having community spread"--By this definition, ***Kerala already has community spread ..***

Implications

- (i) Only home isolation needed for category A and B , not hospital isolation
- (ii) Hospitalization needed for Category C.
- (iii) Only ABC Guideline based treatment with Oseltamivir indicated for Category B and Category C (refer to patient categorization guidelines). Testing not needed to initiate treatment
- (iv) ***Widespread Chemoprophylaxis*** to family/school/social contacts of a positive case NOT NEEDED- But --
 - For those contacts with high risk Eg. pregnancy/ diabetes/ liver/kidney disease, Asthma/immuno-suppressed/ very low or high age etc etc as in Cat B-ii-- Start OD dose Oseltamivir x 10 days
 - Other contacts – reassure, recommend watchfulness, assess category. If and when they become symptomatic, then treat as per ABC guidelines

7. General Guidelines for schools / educational institutions if outbreak develops

1. Assembly to be limited to once a week or preferably less, if there is an outbreak
2. Screening of students in the class by class teachers for symptoms of flu.
3. Home isolation for teachers and other employees if they develop flu like symptoms
4. **No Medical certificate to be insisted on from preventive absentees.**
5. Promote frequent hand wash with soap and water.
6. All to observe strict cough / sneeze etiquette
7. Regular cleaning with the cleaning agent they ordinarily use
8. Closure of schools has not routinely recommended . Contact DSO/DMO for advice
9. Hostels need not be closed But monitor the health of students and staff
10. Display "DO'S AND DON'TS" for ILIs ,H1N1 infection at all important places.

For any clarifications or any related advice, please contact your DMO/ Dist. Surveillance Officer, or call DISHA Helpline 0471-2552056, or 1056 toll free (from BSNL Reliance and Idea networks)

Please visit www.dhs.kerala.gov.in or www.arogyakeralam.gov.in to update your general knowledge comprehensively. It will help save many a life! -----

****** 2017/ STATE H1N1 CONTROL ROOM ******