

Week in review

SWINE FLU LOCKDOWN

HEALTHY children returning from holidays in North America or Japan have been told to stay away from school or childcare for a week to prevent them passing on swine flu to classmates.

All states plan to implement the same exclusion period.

Eynesbury College, in the city, is closed until Friday and Blackfriars Priory School, at Prospect, until Monday, after a student at each was diagnosed with the disease.

VOCATIONAL CHANGES

THE SACE board released a discussion paper on plans to allow students to undertake more vocational education and training to attain their Year 12 certificate.

Under changes to be in place by 2011, secondary students will be able to attain their SACE while almost exclusively studying a trade as long as they also include four compulsory SACE subjects: the Personal Learning Plan, Research Project, and Stage 1 (Year 11 level) literacy and numeracy subjects.

SCHOOLS GET A MAKEOVER

THE Federal Government announced the last of the \$1.3 billion National School Pride funding, allocating \$35 million for maintenance and minor refurbishment work at South Australian primary and secondary schools.

A total of 277 SA schools successfully secured funding in the second and final round for 388 projects.

It brings the total for SA to \$102.7 million for 1171 projects at 788 schools.

STUDENTS MAKE THE MARK

THE University of South Australia will offer bonus entry points for all its degrees to students who study relevant subjects in Year 12 from next year.

The scheme – a state first – will enable some students to enter courses for which their marks would previously have been too low.

Students will gain up to five bonus points towards their Tertiary Entrance Ranking (scored out of 100) if they score 10 or more out of 20 for subjects which are “matched” to their chosen degree, such as Year 12 Business Studies for a commerce degree.

THE WIZARD OF WINDMILL

70th ANNIVERSARY

SCHOOL SHOWS - HURRY SELLING FAST!
Fri 26 Jun 11am (SOLD OUT!), Mon 29 Jun 11am,
Wed 1 July 10am + 1pm, Thu 2 Jul 11am (SOLD OUT!).
School Bookings: Call BASS 8205 2220.
Teachers Notes and June Professional Learning Workshop available.
More information: Julie Orchard 8415 5358.
GREAT SCHOOL HOLIDAY ACTIVITY:
DAILY SHOWS: Mon 6 Jul - Thu 9 Jul 2pm.

By L. Frank Baum

IN 21ST CENTURY TECHNICOLOR

26 June - 11 July
The Dunstan Playhouse, Adelaide Festival Centre
Tix \$29. BASS 131 246 or www.bass.net.au
www.windmill.org.au

The Advertiser Make the most of every play

Government of South Australia Department of Education and Children's Services National Curriculum ADELAIDE CITY COUNCIL

CAN YOU BELIEVE IT?
WITH JAMES BYRNE, UNIVERSITY OF ADELAIDE

FIGHTING DISEASE

■ The National Immunisation Program for children covers Hepatitis B, Diphtheria, Tetanus, Whooping Cough, Haemophilus influenzae type b (Hib), Polio, Pneumococcus, Rotavirus, Measles, Mumps, Rubella, Meningococcal C, Chickenpox, and Human Papillomavirus.

■ If enough people in the community are immunised, infection can no longer spread efficiently from person to person and the disease dies out. This is how smallpox was eliminated from the world, and why polio has disappeared from many countries. This concept is called herd immunity.

■ In 2009, the National Vaccine Injury Compensation Program ruled that parents of autistic children could not make claims for compensation based on any MMR vaccination due to lack of evidence.

■ Vaccination and inoculation are often confused but are in fact very different. Inoculation involves giving the healthy a very low dose of the active infectious agent. This is often very dangerous to the patient and can result in the death or serious illness.

Vaccination for greater good

TO vaccinate or not to vaccinate? The question vexes many parents but most still go ahead and have their children vaccinated as it is the best defence against many infectious diseases. Detractors claim that, while some can benefit from vaccines, the side effects are not worth the risks.

The credit for vaccination often is handed to Edward Jenner, who developed one of the first widely-distributed vaccines effective against smallpox. As a field, vaccinology can be traced as far back as early 200BC where surviving records show the Chinese had recognised doses of powdered smallpox scabs, when given to the healthy, could prevent the onset of smallpox.

Jenner's method, later developed and given the name vaccination by Louis Pasteur, was different and revolutionary in that he discovered similar or weaker infectious agents could provide a wide spectrum of protection and allow for immunity to develop to more dangerous pathogens.

Jenner noted milkmaids rarely developed smallpox. He hypothesised this was because milkmaids were exposed to the bovine form of smallpox, cowpox. That allowed for the development of immunity to many “cowpox-like” infectious agents.

Jenner tested his hypothesis by scraping the pus from cowpox scabs of a milkmaid over a healthy patient's arms. The patient developed a mild fever but recovered and was able to withstand exposure to the pus expelled from human smallpox scabs.

Vaccination revolutionised the world of medicine as it was partly responsible for a changing view in medical therapy, away from curative medicine to preventative medicine.

Despite helping the way we think about medicine, vaccination has remained controversial since Jenner's successes in the 1790s. Anti-vaccination protests on ethical, political, medical safety, religious and other grounds have resulted in drops

in the vaccination rates of children. Leading the charge against vaccination are groups who point to the history of vaccine development and for the most part, unsubstantiated claims linking vaccination with various conditions, including autism, gastrointestinal disease and auto-immunity (when the body turns upon itself, causing debilitating forms of disease such as arthritis).

The link between autism and the MMR vaccine (measles, mumps and rubella) is one of the most commonly referred to by those groups. In 1998, scientist Andrew Wakefield reported he had identified a link between MMR vaccination and the development of “autism spectrum disorders”. By 2004 vaccination rates had dropped and this was attributed to the perceived link.

The scientific community was outraged. Ten out of the 12 co-authors of Wakefield's paper had renounced the work and said they disagreed with Wakefield's interpretation of the data. Follow-up work by multiple laboratories showed no association between MMR and autism. Some went as far as to calculate the risk of developing autism after receiving the vaccine and the risk of dying after catching measles, mumps or rubella if the vaccine was not administered to show even if Wakefield was correct the risk of autism did not compare with the risk of death from those conditions.

Opponents of vaccination argue that, despite an overwhelming amount of information that suggests otherwise, vaccines can cause extreme and irreversible harm to a large cross-section of the community. Side effects are possible but particularly with vaccines these side-effects are not common. For the most part, they are mild. Vaccine development is one of the most closely monitored areas of the pharmaceutical industry as most are for children.

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