



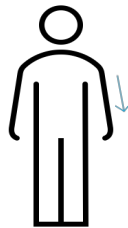
## BACKGROUND

- ❑ Measles is one of the most contagious **airborne** diseases
- ❑ Caused by a **Paramyxovirus** (RNA) which mainly targets respiratory epithelial cells
- ❑ Risk factors for severe disease
  - Young infants (< 1 yo)
  - Unvaccinated
  - Nutrient deficient (Vitamin A)
  - Pregnancy
  - Immunosuppressed

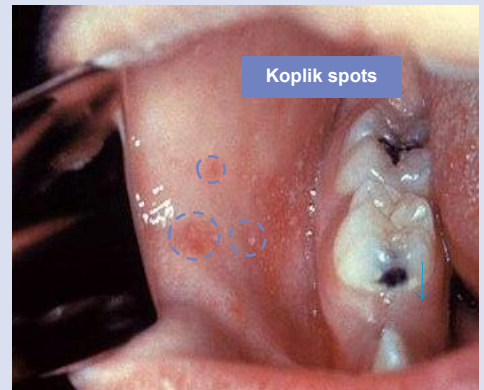
**MEDICAL URGENCY**  
One infected person  
can infect 9/10 close  
unimmunized contacts!

## PROGRESSION

1. **Exposure**
2. **Incubation:** 6-21 days
3. **Prodromal stage:** 2-4 days
  - Fever
  - Cough
  - Coryza
  - Conjunctivitis – non-purulent
  - Koplik spots
4. **Exanthem:** cephalocaudal spread for 2-4 days (persisting fever may suggest a complication)
5. **Recovery:** cough can last for 1-2 weeks



Maculopapular rash



Koplik spots

## PREVENTION

*Outbreaks related to decreased herd immunity due to suboptimal vaccine coverage*

MMR live attenuated vaccine:

1<sup>st</sup> dose at 12-15 months

2<sup>nd</sup> dose at 18 months or 4-6 years

*(varying regimens worldwide)*



Immunity in over 98% of individuals

## COMPLICATIONS

- **Encephalitis (SSPE, ADEM)**
- **Pneumonia**
- **Otitis media**
- **Diarrhea**
- **Myocarditis/Pericarditis**
- **Blindness**
- **Hepatitis**
- **Immune suppression**



## DIAGNOSIS

- ❑ Clinical diagnosis
- ❑ PCR viral RNA – throat and urine
- ❑ Serological testing (IgM, IgG antibody)

*Reportable to public health*

## MANAGEMENT

- No antiviral therapy, **supportive management** (hydration) with:
- ❑ **Isolation:** if hospitalized, negative pressure room + N95
  - ❑ **Vitamin A:** in severe cases / malnourished
- Postexposure prophylaxis:**
- ❑ Vaccination within 3 days
  - ❑ Immunoglobulin (Ig) in high-risk patients within 6 days

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