**Super-bug: Direct infection kills 2**

by Marilyn Ten, reporters@theborneopost.com. Posted on August 17, 2013, Saturday

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IMPROPER USE OF ANTIBIOTICS A HAZARD: Dr Chua speaking at the press conference regarding CRE cases that occurred in Sibu Hospital. With him are Soon Koh (left) and Dr Zulkifli.

***Exact cause of 8 fatalities from CRE positive cases at Sibu Hospital yet to be ascertained***

KUCHING: Two of the 10 fatalities from Carbapenem-Resistant Enterobaceriaceae (CRE) positive cases reported in Sibu Hospital this year were due to direct infection.

The exact cause of the remaining eight cases has not been confi rmed yet.

State Health Department statistics showed that 38 cases were reported up till August 14 this year at Sibu Hospital, with four cases treated as CRE infections and the rest colonisers.

Minister of Local Government and Community Development Dato Sri Wong Soon Koh yesterday urged the public not to panic, and assured that the health authorities were taking steps to curb its spread.

“ There is no c ause for alarm, despite claims by Bukit Assek assemblyman Wong Ho Leng that CRE or ‘super-bug’ infections are prevalent at Sibu Hospital.

“He (Ho Leng) made an error by alleging that hospital workers, particularly nurses, were being vaccinated against CRE. This insinuated that we only take care of our own workers, and not the public. This is not true,” he said in a press conference at his office here yesterday.

Soon Koh stressed there was neither discrimination nor coverups on this issue.

“There is no such thing as camouflaging the truth. We are just as anxious as anybody to make known the type of diseases which affect us.

“As a ‘wakil rakyat’, he (Ho Leng) should have consulted doctors at the hospital and get his facts correct before making public statements in order not to create unnecessary worries among the public.”

CRE, Soon Koh said, was not confi ned to Sibu Hospital alone, but is a global phenomenon.

Nevertheless, he advised the public to take preventive measures to curb its spread.

“Practise personal hygiene like washing your hands whenever and wherever possible is very important to prevent contraction or spread of diseases.

“When visiting patients in hospitals, family members or friends of patients are advised to take turns to visit. Refrain from overcrowding because this will create an environment for diseases to spread.”

Meanwhile, Sarawak General Hospital (SGH) State Infection Disease Physician Dr Chua Hock Hin, who was also present, said in addition to the four CRE cases treated as infections in Sibu Hospital, there was one such case at SGH this year.

He explained that CRE infections occurred due to years of inappropriate use of antibiotics.

“This (CRE) did not occur overnight. It is due to years of overuse or rather inappropriate use of antibiotics in the community as well as in hospitals.

“Secondly, what propagates it is because infection control practice (ICP) was not emphasised,” he said on the two factors that caused the increase in the number of CRE cases or other drug-resistant cases.

Drug resistance organisms such as CRE are emerging throughout the world, and in a bid to curb the spread of such diseases, Dr Chua said SGH had been working hard to improve the level of ICP at hospitals in the state.

“By increasing awareness on the importance of ICP, we can cut down on transmission of drugresistant organisms.”

He said SGH was carrying out an Antibiotic Stewardship Programme, where the use of high-end antibiotics would be examined.

“By doing so, we can cut down on unnecessary use of antibiotics and would only limit its use when it is necessary.”

Dr Chua said CRE infections, which usually occur among individuals with a low immune system, affect people from all age groups – from babies to senior citizens.

“If patients are found to be CRE positive, we will isolate them immediately while waiting for lab results.”

Also present at the press conference were Assistant Minister of Public Health Dr Jerip Susil and State Health Director Datu Dr Zulkifli Jantan.

## Read more: <http://www.theborneopost.com/2013/08/17/super-bug-direct-infection-kills-2/#ixzz2cU9z6zC3>

## Antibiotic class changes should be considered to reduce resistance

### [Kardas-Sloma L. *Antimicrob Agents Chemother*. 2013;doi:10.1123/AAC.00711-13.](http://aac.asm.org/content/early/2013/06/25/AAC.00711-13.abstract?sid=83fa0cd6-c5bc-4ac0-938a-a59daf50fb74)

* August 13, 2013

Data published in *Antimicrobial Agents and Chemotherapy* suggest that overall reductions in antibiotic use may not be enough to reduce antibiotic resistance, and class-specific changes in antibiotic use also should be considered.

### See Also

* [Repurposed drugs fight antimicrobial resistance crisis ...](http://www.healio.com/infectious-disease/mrsa/news/online/%7Bb6f37e74-93c3-4df9-b6a3-0f45628f382f%7D/repurposed-drugs-fight-antimicrobial-resistance-crisis)
* [Increased prevention efforts may not reduce spread of hospital ...](http://www.healio.com/infectious-disease/mrsa/news/online/%7Be4fe1961-6630-4a23-a40c-ec843350b9b4%7D/increased-prevention-efforts-may-not-reduce-spread-of-hospital-based-bacteria)
* [S. aureus nasal carriage varied greatly across Europe ...](http://www.healio.com/infectious-disease/mrsa/news/online/%7B5fc3113c-3f39-4eff-b161-99c733e72d86%7D/s-aureus-nasal-carriage-varied-greatly-across-europe)

“Many countries worldwide have implemented nationwide campaigns aimed at reducing unnecessary antibiotic use,” **Laura Temime**,**PhD**, of the Laboratoire Modélisation et Surveillance des Risques pour la Sécurité Sanitaire, Conservatoire national des Arts et Métiers in Paris, told *Infectious Disease News*. “However, while these campaigns were often successful — in the sense that antibiotic use did decrease in the short term — their actual impact on antibiotic [resistance](http://www.healio.com/infectious-disease/mrsa/news/online/%7B41b1fe1d-9931-4670-bde2-249ecea9a039%7D/registries-helped-track-resistant-infections-in-health-care-facilities%22%20%5Ct%20%22blank)remains unclear.”

Temime and colleagues developed a model transmission of methicillin-sensitive *Staphylococcus aureus* (MSSA) and methicillin-resistant *S. aureus* (MRSA). Using this model, they assessed antibiotic use by antibiotic classes. They evaluated changes in antibiotic use following an antibiotic reduction campaign, and they also analyzed the impact of a 10% reduction in antibiotic use over 1 year, specifically on MRSA dissemination.

According to the model, the frequency of hospital [MRSA](http://www.healio.com/infectious-disease/mrsa/news/online/%7Bc85c2f3f-0b25-4a0b-91e9-3d62be075672%7D/mrsa-screening-for-older-patients-at-hospital-admission-recommended) among carriers of *S. aureus* decreased from 39% to 36%. The final MRSA frequency among patients in the ICU ranged from 12.4% to 59.5% in ICUs, and from 3.4% to 7.4% in the community. The researchers found that when the use of antibiotics to which all *S. aureus* are resistant and susceptible increased, the frequency of MRSA decreased in hospital and community settings. But if there was increased use of antibiotics only effective on MSSA or community-acquired MRSA, the frequency of MRSA increased.

“Our research shows that class-specific changes in antibiotic use, rather than overall reductions, need to be considered to properly anticipate the impact of an [antibiotic](http://www.healio.com/infectious-disease/practice-management/news/online/%7Bfae61754-c9cf-4a7b-8964-11115eb276ae%7D/antibiotic-development-lagging-despite-desperate-need-) reduction campaign,” Temime said. “We believe that this research may help health policy makers and physicians design more efficient antibiotic reduction campaigns.”

In future studies, Temime said she would like to investigate the impact of coupling hospital and community infections in terms of resistance, specifically whether there is a risk for community-associated bacteria acquiring new resistance genes in the hospital setting before returning to the community.

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# Human MRSA strain 'originated in livestock'

The study suggests livestock was the original source of an MRSA strain now in people

**A type of MRSA found in humans originated in cattle at least 40 years ago, new research has claimed.**

Edinburgh researchers said they had "clear evidence" that livestock was the original source of an MRSA strain now widespread in people.

They studied the genetic make-up of 40 strains of a bacterium, Staphylococcus aureus, that can build up antibiotic resistance to develop into MRSA.

The Roslin Institute at Edinburgh University carried out the research.

At least two genetic subtypes of the bacterium, which have become endemic in people, were traced back to cattle by the scientists.

**Immune system**

They said the most likely scenario was the bug crossed over from cattle to people through direct contact - perhaps through people working with farm animals.

It is hoped the research will help scientists find out how bacteria is able to spread and cause disease in humans, and to prevent further strains from jumping from livestock.

After switching to human hosts, the Staphylococcus aureus bacterium became resistant to the antibiotic methicillin and developed into methicillin-resistant Staphylococcus aureus or MRSA.

The bacteria also acquired the ability to avoid attack by the human immune system.

However, the bacteria that originated in cattle did not appear to be more aggressive or more resistant to antibiotics than other MRSA affecting humans, researchers said.

Professor Ross Fitzgerald, Roslin Institute researcher, said: "Human infections caused by bacteria being transmitted directly from livestock are well known to occur.

"However this is the first clear genetic evidence of subtypes of Staph. aureus which jumped from cattle and developed the capacity to transmit widely among human populations."

The study has been published in the journal mBio.

**Guild slams CHF, CHOICE**

**The** Pharmacy Guild has blasted

a “disgraceful campaign” which

has been launched today by the

Consumers Health Forum, CHOICE

and ACOSS, saying it “seeks to

quite deliberately mislead the

public about recent changes to the

Pharmaceutical Benefits Scheme”.

The three groups have attacked

the petition being circulated

through community pharmacies

across the country, alleging that

pharmacists are deliberately

pushing for political parties to

“back away” from the price

disclosure mechanism for PBS-listed

medicines.

According to a Guild statement

this is a “deliberate untruth”.

“We have not asked for the price

disclosure mechanism for PBS

medicines, announced two days

before the Federal Election with no

consultation, to be reversed,” the

Guild said.

“Nor are we asking patients

to pay a cent more for scripts.

Pharmacists - like everyone in the

healthcare industry - want patients

and consumers to be able to access

essential medicines at an affordable

price,” the statement added.

The Guild says it supports the

objectives of price disclosure and

cheaper prescription medicines,

and has worked closely with

government over many years to

achieve that.

“No one is contributing more

to keeping medicine prices in

check through price disclosure

than Australia’s 5,300 community

pharmacies.

“However unless pharmacists

are paid adequately to dispense

medicines, patients will lose out

through reduced services and

opening hours, jobs will be lost, and

some pharmacies may be forced to

close,” the Guild said.

“This is clearly not in the interests

of Australia’s REAL consumers who

know the value of community

pharmacy from the 300 million

visits they make to their local

pharmacies...every year”.

**MEANWHILE** the Consumers

Health Forum has achieved strong

exposure for its ‘Stand Up for

Cheaper Medicines’ campaign, with

CHF ceo Carol Bennett appearing

on the Channel 7 *Sunrise* show

today focusing on the high prices

Australians pay for medicines.

The CHF, ACOSS and Choice are

“bluntly warning individuals and

families in Australia” that prices for

pharmaceuticals here are up to ten

times those paid in Britain.

The campaign urges consumers

and political parties to support

the PBS disclosure policy which

sees savings on price reductions

passed onto taxpayers “rather than

to pharmacy owners,” saying they

should “not support the union

representing pharmacy owners, The

Pharmacy Guild, in calling for a $150

million taxpayer compensation

scheme to pharmacy owners”.

The organisations claim that up to

15% of people now struggle to pay

for prescriptions, and rather than

signing the Pharmacy Guild petition

are calling on people to email

candidates via a special campaign

website which can be accessed at

ourhealth.good.do.