Pathogen surveillance Results of respiratory tract infections

In a military Command in Spring and Winter

Liqingfeng,Lixiangda,Shimengjing,Yanghuisuo,Dengbing,Wangjian,Zhouyuanyuan,Bingfeng

CenterFordiseasepreventionand controlofBeijingmilitaryCommand,Beijing100042,

*Abstract:*Objective

ToinvestigateThepathogenictrendstoRespiratoryinfectiousdiseasesinamilitarycommandinor[dertoprovideReference thenGuidancetoEpidemicpreventionandcontrol.Methodssurveillancedatafrom2014.10to2015.04werecollectedfrom thesurveillancePlatformforPathogensofRespiratoryinfectiousDiseases,weredescriptivelyanalyzedbyExcel2007.Res ults281CasesToPositivesampleswerefoundin1518casesofsamples.Thepositiveratewas18.51%.Theamountof samplecollectionandpositiveRateacrossthemilitaryCommandkeptRisingFromOctobertoDecember,but*Decreasedfr omOut of the otheruaryTo March.ThemajorityinpositiveSampleswereInfluenzaA.(88.61%),adenovirus(8.19%)andinfluenzaBvirus(3 20%).Conclusion,incidencetoRespiratoryinfectiousdiseasesinwinterandSpringisHigh,

in,militarycommand.Influenza A,adenovirusandinfluenzaBarethemaintypes,specificmeasuresshouldbetaken.

Keywords: respiratoryinfectiousdisease;pathogen;Monitor

Acute respiratory infections are the most common diseases of humans_(1-2).Force as a crowd gathering environment,Respiratory passinfected with frequent high hair,military operational capabilities of troops, especially warThe has a significant effect on the maintenance of the bucket Force.Modern non-military War conditionsnext,respiratory Infectious disease_dan outbreak,control is extremely difficultbig (3-4).has research indicating,early precautions against disease reductionLove happens very important,should be passive in prevention workmove(5-7).so,system,Long-term and systematic infection of the respiratory tractThe occurrence of sexual diseases,development,Trend monitoring,early establishFund projects:army[Thirteen-FiveMajor items(No.AWSJ020

Introduction to authors:LiQingfeng(1975-),female,graduate student,Dr. Neo,Research Lab mainNo,attending physicians.working with pathogen detection and pathogenic biology.

① Military Preventive Medicine Institute, third Military Medical UniversityAlert System,and according to the prevalence of the corresponding disposal preThecase is particularly necessary..This study is based on respiratory infectiousdiseases.monitoring platform,to a war zone2014year10month-2015year4Analysis of the prevalence of acute respiratory infections betweenmonthly,With aviewtoprovides a theoretical basis for the prevention and control of the disease.

1. Data and methods

1.1 Data monitoring data from the respiratory Infections Network Supervisortest Platform,time to2014yeartenmonth-2015Year4month,Monitoring the diseasecases are acute fever(body temperature°C)withrespiratory tract clinicalsymptoms Patients,detects samples for nasopharyngeal swab samples of patients.

1.2 Method

1.2.1 Thedetection method makes a sample of the monitored casesRNAmentioning take,using real-time

fluorescence quantificationPCRTechnology detects influenzaA (a)Poison,B influenza virus and adenovirus specific sequence,and a fluvirus-positive samples for type detection.

1.3 Statistical methods for monitoring the pathogen of respiratory infectionsto a war zone2014year10month-2015year4month period respiratoryInfectious disease data collation,usingExcel2007software to the warA 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 theatrePrimary Hospital1518case Samplestested,Positive detectedsample281parts,thepositive rate is upto18.5%.except monitoring point2on3Monthforadenovirus aggregation infection,,sample size is up.outside,The overall sample size and detection positive rate for each monitoring point inthe2014year10-12Monthly increase trend, 015Year1-3monthly down-potential.(See diagram1,).

monitoring Point1monitoring Point2Cosmetics Point3Monitor Xu4

Total Juice

diagram2Positive detection rate changes in each network lab

2.2 pathogen type distributed in positive samples,Influenza A viruspoison infection main,total249example,accountingfor88.6%,of which influenzaA is thepoison seasonalH3subtype170Example(68.3%),Influenza A virus nottypeexample (31.7%);followed by adenovirus infection,

3Example,takes up8.2;influenza B virus infection9Example,takes up3.2%.

2.3 influenza virus positive rate time distribution trendInfluenza A diseasePoison positive rate2014year10-12Month elevation trend, 2015year1-3Month drop trend,where12theincidence of the month is highest in the checkmeasured timeperiod.positive rate for influenza B virus inmonth-the next year2month rise trendafter a peak of2monthisdown

Drop Trend,3month and4No influenza B virus infection occursin the average monthly.at post-monitoring3month and4detection of adenovirus in monthsex,Its positive rate continuesto Rise,See diagram3.

3. Discussion

respiratory infections are an important part of infectious diseases.have research on1951-2008Epidemiological trend of infectious diseases in PLAfind,The incidence of respiratory infectious diseases has increased year in years,already superintestinal infections and insect-borne infections,become a type of infectious diseaseFirst Heart).inrecent years,at all levels of leadership and health professionalsworkingwith,theArmy's infectious disease prevention and control work has achieved a greatereffect, alltypes of infectious diseases are effectively controlledu3-15).But the current infectious disease is still an important threat to the fighting force..

from the pathogen type distribution,Respiratory infection for this monitoringThe pathogen isprimarily a influenza A virus,adenovirus and B-Flowvirus less,.Positive rate of influenza A virus in themonth--The following1month peak,influenza B virus and adenovirus in2-3month reachpeak.This tip in the autumn and winter prevention and control work still have to adhere to the influenzaControl primary,Takinginto account the prevention and control of other types of communicable diseases,has a mesh,,focused intervention6-17).

This article monitors the results to display,Month for this battlefield respiratory tractinfected peaks,Enforcing prevention and control measures.year months for recruits to military examination time,Major rules for recruits after enlistmentmodel new training,Larger people flow,Low temperature,Fatigue,immunity lowand other factors may cause the incidence of respiratory infections increased byhigh(18-19).on theother 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 workersmake,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 ahighly concerned.

from the control effect,This war zone2014YearTenMonth-2015Year4aggregated morbidity and outbreaks occur during monthsTenmore 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,Tomake the plagueLove is effectively controlled.These outbreaks have been monitored through the monitoring system.to confirm in time,Wonvaluable time for early control of outbreaks.at the same time,and the outbreak of respiratory infections in the war zonegreater than,Monitoring time internal respiratory tract infection effective control,in plaguenumber of outbreaksthe,,and Health resources for prevention and controlareSignificantly lower(22-).

Infectious diseases are still an important threat to combat effectiveness intheThere are still the following issues with respect to its monitoringW5-:(1)Force DepartmentPoor awareness of infectious diseases among administrative staff,cause infectious diseasePrevention and control work is not highly valued(2)The onset of infectious diseasesfalse negatives,Actual morbidity is higher than reported incidence;(3)Force officerfor collective,,and take a variety of tasks,people are very mobile,Easycauses infection to propagate.also,This study also found,Primary diseaseMonitor Sentry Power light,,has a large default in terms ofpeople,devices, etc.missing,failure to implement pathogen monitoring,This is effective for the ForceGreaterimpact of respiratory infectious disease trends.prompts us in the futuremonitoring work,should be unison,improving control inmindknowledge,Implementing monitoring measures at work,Improve monitoring capabilities.

Reference

1. TEMPLETONKe.whyDiagnoserespiratoryviralinfec-tioi? (J).JclinVirol, 2007 (Suppl) 1:S2.
2. HouYunde.Etiologicaland prevention of acute respiratory virus infection(M).
Beijing:China Concord Medical University publishes, in:1-36.
3. Secret accomplishment ping,high dongqi.a theater force2001-2010Annual respiratory infectiondisease Analysis(J).PLA Medical Journal,2: A.
4. SunHairong,MaChungang,LiShenlong,, and so on.epidemic trends in military infectious diseasesAnalysis and prevention countermeasures(J).PLA Journal of Preventive Medicine,(6):391.
5. ChenQijun,ChenYue,DuShenming.on the harm of infectious diseases and the prevention and cure of our countrypolicy(J).Chinese basic Medicine,(6):.
6. LiuJianmin.status and future development of disease prevention and Control in China(J).China Health Education, and then,(1): 5.
7. HuangWeijuan,DongJi,Shu YueLong.China Influenza Surveillance Network development Overview(!).disease monitoring, 2008,23 (8): 463.
8. MadhiSA,klugmanKP.acuterespiratoryinfections.diseasethenmortalityinSub-SaharanAfrica. 2nd edition(R).Washington(DC) ^WorldBank, 2006.
9. ZhouYiping,LuXuedong,ChenXiaoko,, and so on.patients with acute lower respiratory tract infections in adultsvirus Etiology Research(J).Chinese Journal of Respiratory and Critical care,,9(4),:379.
10. ZhangZhaoming,wangying.Viral etiology of adult respiratory infections(J).Journal of Sichuan Provincial Health Management Institute,,4:261.
11. GaoPing,ChenFusheng,Liyun,, and so on.Prevention of respiratory tract transmission by armed police grass-roots unitsinfection Health Promotion policyJ.Journal of theArmed Police Logistics College Medical edition,2015 (+):834
12. LIUW,LIZD,[]TANGf,etal.MixedinfectionstoPan demicH1N1andseasonalH3N2VirusesIn1outbreak(J).ClinicalinfectiousDiseases, 1359:
13. high dongqi,LiHong,YangHui,, and so on.A unit2004-2013Year RespiratoryInfectious disease analysis(J).PLA Medical Journal,2014(7):""
14. Yongjian,TaoTao,Guobaoshi,, and so on.A unit1992-2006Annual RespiratoryInfectious Disease analysis(J).PLA Journal of Preventive Medicine,2008,(3):219.
15. YangShe,Cao ShuPeople,Fang,, and so on.Anupper respiratory infection on a ministry in Beijingand influenza-like cases visits and trends(J).PLA to prevent medicalTreatmentJournal, 2015,(6): 615.
16. SunXianchun,YangShumei.control of respiratory infections during boot campMain Practice(J).PLA Journal of Preventive Medicine,2015,(4):

429.

17.   high dongqi,YangHui,ShenBeiyu,, and so on.Army level two Disease Control agency infectionTheconstruction of disease treatment system(1).PLA Journal of Preventive Medicine,2015,(4):361.