

Influenza Pandemic and Syndromic Surveillance Weekly Report for the Solomon Islands for the period of Epi weeks 41 and 47, dates including Monday 12/10/09 until October 23/11/2009.

Introduction

Syndromic and event based surveillance continues to be conducted at seven sentinel sites including 4 urban sites established within Honiara including the National Referral Hospital, Kukum Outpatient Clinic, Rove Outpatient Clinic and Mataniko Outpatient Clinic and three provincial sites being Lata Hospital Outpatient Department in Temotu, Kilu'ufi Outpatient Department in Auki and Gizo Outpatient Department in Gizo.

Focal diseases for weekly sentinel surveillance include but are not limited to the following: Botulism, Poliomyelitis, IA (H5N1) (Avian Influenza) , IA (H1N1) (Swine Influenza), Dengue Fever, Malaria, Tetanus, Typhoid, Pertussis, Pneumococcal Disease, Measles, Mumps, Rubella, Meningitis, Cholera, Shigellosis, Varicella and Hepatitis.

Results

The reporting period contains 7 epi-weeks; epi-weeks 41 commencing Monday 12th of October 2009 up to and including week 47 ending on October 23rd 2009. A total number of 30 out of 49 reports have been received from the 7 participating sites.

A total of 61,828 outpatient attendances were reviewed of which there were a total of 4,292 respiratory infections. 4,228 were ILI presentations and 64 were severe acute respiratory infections requiring examination at and admission to the National Referral Hospital. There were no recorded clusters, atypical, or probable cases of respiratory infections identified during the reporting period. However, a 15 month old male from a local community near Kilu'ufi was confirmed as having IA (H1N1 09).

Since the commencement of surveillance in April 2009 there has been a total of 22,902 ILI's with 371 SARI recorded from the sentinel sites. For this 7 week reporting period the proportion of ILI infections is similar to that experienced at the commencement of surveillance in April 2009 where ILI infections accounted for 30 % to 44% of total clinic presentations.

Presentations for ILI were reasonably spread across the reporting period with ILI accounting for between 30 % to 42% of total clinic presentations. Higher incidence of the proportion of ILI clinic visits to total clinic visits occurred at the commencement of the reporting period with incidence decreasing until week 47.(see Diagram 1). Table 1 demonstrates the number of ILI cases by age and gender. ILI's remain slightly higher in the under 5 age cohort. Table 2 demonstrates the number of SARI presentations to clinics for the reporting period. This is slightly lower compared to the reporting period at the commencement of surveillance activities in April 2009. Clinical Malaria remains higher than when surveillance began and has gradually increased from 6% to 9 and 12% for this reporting period (see Diagram1). Diarrhoea remains under 5% of total clinic presentations.

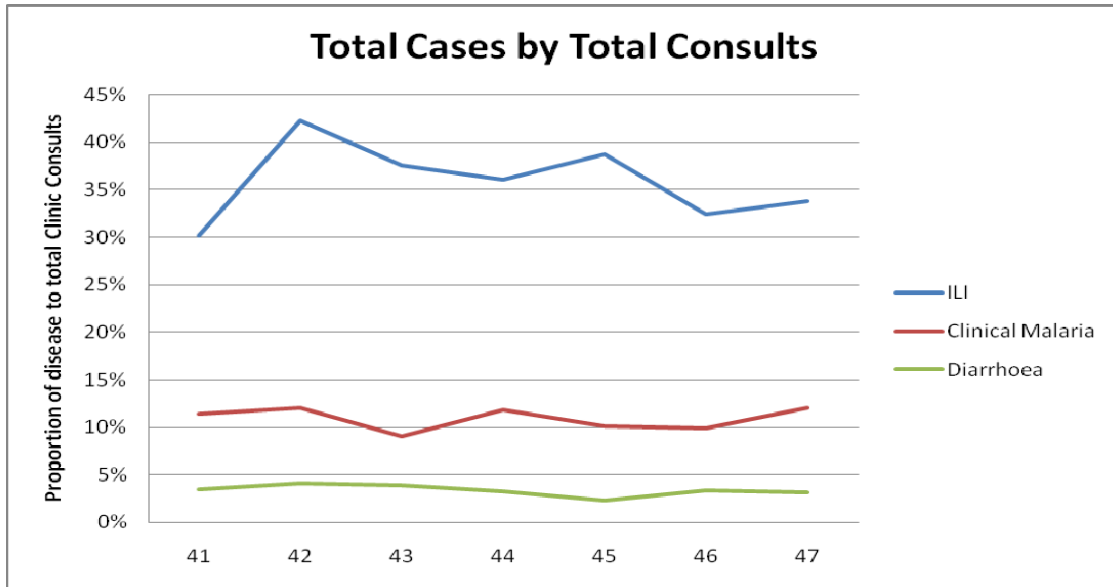


Diagram 1: Aggregated data for epi weeks 41 to 47 inclusive from Honiara sentinel sites

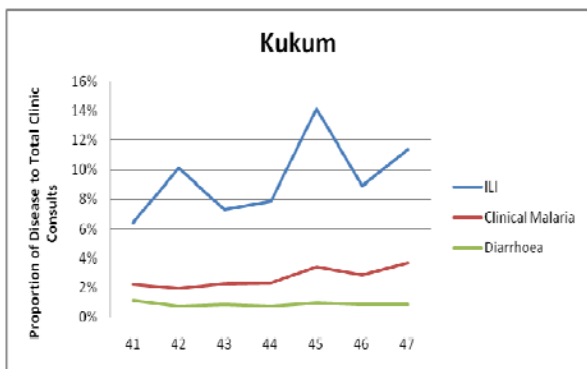


Diagram 2 : Proportion of ILI, Clinical Malaria and Diarrhoea to total clinic consults for Kukum Clinic

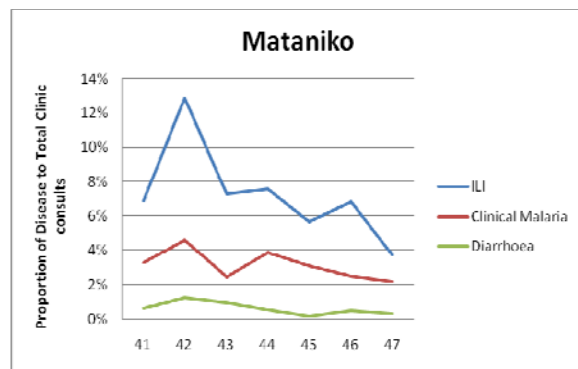


Diagram 3: Proportion of ILI, Clinical Malaria and Diarrhoea to total clinic consults for Mataniko Clinic

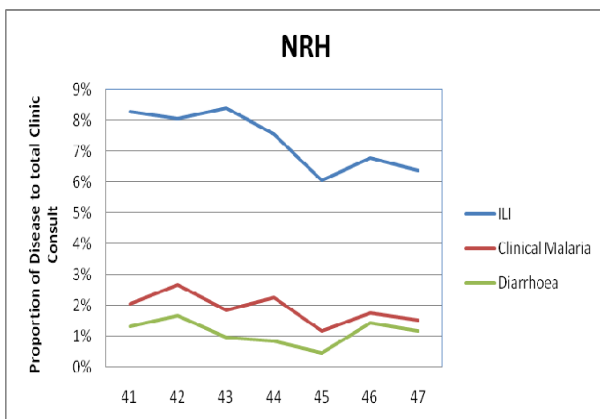


Diagram 4: Proportion of ILI, Clinical Malaria and Diarrhoea to total clinic consults for NRH Clinic

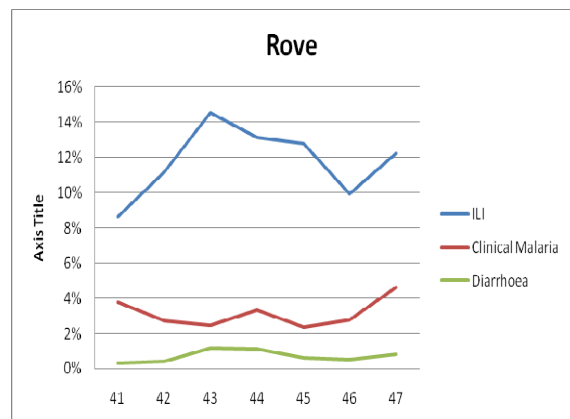


Diagram 5: Proportion of ILI, Clinical Malaria and Diarrhoea to total clinic consults for Rove Clinic

| Age Cohort | Gender | | Total |
|-----------------------|--------|--------|-------|
| | Male | Female | |
| Under 5 years | 1160 | 1018 | 2178 |
| Between 5 to 55 years | 835 | 948 | 1783 |
| Over 55 years | 51 | 48 | 99 |
| Total | 2046 | 2014 | 4060 |

Table 1: ILI cases by age and gender

Data received from Lata was aggregated for the reporting period and has not been included as part of the weekly analysis of other sites. Below is the trend of ILI for epi weeks 41 to 47 for the sentinel sites excluding data from Lata.

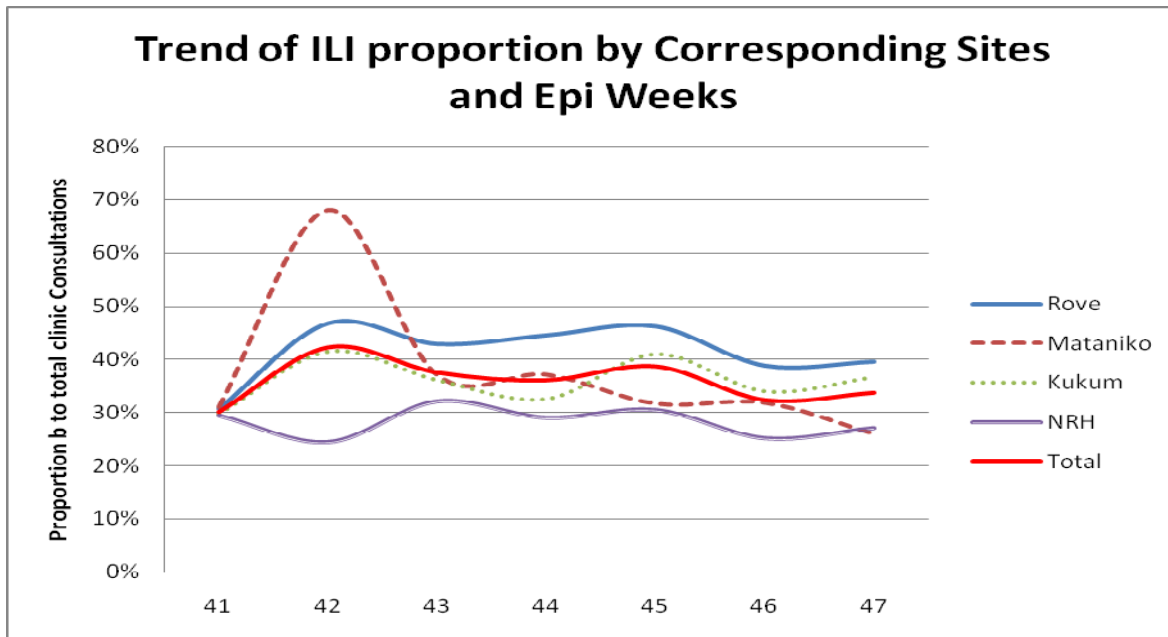


Diagram 6: Proportion of ILI to total clinic consults for epi week 41 to 47

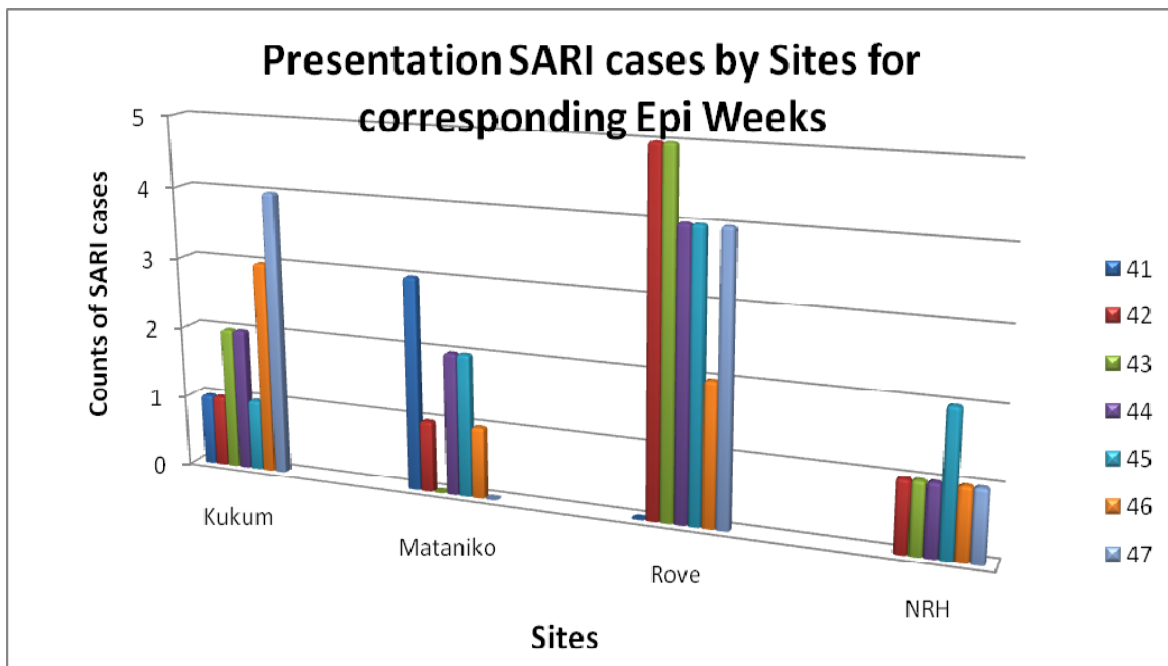


Table 2: Number of SARI by Sentinel Site for epi weeks 41 to 47

Clinical Malaria cases peaked at Mataniko clinic in epi week 42. See Diagram 7 below. Malaria health promotion and prevention activities may need to focus in this area.

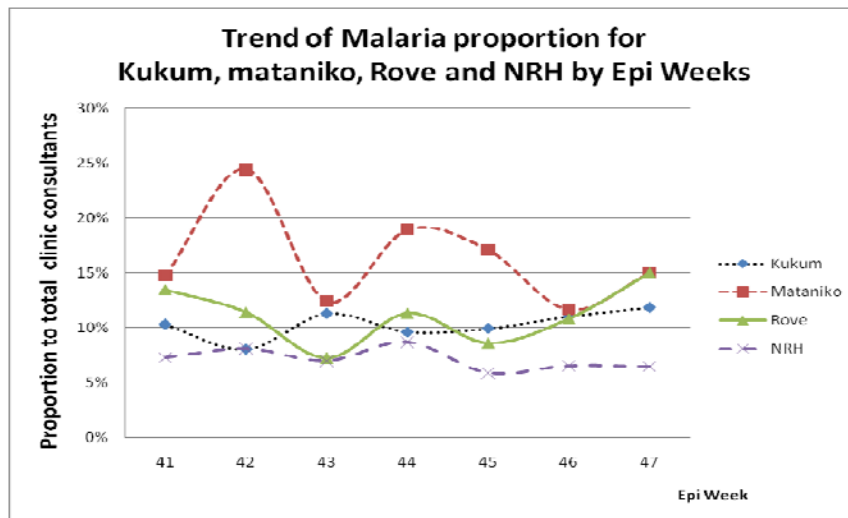


Diagram 7: Proportion of Clinical Malaria Presentations for epi week 41 to 47

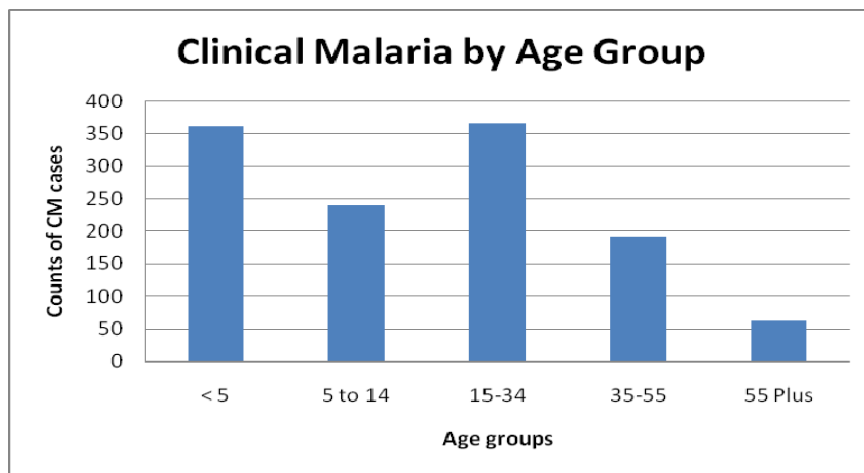


Diagram 8: Count of Clinical Malaria Presentations for epi week 41 to 47 by Age group

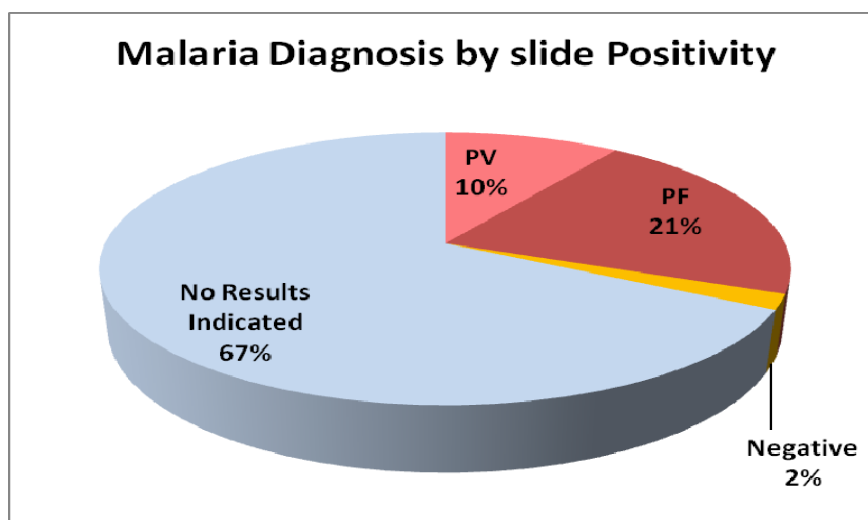


Diagram 9: Malaria slide positivity

Total clinic consults remain high in all centres since August 2009. This places pressure on human resources at the clinic level with many clinics working overtime. Aggregated data is not reflected in the above table as weekly comparison cannot be made.

| Epi Week | Kukum | Mataniko | NRH | Rove | Total Clinic Consults |
|----------|-------|----------|-----|------|-----------------------|
| 41 | 262 | 271 | 343 | 342 | 1218 |
| 42 | 349 | 270 | 469 | 342 | 1430 |
| 43 | 354 | 346 | 458 | 592 | 1750 |
| 44 | 448 | 380 | 482 | 548 | 1858 |
| 45 | 594 | 310 | 341 | 476 | 1721 |
| 46 | 417 | 343 | 428 | 407 | 1595 |
| 47 | 531 | 247 | 402 | 528 | 1708 |

Table 3: Total Clinic Consults for Sentinel Sites

Epi- notes:

Table 4 below details confirmed cases of H1N1 09. Table 5 details the mortality data for epi weeks 41 to 47. There are a number of still births documented. It is unclear whether there is a correlation between the number of still births and H1N109 infections.

| Date tested and later confirmed for H1N1 | Age | Gender | Ethnicity | Country of Origin | Occupation | Comment |
|--|-------------------------|--------|------------------------|-------------------|------------|--|
| 3/7/09 | 15 years | Male | Caucasian | Australia | Student | Individual one of a group of students from Australia visiting local teaching facility. Isolated on facility. Mild respiratory symptoms only. No contact with Solomon Islanders. Contract tracing conducted. |
| 4/7/09 | 20 years | Female | Caucasian | Australia | Student | Individual one of a group of students visiting local teaching facility. Individual within same group as male above. Isolated on facility. Mild respiratory symptoms only. No contact with Solomon Islanders. Contract tracing conducted. |
| 29/7/09 | 41 years | Male | uncertain | Australia | AFP | Arrived unwell with mild respiratory symptoms from Australia. Admitted to Private Medical Facility. Contact tracing of travellers conducted. |
| 1/10/09 | 1 year and 10/12 months | Male | Micronesian (Kilu'ufi) | Solomon Islands | Infant | No history of travel. Mild respiratory symptoms only. |

Table 4: H1N1 09 confirmed cases in the Solomon Islands

| Date of Death | Age | Cause of Death |
|-----------------------------------|-----------------|---|
| 17 th of October 2009 | unknown | Still birth macerated foetus |
| 19 th of October 2009 | 24/40 | Still birth |
| 20 th of October 2009 | 60 year male | IHD |
| 21 st of October 2009 | 70 year male | Not documented |
| 22 nd of October 2009 | 24/40 | Still birth |
| 24 th of October 2009 | 34/40 | Still birth |
| 25 th of October 2009 | 20/40 | Still birth |
| 25 th of October 2009 | 6/7 | Infant with dysmorphic features |
| 25 th of October 2009 | 9/12 female | Maramas |
| 27 th of October 2009 | 4/12 | Severe Malaria and anaemia |
| 28 th of October 2009 | 7/12 female | Positive Malaria and Gastroenteritis |
| 1 st of November 2009 | 38/40 | Still birth |
| 1 st of November 2009 | 26 year male | Not documented |
| 2 nd of November 2009 | 55 year male | Not documented |
| 4 th of November 2009 | 40 year male | Laparotomy on 29 th of October 2009, Cirrhosis |
| 6 th of November 2009 | 4/7 | Respiratory Distress |
| 7 th of November 2009 | 33/40 | Still birth |
| 8 th of November 2009 | 30/40 | Still birth macerated foetus |
| 10 th of November 2009 | 50 year male | Not documented |
| 12 th of November 2009 | 26 year female | Not documented |
| 13 th of November 2009 | 41/40 | Still birth |
| 13 th of November 2009 | 80 year male | Renal Failure |
| 13 th of November 2009 | 49 year male | CCF secondary to VHD and pneumonia |
| 13 th of November 2009 | 21 year female | r) pyelonephritis |
| 14 th of November 2009 | 39/40 | Still birth |
| 15 th of November 2009 | 36/40 | Still birth |
| 15 th of November 2009 | 9 year male | Cerebral Palsy with mild pneumonia |
| 16 th of November 2009 | 38/40 | Still birth |
| 16 th of November 2009 | 1 (6/12) female | Aspirate pneumonia |
| 18 th of November 2009 | 23/7 | Omphalocele |
| 18 th of November 2009 | 46 year male | Diabetic carbuncle l) foot |
| 20 th of November 2009 | 34 year male | Pulmonary TB |
| 25 th of November 2009 | unknown | Still birth |
| 26 th of November 2009 | 2/7 | ELBWT/Prematurity |
| 26 th of November 2009 | 40 year male | Atypical pneumonia and fibrotic lung disease |
| 27 th of November 2009 | 2 year male | PVD PHT |
| 28 th of November 2009 | 32/40 | Still birth |
| 1 st of December 2009 | 29/40 | Still birth macerated foetus |
| 1 st of December 2009 | 60 year female | Severe Gastritis |

Table 5: Mortality Data for Epi Week 41 to 47

Method of control for Respiratory/Influenza Infections including control of the patient, contacts and the immediate environment.

1. Give consider prescribing Tamiflu to those in high risk categories. These include children under the age of 5 years, those with co-morbidities, adults over the age of 55 years and pregnant women.
2. Educate the public and health care personnel in basic personal hygiene, especially the danger of unprotected coughs and sneezes, and hand to mucous membrane transmission.
3. Avoid crowding n living and sleeping quarters, especially in institutions and barracks. Provide adequate ventilation.
4. Isolate if possible. Do not mix with other people. Stay in a separate room.
5. If possible, use a toilet isolated for those with respiratory infections. This is particularly important if diarrhea is present.
6. Instructions on good respiratory etiquette should be provided including: Covering nose and mouth with a tissue when you cough or sneeze. Coughing into a sleeve. Throw the tissue in the rubbish bin after you use it. Do not spit.
7. Washing of hands at least 6 times per day with soap and water, especially after cough or sneeze.
8. Avoid touching eyes, nose or mouth.
9. Bed rest, medication for fever, antibiotics if appropriate, good nutrition. General support and advice should be given to caregivers on the use of antipyretics (acetylsalicylic acid should be avoided in children), oral fluids, and nutrition and bed rest.
10. Instructions must be provided on the use of antibiotics (if necessary) for bacterial complications of influenza when prescribed.
11. Stay at home until completely recovered. Social distancing and social isolation practices. Keep windows open and allow ventilation of the room.
12. Household surfaces including door knobs, taps and light switches should be cleaned regularly with soap and water or disinfectant.
13. Don't share tooth brushes, towels, pillows or anything else like that.