

PRINCIPAL'S REPORT

As we begin our new year, I would like to extend a very warm welcome to Point Cook Senior to all new students and their families, and especially families who are completely new to the school community. I would also like to welcome back all the continuing students and their families.

I would also like to take this opportunity to welcome the new staff to the school, and those returning from leave. As the student numbers at the school have continued to grow, we welcome a number of new staff:

Mary Adamou (English/EAL) Elise Garro (English/EAL) Alan Hale (International Students Coordinator) Amie John (Business/Legal) Shane Woon (Theatre/English)

I am also delighted to welcome back Lauren Wouda (Psychology) who has returned from leave.

The Secrets to Success

As our students begin their new year, we have started to discuss the factors that usually lead to success at school. You will see reports in this newsletter of our orientation programs at each year level - a major part of these programs was a focus on study skills. However, here I would like to quickly review some of the basics that often get left out because they sometimes seem quite obvious. Those basics are "attendance", "punctuality" and "participation". There is no doubt that there is a strong link between student attendance at school and their academic results. It is no accident that in every school I have worked in, our highest performers are very rarely absent from school. In fact, there is a significant body of research that suggests that the more regular a student's attendance at school, the better their learning outcomes will be. Another key factor in success is punctuality - getting to school on time, getting to class on time and meeting deadlines. Students who miss the start of class often take a fair bit of time to catch up as they have missed the very important introductory explanations and instructions. Fortunately we do not have many students who arrive late to class, but it is worth noting that, when they do, they also disrupt the learning of others as the classroom flow is broken when they arrive. The last of the basics is participation – not just turning up to class but actively listening, asking questions, contributing ideas, and regularly reflecting and making sense of material as the class progresses. In my experience, students who are active participants in their classroom generally achieve much higher academic results and are much more successful in achieving their preferred pathways in life.

Events and Opportunities

Of course, our school is about more than just academic results. I recently had the opportunity to speak to the entire student body at our general assembly, and I was delighted to be able to talk about a range of opportunities and events that were coming up this term and beyond (some of which you will read about in this newsletter. We talked about the swimming carnival on 22 February, the athletics carnival in May, and a range of interschool sports. I spoke of signups for guitar lessons, and about a range of clubs and activities being run at lunchtimes, and of a broad range of cultural events being offered both in school and outside of school hours. And our student leaders followed up with some information about student activities, opportunities for student involvement, and the school captain elections. Those elections have now been completed and I am delighted to congratulate our new captains (Albizia Balbuena and Clyde Montaner) and vice-captains (Dylan Bruce and Tiarna Pardis).

Cambodia Project

One of the opportunities I spoke of at our assembly was our Cambodia Project. This is a chance for our students to make a difference and get involved in a community service project in Cambodia this December through the Asia Pacific Youth Foundation (APYF). Our students and staff have decided to try to raise funds to support the construction of a peace house – a house for a family in need in the Siem Reap area – and our student leaders are very committed to this major task. Additionally, students from Year 10 to 12 have the opportunity to be involved in a seven day trip to Cambodia to work with the family, the local village, and a group of Buddhist monks to construct the house (and visit some important cultural sites as well). APYF supports local communities to break the poverty cycle, develop sustainable practices and to provide educational opportunity for all young people. The focus is on 'youth helping youth'. We are delighted to have the chance to be involved in such a worthwhile project. There is an information night at 6.30pm on the evening of 2 March to be held in our LRC. Given the short notice, if you are interested to know more about the project but cannot make the information evening, I would be happy to organise some further information.

As we move ahead into this new school year, we look forward to witnessing the achievements of our 2016 students. The starting point is getting the basics right — attendance, punctuality and participation. From this foundation our students can embrace challenges, engage fully to the best of their ability and take every opportunity to learn and grow.

Darryn Kruse Principal

address: Cnr Boardwalk Boulevard and Bergamot Drive, Point Cook, Vic 3030 postal: PO Box 6520, Point Cook, Vic 3030











Year 12 Orientation Days

To begin the year with a focus on the best chance for success, we set off by bus to Victoria University to participate in activities and workshops as a year level. The weather was beautiful on both days and the university campus was an excellent facility: with lecture theatres, and classrooms that we could use for our workshops, as well as excellent lattes from the Uni cafes, and loads of greenery to sit amongst during breaks. There was a good balance of study skills and 'how we learn' information, with workshops that meant we were able to play and relax with our Advisories which was excellent time to re-energise. The speakers and workshop facilitators brought a new perspective, and for many students put a name to good habits they have already developed. For others there were light-bulb moments that meant they were home re-arranging their study spaces and dismantling their facebook page to keep their focus on what mattered this year. Catered lunches on both days meant we could share our lunch-times kicking back and taking in the university lifestyle. We finished the two day orientation program with a team competition, 'Minute To Win It', down on the oval. There was furious competition with much encouragement from the sidelines. The winners raised their medals high, but even the team that finished last was happy, as they took home a wooden spoon each to celebrate being bottom of the ladder. The bus ride home to Point Cook was a rowdy one as we sang and talked and were happy to be Year 12s.



Year 12 English Support Classes

Every Monday after school (3.15 - 4.15 pm) in room 103 Year 12 English students are encouraged to attend an extra English class. This will help students at all levels and ensure they are prepared for their assessments.

















Year 11 - The Beginning of 2016

The Year 11s have had an eventful start to the 2016 school year. They all took part in orientation activities designed to set the tone for the year and to allow the students to build positive relationships with their peers and teachers. As part of the orientation program the students attended sessions run by Elevate Educate that revolved around organisation, time management, goal setting and study skills. Rosie Pekar delivered a motivational talk that the students responded well to. A session focusing on drugs and alcohol was highly beneficial and the students found it very educational. The orientation program concluded with an excursion to Adventure Park. All students were attentive and thoughtful and thoroughly enjoyed all the activities on offer.



The students have all settled into their VCE or VCAL classes well. There are a number undertaking VET subjects and all students are enjoying their course program. In order to strive for success it is imperative that all students arrive to class on time with all the necessary learning tools and resources. If your son/daughter is having trouble with obtaining all of the required resources for their subjects please encourage them to speak with their advisory teacher who will be able to recommend courses of action to overcome this hurdle.



All year 11 students were well behaved at the college swimming sports held on Monday 22 February. The students that represented their house by taking part in an event will be treated to a trip to the Town Centre next week.

Well done to all Year 11 students for a positive start to the 2016 school year.

















Year 10 Orientation Program - A Student's Perspective

On Thursday 18 February a guest speaker came in and talked to all of the Year 10's about acceptance and knowing who you truly are as a person. She demonstrated different qualities about life and shared her experience throughout and events that had an impact on her throughout her lifetime. She gave us information that we could take into consideration if we choose. For instance, she talked about her past experience with trying to fit in, she talked about many different varieties of things such as self-esteem and things she did to try to 'fit in.' This included not being herself, doing stuff that she wouldn't normally do and so on. Lastly, she gave us good advice and she talked to us about loving who we are as a person and to accept each and every one of us for who we are.

Natasha Balnozan 10D





Adventure Park

















POINT COOK SENIOR SWIMMING CARNIVAL

Point Cook Senior has yet again celebrated another successful Swimming Carnival at Lara Swimming Club on Monday 22 February. The participation from the college students was outstanding this year with 700+ attending the day. With an emphasis on participation, students showed their House pride by swimming in an enormous number of 50m heats across the four strokes. There was even a time trial for butterfly. As always House themes were hotly contested with each House given the chance to belt out their chant across the pool to the remainder of the school for bonus points. Also setting an enjoyable atmosphere was the year 12 students who create a hype at the school carnivals, as they dress to impress in their house coloured costumes. We had some very creative dress ups that were awarded gift vouchers for their efforts.



The Advisory activities were also filled with lots of students participating by competing in soccer and volleyball, attending the salon (where hair was coloured and faces and nails were painted) and participating at the water park, which is always a hit with the students as they have free time to enjoy the water slides and the pirate ship features.



A huge event that brings the college together is the Ironman and Ironwoman Challenge. This year we had to have three challenges as the participation was huge at all year levels. Our champion ironman Pio Nakubuwai from 2015 accepted the challenge to try to keep his title for 2016. The challenge this year was to swim under four lane ropes, eat a weetbix, run around the water park, eat a cold meat pie, and swim back under the lane rope and skull a bottle of cold water. Our Ironwoman for 2016 was Mikaela Bourke. At Year 11 the Ironman winner was Josh Nakubuwai and the Year 12 Ironman competition resulted in a tie between Pio Nakubuwai and Bobby Halatanu.



The final House results for 2016 were:

- 1st Iroquois
- 2nd Demons
- 3rd Dragons
- 4th Sabres

Swimming is an incredible challenge for most children. Not only is it a lifesaving skill, it is also a great way to develop self-discipline, coordination and resilience. We congratulate and recognise every student that participated and tried their hardest in all swimming events. Our individual winners for 2016 were:

Year 10 Girls Champion: Jasmine Sparks Year 10 Boys Champion: Lochie McNeilly Year 11 Girls Champion: Ariana Eruera- Chase Year 11 Boys Champion: Hayan Azcoul Year 12 Girls Champion: Emily Bourke Year 12 Boys Champion: Sam De Pasquale

A very special mention goes to the staff that helped make this day possible for the students. Whether supervising areas of the pool, participating in activities or being allocated a job for the day, it is wonderful to have such great support.

Danielle Ryan (Murray)











SWIMMING CARNIVAL







Senior Boys and Girls Volleyball

Senior students from Year 11 and 12 competed in the Hobsons Bay Division Volleyball competition on Tuesday 23 February. The students traveled to Bayside College where they competed against Bayside, Laverton and Williamstown College. Our Girls did extremely well finishing off with $2^{\rm nd}$ place and our boys tried really hard finishing off in $4^{\rm th}$ place. It was an enjoyable day and the students showed great sportspersonship throughout each game. Special mention to Mr Schorback who coached the girls and also umpired on the day. Well done to both sporting teams for their efforts.















Student Leaders Announcement for 2016

After a rigorous selection process the School Captains and Vice Captains have been selected for 2016. The Year 12 cohort elected these leaders after they made excellent candidate speeches. They are committed to representing the students at school this year and we know they will accomplish great things. Congratulations to School Captains Albizia Balbuena and Clyde Montaner and Vice Captains Dylan Bruce and Tiarna Parnis. A special commendation also goes to Bethany Burdett for an inspirational speech. Please enjoy our captain's Year 11 school photos.



Albizia Balbuena



Clyde Montaner



Dylan Bruce



Tiarna Parnis

New Phone System

The College has a new phone system. Once you ring, you will be prompted to dial a number.

Dial 1 for Student Attendance (absences, early leavers, attendance queries)

Dial 2 for Accounts Payable (outside creditors)

Dial 3 for Reception (general gueries)

Dial 4 for Teaching Staff Absences (school staff only)

Dial 5 for Student Pathways & Careers

Year 11 Literature: Reading 'In the Park' in the park

Last Tuesday, students from Ms Marie's Year 11 literature class enjoyed some intellectual discussion outside of the classroom. As part of our unit concerning the dissection and discussion of Gwen Harwood's poem *In The Park*, Ms Marie decided it would be an effective visual aid to our analysis if we conducted it within more relevant surroundings. The similarities and contrasts we found between our real world park and the subject within the poem helped to provoke a more in-depth analysis, and served as an aesthetically pleasing backdrop to our literary discussion.

As an added bonus, we learned that there are few images more

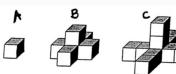


serene than that of a group of young adults sitting under the shade of a tree in the summer sun (no matter how stereotypical it may appear!)

Seth Reeves, 11E

Building Block Dilemma

I was constructing towers as you see below. I noticed that each time I made the tower higher, I had to add more blocks on the sides to stabilize the structure. I would like to know how many cubes I will need to build a 5-block high tower and a 10-block high tower. Generalize, if you can, on how many blocks I will need for any size tower?



(A solution is on page 9.)











Students Engagement

To celebrate the Lunar New Year students could sign up for a free Dragon Dancing Workshop – let's hear from Erin Hartney-Mackellin, one of the Year 12s who participated in the senior workshop – the photos are of some exuberant Year 10s practising their skills

DRAGON DANCING

17 February was a time of celebration and creativity for the Lunar New Year. Throughout an advisory session, a small group of year 11s and 12s gathered together to create an artistic dragon dance as well as constructing a traditional Chinese performance piece. Together, we discussed the significance of this celebration which gave us a clearer understanding as to why these dances are performed throughout this celebration period as well as throughout the entire year. Although at first we didn't know each other well and we were shy at first, this opportunity enabled us to form friendships through our team work.

Erin 12H





Compass Portal

Just a brief reminder that the majority of our communications with parents at PCSSC are made through the Compass Parent Portal. All parents have a portal account that provides access to reports, attendance information, absence requests and approvals, school photo ordering, teacher email contact, booking for parent-teacher interviews, calendar of events, excursion consent/permissions and news items to keep you update with what is going on.

If you are a CSEF (Camps, Sports & Excursions Fund) recipient, please contact the school before consenting to any event so that we can adjust the costing.

To access your account:

go to the College's homepage www.pointcooksenior.vic.edu.au and click on the Compass Portal icon.



Compass Portal

Click here to login to the Point Cook Senior Compass Portal

or directly go to Compass login https://pointcooksenior.vic.jdlf.com.au/Login.aspx

| Point Cook Senior | Point Cook Senior Secondary College | | | | |
|-------------------|--|--|--|--|--|
| | Username | | | | |
| | Sign in ☑ Remember me | | | | |
| | Can't access your account? | | | | |

If you are having trouble accessing your account, click on the "Can't access your account" and follow the prompts to access it using your username, email address or mobile number. If you need guidance on how to navigate the Compass Portal, please contact the school.











Breakfast Club

Where: Room 312 When: Fridays

Time: 8.00am - 8.30am

All welcome

Point Cook Senior Secondary College would also like to sincerely thank the Bendigo Bank for their ongoing support towards our Breakfast Program.

Point Cook Community Bank® Branch



The Breakfast Program has been beneficial in supporting those students in need and also developing relationships between staff and students. It also improves student wellbeing, supporting them in improving their outcomes. It is with the support and generosity of the Bendigo Bank that this program continues to be successful.

ATTENDANCE

Student attendance information is available on Compass, including the option to approve absences and input requests to leave early for an appointment. Students are required to provide a medical certificate when absent from a VCE class or assessment.

Late Arrival to School - Students are requested to use Compass card to sign in at Kiosk at the front of the school. Students who do not have cards can report to the attendance office.

Early Leave - Parent approval is required for any student requesting to leave early. This can be done either by parent entering approval on Compass or contacting the attendance office.

Building Block Dilemma Solution:

A five-block high tower takes 21 blocks and a 10-block high tower takes 46 blocks (five blocks are added each time - one to the tower and one to each of the four supports). Some observations that lead to a generalisation are that there is one more block in the tower than the four supports. So if h = height of tower then...5h - 4 = total blocks. You need to subtract four because each support has one less block than the height of the tower. Another way to think of this is...4(h-1) + h = total blocks

IMPORTANT DATES

Term 1:

1 March - Swimming Division

4 March - Intermediate Summer Sports

8 March - School Photo Day

14 March – Labour Day Public Holiday

23 March – Parent Teacher Interviews (evening)

24 March – Parent Teacher Interviews (morning)

24 March - Year 12 Further Maths SAC

24 March - Term 1 Ends

11 April – Term 2 Commence

25 April – ANZAC Day Public Holiday

26 April - Curriculum Day

11 May – Winter (1) Senior Sports

16 May – Division Cross Country

20 May – Winter (1) Intermediate Sports

27 May - College Athletics Day

30 May - 2June – Year 10 & Year 11 Revision Week

3 - 9 June - Year 10 & Year 11 Mid-Year Exam

8 June - GAT all students enrolled in Unit 3 & 4

10 June – Report Writing Day

13 June - Queens Birthday Public Holiday

14 - 20 June – Year 10 Work Experience Week

24 June - Term 2 Ends



ASIA PACIFIC YOUTH FOUNDATION (APYF) MAKE A DIFFERENCE!



An opportunity exists for students to **make a difference** and get involved in a Community Service Project in Cambodia this December 2016 through the Asia Pacific Youth Foundation (APYF).

APYF supports local communities to break the poverty cycle, develop sustainable practices and to provide education opportunity for all young people. The focus is on 'youth helping youth'. Point Cook Senior Secondary students will be involved with building a house for a family in need in Siem Reap, Cambodia.

Students were given an information flyer regarding this opportunity, however if you require a new one or missed the information there are spare flyers at the front office.

If you would like to learn more and are interested in attending an Information Evening at the school, please email Danielle Spagnol (APYF representative) at danielle.spagnol@apyfoundation.org by 12.30pm on Wednesday 2 March. The Information Evening will be held on **2 March** at 6.30pm in the LRC.

For more information please contact Danielle from APYF on **0448 909 858**.



MEMBERS WANTED

Botanical Society

Do you love gardening?

Preparing seedlings, weeding and watering plants regularly.

Are you interested in the environment?

Sustainability, conservation or plants and animals.

You can have a positive impact on the school and local ecosystems!

Set new goals for the school grounds.

"To forget how to dig the earth and to tend the soil is to forget ourselves."

~Mahatma Gandhi

Sign up if you're interested!

Contact:

- Miss Chapman
- In 100's office

Email: chapman.melissa.m@edumail.vic.gov.au



VOLUNTEERS

Principal

An Invitation to Parents/Guardians

So many family members of our student body have interesting skills and/or knowledge that can be shared with students and staff at our college.

If you have time to volunteer at our college (in areas such as the Classroom, Learning Resource Centre, Production/Theatre performance, School Council, as an advisor in areas in which you have professional experience — e.g. architecture, landscape design, OHS, plumbing, etc. — or as a guest speaker in a career-based information session), please tick the box in your chosen area, add your contact details and return this form to our general office.

All volunteers will need to obtain a "working with children check" (volunteer non-paid work card). A form for this can be easily obtained at the post office.

| Ш | SCHOOL COUNCIL | | | | | | | | | |
|------|---|----------|---------|--|--|--|--|--|--|--|
| | LEARNING RESOURCE CENTRE | | | | | | | | | |
| | CLASSROOM | | | | | | | | | |
| | GUEST SPEAKER: (please suggest area) | | | | | | | | | |
| | PROFESSIONAL ADVICE: (please suggest area) | | | | | | | | | |
| | OTHER: Landscaping, Building or grounds Maintenance, specify) | Painting | (please | | | | | | | |
| | | | | | | | | | | |
| Nam | e: | | | | | | | | | |
| Cont | act: | | | | | | | | | |
| Darr | yn Kruse | | | | | | | | | |



NEW VOLLEYBALL CLUB IN WYNDHAM

Are you interested in helping to develop a new Volleyball club in Wyndham?

Wyndham City is looking to further the development of new and diverse community sporting clubs and understands that there is demand for a Volleyball Club in Wyndham. Please help to develop volleyball in Wyndham by coming to a community forum on Tuesday 15 March 2016. The forum will provide interested residents the chance to contribute to the formation of a new volleyball club.

The purpose of this meeting will be to determine the feasibility of starting a new club, discuss ideas for the development of the club and learn more about the process of establishing a new volleyball club.

What: Community meeting to discuss the creation of this new volleyball club.

Who: All residents interested in helping to develop the club.

When: 6:30pm, Tuesday 15 March 2015.

Where: VICSEG Offices - 3-4/67 Watton St, Werribee (between Chatterbox Cafe and Amcal

Chemist).

For any access requirements or more information contact:

Lewis Tuck - Acting Leisure Projects Officer Email: lewis.tuck@wyndham.vic.gov.au

Phone: 9742 0840





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The Principal
Point Cook Senior Secondary College
PO Box 6520
POINT COOK VIC 3030

PO Box 4724 Melbourne Victoria 3001 Australia

Telephone 1800 800 007 ptv.vic.gov.au

Dear Principal

IMPORTANT INFORMATION TO PASS ONTO PARENTS

Please find below some important information regarding Victoria's student and concession travel ticketing arrangements for 2016, which will be of interest to your school community. We encourage you to make this information available by inclusion in your school newsletter or intranet page.

Proof of concession entitlement

All students aged 17 years and over, or those requiring a half yearly or yearly Student Pass (regardless of age), are required to obtain a 2016 Victorian Public Transport (VPT) Student Concession Card as proof of their concession entitlement. Application details and a copy of this year's form are contained within this letter. It is important to note that school issued student identification cards are not accepted as entitlement to concession travel on public transport.

2016 Victorian Student Pass

The Victorian Student Pass provides travel for students on all metropolitan trains, trams and buses, all regional bus services and all V/Line train and coach services operating wholly within Victoria. The Victorian Student Pass is issued on a myki.

2016 Regional Transit Student Passes

Regional Transit Student Passes provide travel for students on buses in the Geelong, Ballarat and Bendigo Transit Systems and limited V/Line rail services in these transit areas. The Regional Transit Student Pass is issued on a concession myki. Regional Transit Student Passes for Southwest Transit, Colac Transit and Portland Transit will continue to be issued as paper passes.

How to apply for a 2016 VPT Student Concession Card and/or a Student Pass

The 2016 VPT Student Concession Card & Student Pass Application Form (enclosed) can be obtained from:

- o metropolitan premium train stations
- o PTV Hubs (Southern Cross Station, Docklands, Geelong & Bendigo)
- V/Line staffed stations and ticket agents
- PTV Call Centre by calling 1800 800 007
- o online at ptv.vic.gov.au.

- Students wishing to purchase a Half Yearly (\$285.00) or Yearly (\$546.00) Victorian Student Pass will be required to obtain a 2016 VPT Student Concession Card, regardless of age, as proof of their concession entitlement. The standard \$9 fee applies. Students can have their 2016 Yearly or Half Yearly Victorian Student Pass loaded to their existing myki card at a metropolitan premium train station, a myki-enabled V/Line staffed station or from a PTV Hub (located at Docklands, Geelong or Bendigo). If the student does not already have a myki, the Student Pass will be loaded onto a new myki. This myki will be issued on the spot with the myki card fee waived.
- Students 16 years and under, who do not wish to purchase a Student Pass are not required to obtain a VPT Student Concession Card but can still get a child myki for concession travel by visiting a metropolitan premium train station, a myki-enabled staffed V/Line station, a myki retailer, visiting ptv.vic.gov.au, or calling 1800 800 007. A \$3 card fee applies.
- Students 17 years and over, who require a VPT Student Concession Card as proof of their concession entitlement can obtain a VPT Student Concession Card and apply for a free concession myki (if required) at the same time. Students will need to complete the enclosed form and lodge it at a metropolitan premium train station, a myki-enabled staffed V/Line station, the PTV Hub at Southern Cross Station or the PTV Hub at 750 Collins St, Docklands. They will then be issued with their 2016 VPT Student Concession Card (\$9 fee applies) and a free concession myki (if required). Those students who already have a concession myki can continue to use it and only need to renew their concession entitlement by completing the 2016 VPT Student Concession Card form.

Registration

Registration is optional for students that hold a student pass. It is, however, strongly recommended that students register their myki online at **ptv.vic.gov.au** or by calling 1800 800 007. Benefits of registering a myki include:

- The balance on the myki is protected if it is reported lost or stolen
- · Option to manage myki with an online account
- Option of auto top up for 'set and forget' convenience

If a myki is not registered, there is no way for a student to recover the value held on the card in the event it is lost or stolen.

Further information specific to student travel arrangements under myki can be obtained by visiting **ptv.vic.gov.au** and going to the student area under the Tickets > Concessions > Students on the website. For information about non-myki Regional Transit Student Passes, visit http://ptv.vic.gov.au/tickets/regional-fares/ under the section 'Student concessions'.

I would be grateful if you could share this information with your staff and students.

Yours sincerely

Alan Fedda

Director, Customer Experience Public Transport Victoria



Getting the balance right: vitamin D and sun protection



This information has been jointly developed by:



















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The sun's ultraviolet (UV) radiation is both the major cause of skin cancer and the best natural source of vitamin D.

In Australia we need to balance the risk of skin cancer from too much sun exposure with maintaining vitamin D levels.

What is vitamin D and why is it important?

Vitamin D forms in the skin when it is exposed to UVB radiation from sunlight. Some foods, such as oily fish and eggs also contain small amounts of vitamin D, while margarine and some types of milk have added vitamin D. However, food only makes a small contribution to the body's overall vitamin D levels and it is difficult to get enough from diet alone.

We need vitamin D to maintain good health, in particular to keep bones and muscles strong and healthy.

How much sun do we need for vitamin D?

When the skin is exposed to UV radiation from the sun, vitamin D is formed through a series of processes that start in the skin.

The amount of sunlight you need to make vitamin D depends on a range of factors such as the UV level, your skin type, and your lifestyle. UV levels vary across Australia and throughout the year. Therefore, the amount of time you need to be in the sun to make vitamin D will vary according to your location, the season and the time of day.

Prolonged sun exposure does not cause your vitamin D levels to increase further, but does increase your risk of skin cancer. Short incidental exposure to the sun, such as walking from the office to get lunch, is the best way to produce vitamin D. The amount of vitamin D you make is also related to the amount of skin exposed to the sun – if you expose more of your skin, in most cases you'll make more vitamin D.

During summer in the southern parts of Australia (for example Sydney, Melbourne, Canberra, Adelaide, Hobart and Perth), and all year round in the north (Brisbane and Darwin), people with fair to olive skin need just a few minutes of mid-morning or mid-afternoon sun exposure to the face, arms and hands (or equivalent area of skin) to help with vitamin D levels. Be extra cautious in the middle of the day when UV levels are most intense.

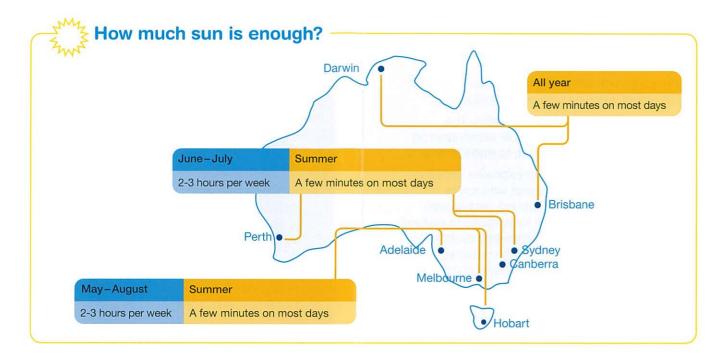
In winter in the southern parts of Australia, where UV radiation levels are below 3 all day, people with fair to olive skin need about two to three hours of midday sun exposure to the face, arms and hands (or equivalent area of skin) spread over the week. People with naturally very dark skin may require up to 3-6 times more sun exposure to help with vitamin D levels.

Daily exercise will also assist your body with the production of vitamin D.

If I protect myself from the sun, will I still get enough vitamin D?

Sunscreen use during the sun protection times should not put people at risk of vitamin D deficiency. When sunscreen is tested in lab conditions it is shown to block vitamin D production, however regular use in real life has been shown to have little effect on vitamin D levels. This is probably because people who use more sunscreen spend more time in the sun, so naturally they will have higher vitamin D levels.





When do I need sun protection?

Most Australians need sun protection when the UV Index is 3 or above. The UV Index is an international standard measurement of the strength of UV radiation from the sun at a particular place on a particular day. UV levels are low in the early morning as the sun comes up, gradually increasing to a peak around the middle of the day when the sun is at its highest, and then decreasing slowly as the sun gets lower in the sky.

In the northern parts of Australia (for example Brisbane and Darwin), UV levels are above 3 all year round and reach extreme levels of 14+ in summer, so sun protection is needed daily.

In the southern parts of the country, there are times of the year when sun protection is not necessary. For example, in Adelaide, Melbourne and Hobart, the average daily UV levels remain below 3 from May to August, so sun protection is not required unless you are at high altitudes, outside for extended periods or near highly reflective surfaces like snow.

UV Index in selected Australian cities averaged over the days in each month

| Location | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec |
|-----------|-----|-----|-----|-----|-----|------|------|-----|------|-----|-----|-----|
| Darwin | 11 | 12 | 11 | 6 | 8 | 7 | 7 | 9 | 11 | 11 | 11 | 10 |
| Brisbane | 11 | 10 | 9 | 6 | 4 | 3 | 3 | 5 | 7 | 8 | 10 | 11 |
| Perth | 11 | 10 | 8 | 5 | 3 | 2 | 2 | 4 | 6 | 8 | 9 | 10 |
| Canberra | 10 | 9 | 7 | 5 | 3 | 2 | 2 | 3 | 5 | 7 | 9 | 10 |
| Sydney | 10 | 9 | 7 | 5 | 3 | 2 | 2 | 3 | 5 | 7 | 8 | 8 |
| Adelaide | 11 | 10 | 7 | 5 | 2 | 2 | 2 | 2 | 5 | 7 | 9 | 10 |
| Melbourne | 9 | 9 | 6 | 4 | 2 | 1 | 1 | 2 | 4 | 6 | 8 | 9 |
| Hobart | 8 | 7 | 4 | 3 | 1 | 1 | 1 | 2 | 3 | 4 | 6 | 7 |

Table is from Gies et al

UV levels remain below 3

The table above is a guide to average peak UV levels by month for Australian capital cities. The shaded area identifies the months of the year when sun protection may not be required.

You can refer to the SunSmart UV Alert to find out the sun protection times for your location.

Who is at risk of vitamin D deficiency?

There are groups within the population that are at higher risk of vitamin D deficiency including:

- People with naturally very dark skin. The melanin in dark skin affects UV penetration so you need more UV exposure to make vitamin D.
- People with little or no sun exposure including older adults, especially those who are in residential care or housebound; people who wear concealing clothing for religious or cultural purposes; people who deliberately avoid sun exposure for cosmetic or health reasons; people hospitalised for a long time; people with a disability or chronic disease; night-shift and indoor workers, such as factory workers who have limited incidental UV exposure throughout the day.
- Breast fed babies who fall into the risk categories above or have mothers with low vitamin D. Breast milk contains little vitamin D and infants depend on maternal stores initially. (Formula milk is fortified with vitamin D.)
- People with conditions (obesity, end stage liver disease, renal disease and fat malabsorption syndromes such as cystic fibrosis, coeliac disease, inflammatory bowel disease) or medications affecting vitamin D metabolism.

If you're at risk of vitamin D deficiency, consult your GP. Vitamin D levels can be checked with a blood test, and your GP can advise on options, such as supplementation, depending on your individual circumstances.

Solariums should never be used to boost vitamin D as they emit dangerous levels of UV that increase your risk of skin cancer.

- 1 Gies P, Roy C, Javorniczky J, Henderson S, Lemus-Deschamps L, Driscoll C. Global Solar UV Index: Australian Measurements, Forecasts and Comparison with the UK. Photochemistry and Photobiology, 2004; 79(1): 32-39.
- 2 Hobart and Canberra data is supplied from personal communication from ARPANSA August 2011

For more information

- → Cancer Council cancer.org.au/VitD
- → Cancer Council Helpline, ph 13 11 20 (cost of a local call anywhere in Australia)
- Australasian College of Dermatologists dermcoll.asn.au
- Osteoporosis Australia osteoporosis.org.au
- Australian and New Zealand Bone and Mineral Society anzbms.org.au
- → Bureau of Meteorology bom.gov.au/uv
- → Australian Radiation Protection and Nuclear Safety Agency arpansa.gov.au



10 myths about sun protection

1 It is not possible to get sunburnt on cloudy or cool days.

False You can get burnt on windy, cloudy and cool days, as ultraviolet (UV) radiation can penetrate clouds, and may even be more intense due to reflection off the bottom of the clouds.

Check the sun protection times every day and protect your skin during these times. The sun protection times for your local area are available via the free SunSmart app, online at sunsmart.com.au, in the weather section of major daily newspapers or at bom.gov.au/uv.

2 If your cosmetics contain sunscreen, you do not need to use sunscreen.

False Foundations and moisturisers that contain sunscreen do offer protection from the sun's UV but not for the whole day – for example, a cosmetic with SPF30 will only be effective for up to two hours.

To ensure continued protection you will need to reapply sunscreen every two hours and use other sun protection throughout the day. Be aware that most cosmetic products offer protection that is much lower than the recommended minimum of SPF30.

If you had a lot of sunburns or didn't use sun protection when you were a child or teenager, it's a waste of time trying to protect your skin now.

False While excessive exposure to the sun's UV rays in the first 10 years of life doubles your lifetime risk of melanoma, sun exposure later also counts.

You can reduce your risk of skin cancer at any age, whether you are six, 16 or 60, by using good sun protection behaviours.

Solariums are a safe way to get a 'base tan' to start off the summer.

False There is no safe way to tan. Solariums emit UV radiation that is three times stronger than the midday summer sun, so they can damage your skin even faster than being outside unprotected.

Commercial solariums have been banned in most Australian states, including Victoria, from 1 January 2015.

Using fake tan means you don't need sun protection.

False Some fake tanning products may include a high SPF sunscreen, but these provide protection for a maximum of two hours after application.

Protection does not last for the length of the tan, so sun protection is still required.

6 People need plenty of sun exposure to avoid vitamin D deficiency.

False From September to April in Victoria, most people will only need a few minutes of sun exposure mid-morning or mid-afternoon to help with vitamin D. This can generally be achieved by just going about day-to-day activities.

Prolonged sun exposure does not result in increased vitamin D levels, but does increase your risk of skin cancer. Sunscreen use should not put people at risk of vitamin D deficiency.

From May to August in Victoria sun protection is not required, unless you are near highly reflective surfaces such as snow, outside for extended periods, or if UV levels reach 3 or above. In winter time most Victorians need approximately 20 minutes of daily midday sun exposure. People with naturally dark skin may require more sun exposure.

You don't have to be concerned about skin cancer because if it happens you will see it, and it is easy to treat.

False Skin cancer treatment can be much more serious than having a lesion 'burnt off'. It can include surgery, chemotherapy and can result in permanent scarring. Melanoma can also spread to other parts of your body and can result in death.

Use sun protection and check your skin regularly. Visit your doctor immediately if you notice any changes. Remember, prevention is always better than cure.

8 Only sunbathers get skin cancer.

False Many people get sunburnt when they are not deliberately seeking a tan. In Victoria, we can be exposed to high UV levels during all sorts of daily activities, such as working outdoors, gardening, running, walking the dog or having a picnic.

UV exposure adds up over time, and increases our risk of skin cancer.

9 If you tan but don't burn, you don't need to bother with sun protection.

False If your skin turns brown, it is a sign of sun damage, even if there is no redness or peeling. It's your skin's way of trying to protect itself because UV rays are damaging living cells.

Tanning without burning can also cause premature skin ageing and skin cancer. All Victorians need to slip, slop, slap, seek and slide during the daily sun protection times.

You can't get burnt in the car or through a window.

False Glass reduces but does not completely block transmission of UV radiation, so you can still get burnt if you spend a long time in the car or behind a window when the UV is high.

More commonly however people are burnt in cars with the windows down, where they can be exposed to high levels of UV radiation.

Be SunSmart

Australia has one of the highest rates of skin cancer in the world. SunSmart recommends a five-step approach to protect your skin during sun protection times, when the UV level is 3 or above.

There's more to sun protection than sunscreen. Protect yourself in five ways:



Slip on sun-protective clothing



Slop on SPF30 or higher broad-spectrum, water-resistant sunscreen



Slap on a broadbrimmed hat



Seek shade



Slide on wrap-around sunglasses

Check the sun protection times each day via the free SunSmart app for smartphones and tablets. Find out more at sunsmart.com.au/app







When UV is 3+



Slip on covering clothing



Slop on SPF30 or higher, broad-spectrum, waterresistant sunscreen



Slap on a broad-brimmed hat



Seek shade



Slide on sunglasses (AS:1067)



Download the SunSmart app

o find sun orotection times for your location in Australia. Think UV, not heat! UV rays can't be seen or felt and can damage your skin on cool or cloudy days.

When UV is below 3

Sun protection isn't required unless you are outdoors for extended periods or near reflective surfaces, such as snow.

sunsmart.com.au/app



