Pathogen surveillance Results of respiratory tract infections

In a military Command in Spring and Winter
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Abstract: Objective
To investigate the pathogenic trend to respiratory infectious diseases in a military command in order to provide guidance to epidemic prevention and control. Methods surveillance data from 2014.10 to 2015.04 were collected from the surveillance platform for pathogens of respiratory infectious diseases, were descriptively analyzed by Excel 2007. Results 281 cases to positive samples were found in 1518 cases of samples. The positive rate was 18.51%. The amount of sample collection and positive rate across the military Command kept rising from October to December, but decreased from Out of the other year to March. The majority in positive samples were Influenza A (88.61%), adenovirus (8.19%) and influenza B virus (3.20%). Conclusion incidence to respiratory infectious diseases in winter and Spring is high in the military command. Influenza A, adenovirus and influenza B are the main types, specific measures should be taken.

Keywords: respiratory infectious disease; pathogen; Monitor
fluorescence quantification PCR technology detects influenza A, B, influenza virus and adenovirus specific sequence, and a flu virus-positive samples for type detection.

1.3 Statistical methods for monitoring the pathogen of respiratory infection to a war zone 2014 year 1 month-2015 year 4 month period respiratory infectious disease data collation, using Excel 2007 software to the war A descriptive analysis of the incidence of respiratory infections in the region.

2. Results

2.1 Monitoring of pathogens in primary and lower-level hospitals to collected from the theatre Primary Hospital 1518 case Sample tested, Positive detected sample 281 parts, the positive rate is up to 18.5%. Except monitoring point 203 month adenovirus aggregation infection, sample size is up outside, The overall sample size and detection positive rate for each monitoring point in the 2014 year 10-12 month increase trend, 015 year 1-3 monthly down-potential. (See diagram 1.)

monitoring Point 1 monitoring Point 2 Cosmetics Point 3 Monitor Xu 4 Total Juice
diagram 2 Positive detection rate changes in each network lab

2.2 Pathogen type distributed in positive samples, Influenza A virus, poison infection main, total 249 example, accounting for 88.6%, of which influenza A is the poison seasonal H3 subtype 170 Example (68.3%), Influenza A virus not type example (31.7%); followed by adenovirus infection,

3 Example, takes up 8.2%; influenza B virus infection 9 Example, takes up 3.2%.

2.3 Influenza virus positive rate time distribution trend Influenza A disease Poison positive rate 2014 year 10-12 month elevation trend, 2015 year 1-3 month drop trend, where 12 the incidence of the month is highest in the check measured time period, positive rate for influenza B virus in month—the next year 2 month rise trend after a peak of 2 month is down

Drop Trend, 3 month and 4 No influenza B virus infection occurs the average monthly, at post-monitoring 3 month and 4 detection of adenovirus in month sex, its positive rate continue to Rise, See diagram 3.

3. Discussion

Respiratory infections are an important part of infectious diseases. Have research on 1951-2008 Epidemiological trend of infectious diseases in PLA find, The incidence of respiratory infectious diseases has increased year in years, already superintestinal infections and insect-borne infections, become a type of infectious disease First Heart. In recent years, at all levels of leadership and health professionals working with the Army's infectious disease prevention and control work has achieved a greater effect, all types of infectious diseases are effectively controlled (3-15). But the current infectious disease is still an important threat to the fighting force..

From the pathogen type distribution, Respiratory infection for this monitoring. The pathogen is primarily an influenza A virus, adenovirus and B-Flow virus less, Positive rate of influenza A virus in themonth--The following 1 month peak, influenza B virus and adenovirus in 2-3 month reach peak. This tip in the autumn and winter prevention and control work still have to adhere to the influenza Control primary, Taking into account the prevention and control of other types of communicable diseases, has a mesh, focused intervention (6-17).

This article monitors the results to display, Month for this battlefield respiratory tract infected peaks, Enforcing prevention and control measures year months for recruits to military examination time, Major rules for recruits after enlistment model new training, Larger people flow, Low temperature, Fatigue, immunity low and other factors may cause the incidence of respiratory infections increased by high (18-19), on the other hand, with temperature decreasing in northern area, The positive rate of acute respiratory pathogens in this theatre is on the rise.. Prompt autumn and winter health departments should systematically strengthen health prevention workers make, especially for surveillance workers who strengthen respiratory infections for (20-21), at the same time, for other personnel in
the existing case company to be given a highly concerned.

from the control effect, This war zone 2014 Year Ten Month-2015 Year Four aggregated morbidity and outbreaks occur during months Ten more than, primarily in the case of a influenza a pandemic, passes through health departments at all levels.

Move, detect pathogen types in a timely manner, Site Implementation prevention and control measures, To make the plague Love is effectively controlled. These outbreaks have been monitored through the monitoring system to confirm in time. Won valuable time for early control of outbreaks at the same time, and the outbreak of respiratory infections in the war zone greater than, Monitoring time internal respiratory tract infection effective control, in plague number of outbreak the, and health resources for prevention and control are significantly lower.

Infectious diseases are still an important threat to combat effectiveness in the There are still the following issues with respect to its monitoring: W5-:(1) Force Department Poor awareness of infectious diseases among administrative staff, cause infectious disease prevention and control work is not highly valued (2) The onset of infectious diseases false negatives, Actual morbidity is higher than reported incidence; (3) Force officer for collective, and take a variety of tasks, people are very mobile, Easy causes infection to propagate. Also, This study also found, Primary disease monitor, Sentry Power light, has a large default in terms of people, devices, etc. missing, failure to implement pathogen monitoring, This is effective for the Force Greater impact of respiratory infectious disease trends, prompts us in the future monitoring work, should be unison, improving control in mind knowledge, Implementing monitoring measures at work, Improve monitoring capabilities.

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