切勿輕視幾聲咳

百日咳可致肺炎等嚴重併發症[1,2]

每10年一針百日咳疫苗[3]

百日咳疫苗｜問與答

可否同時接種百日咳及其他疫苗？

可以。沒有研究顯示Boostrix與其他疫苗同時接種會影響其抗體保護。疫苗指引建議，Boostrix若與其他疫苗同時接種，應分別注射不同位置[3]。

應如何接種百日咳疫苗？

根據美國疾病控制及預防中心CDC建議50歲以上人士均應接種[4]，而19歲以上人士應每10年接種一支百日咳疫苗[16]。

鼓勵以下人士接種｜Boostrix百日咳疫苗

- 孕婦
- 嬰兒保姆
- 醫護人員
- 中老年人
- 高危人士*
- 長期照顧長者人士

* 成年人患有長期慢性疾病，有可能增加患百日咳的風險，包括哮喘和慢性阻塞性肺疾病。

葛蘭素史克有限公司
香港九龍尖沙咀廣東道9號港威大廈6座23樓
電話：(852) 3189 8989　傳真：(852) 3189 8931　hk.gsk.com

葛蘭素史克有限公司

boostrix
Tetanus Toxoid, Reduced Diphtheria Toxoid & Acellular Pertussis Vaccine, Absorbed

適用於醫療券[5]
Applicable to HEALTH CARE VOCHER

百日咳可致肺炎

切勿輕視幾聲咳

等嚴重[1,2]併發症

什麼是百日咳？

百日咳又名「雞咳」，由百日咳博德氏桿菌所引致。患者初時可能沒有特別病徵，只會流鼻水、打噴嚏、輕微發燒和咳嗽。但咳嗽會日益嚴重和加劇，妨礙病人飲食和呼吸[6]。

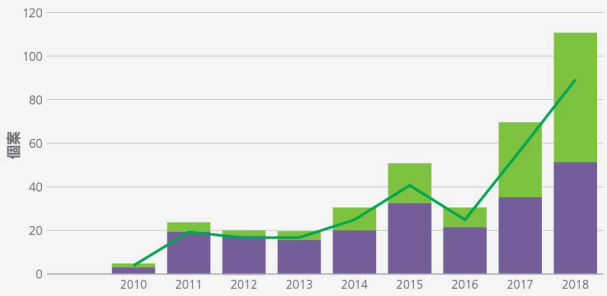
成人患者平均咳嗽時間為5至12周[1,2]。此外，細菌會令肺部受感染，嚴重者可導致抽搐及昏迷不醒[6]。

百日咳是一種十分隱藏並具殺傷力的疾病，細菌可透過直接接觸病人的飛沫而傳播[6]。成年患者可能完全沒有病徵[7]，但仍具傳播細菌的風險。

「世界衛生組織」估計，只有1%百日咳患者被診斷。而大部分嬰幼兒患者被其同居住的父母、祖父母、或照顧者傳染[8]。嬰幼兒或高危人士一旦感染，後果可以十分嚴重。

WHO

百日咳在香港感染個案[9]｜響起警號



	2010	2011	2012	2013	2014	2015	2016	2017	2018
個案≥18歲	2	4	2	4	10	17	9	34	59
個案<18歲	3	19	18	16	20	33	22	35	51
通報率（每十萬人口）	0.07	0.33	0.28	0.28	0.41	0.68	0.42	0.93	1.47

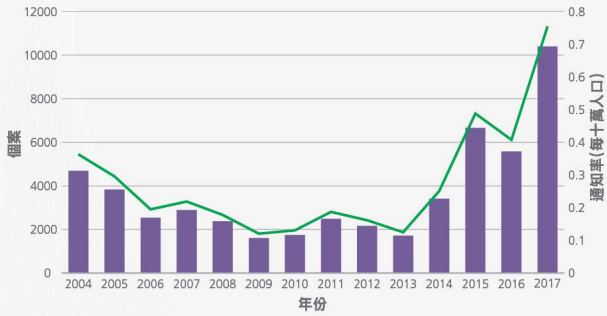
無論是嬰幼兒或成年人，在香港感染百日咳的個案

均不斷攀升

百日咳｜傳染性比流感還高[12-13]

一個病例可引起多達17個新病例[12-13]

中國內地｜百日咳情況[10]



更有研究指出中國內地百日咳個案

被低估43倍[11]

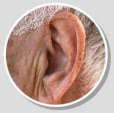
一旦感染｜可引致肺炎

百日咳亦有機會引發嚴重的併發症，超過40%**年齡60歲或以上的患者，曾經歷過肺炎、鼻竇炎、尿失禁、中耳炎、肋骨骨折等**[2]，患者及家人必需多加照顧提防。

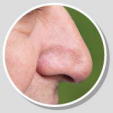
百日咳的併發症[14]

肺炎

尿失禁



中耳炎



鼻竇炎

體重下降

暈倒

肋骨骨折

除嬰幼兒外｜
50歲或以上也屬高危一族

隨著**年齡增長**，免疫力逐漸下降，加上早年注射的疫苗已失效，以致**較易受感染**[14]，繼嬰幼兒後，50歲或以上百日咳患者最容易引起如**肺炎等併發症，需入院接受治療**[1]。

因此「美國疾病控制及預防中心」建議**50歲或以上人士**均應接種預防百日咳疫苗，**首選Boostrix**[4]。

以下人士 較易患上百日咳	較一般人增加 風險倍數
吸煙人士	2.37倍[20]
慢性阻塞性肺病患者	2.53倍[19]
哮喘患者	3.96倍[18]

慢性病患者｜
需格外注意預防百日咳

慢性疾病患者的百日咳陽性抗體較一般人低36%[17]，比較容易患上百日咳。**慢性疾病包括：**

糖尿病

慢性心臟病

慢性腎病

慢性阻塞性肺病

根據慢性阻塞性肺病權威治療指引GOLD 2021，建議

慢性阻塞性肺病患者需接種預防百日咳疫苗[22]

雙重感染｜病情嚴重

此外，百日咳患者不幸地同時患上其他疾病，會加重病情的嚴重性。例如：

- 患上哮喘，會增加**25%的咳嗽日子**[19]。
- 患上慢性阻塞性肺病，則會增加**2倍的住院機會**[18]。

據研究表示，

新冠病毒肺炎患者

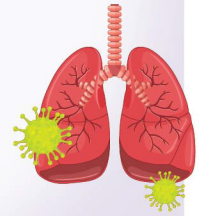
同時染上百日咳，

其病情比一般只患肺炎者嚴重，

雙重感染

或是導致

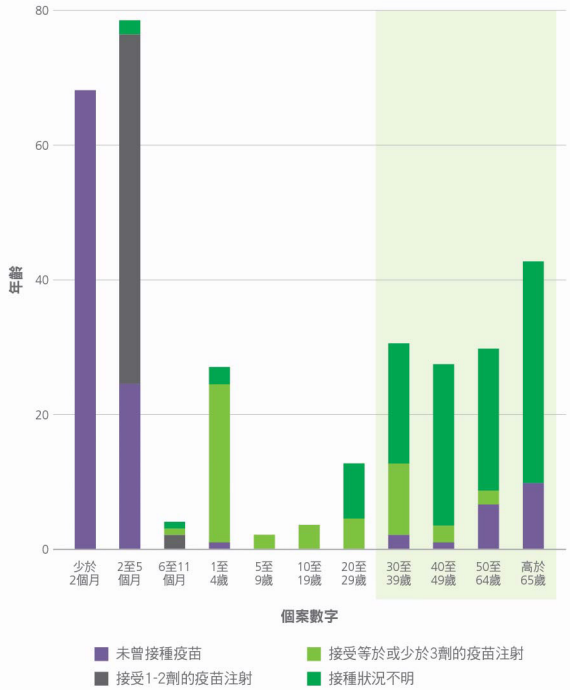
病情惡化主因之一[21]**。**



保護自己｜保護家人

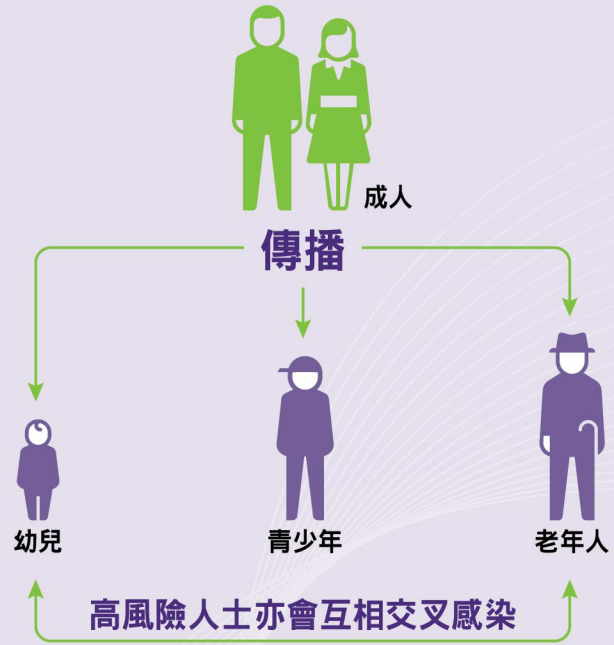
86%成人患者(18歲以上)
尚未接種百日咳疫苗或接種情況不明[15]

香港百日咳病例的年齡分佈(2014-2019)#



除自身具百日咳感染風險｜

細菌會由感染者傳給高危人士(即中老年及嬰幼兒)[23-25]



因此，

照顧高危人士者亦需預防百日咳！

嬰兒照顧者　**醫護人員**　**長期護理員及院舍長者**

2019年4月數據

Graph is adapted from CEID 2019 ASM - An Update on Infectious Diseases in Hong Kong by Dr. Wong KH

Boostrix疫苗助您｜免受百日咳危害

研究顯示，多於**97%**青少年及成人
在疫苗接種後一個月，對Boostrix的抗原產生陽性抗體[3]

10年

研究顯示，多於**85%**成人在疫苗接種後10年，
對Boostrix的抗原仍產生陽性抗體[3]

在青少年和成人當中，Boostrix的
安全性和耐受性良好[3]

† Seroprotection defined as titres ≥0.1 IU/mL by enzyme-linked immunosorbent assay (ELISA) for diphtheria and tetanus; seropositivity defined as titres ≥5 ELISA units/mL for pertussis antigens: pertussis toxin, filamentous haemagglutinin and pertactin.

Boostix｜安全資料

Boostrix用於四歲或以上人士接種，以預防白喉、破傷風及百日咳。

請根據政府建議使用Boostrix。

適用於肌肉深部注射，並以三角肌為優先注射部位。

普遍接種Boostrix後的最常見症狀包括疼痛，發紅和腫脹。

Boostrix不應用於曾接種白喉、破傷風或百日咳疫苗之後出現嚴重過敏徵兆者。

詳情及使用疫苗前，請參考完整說明書。

參考資料：1. De Serres G et al. J Infect Dis 2000;182:174–179. **2.**Riffelmann M et al. Dtsch Arztebl Int 2008;105:623–628. **3.**Boostrix Hong Kong Prescribing Information 2019. **4.**Centers for Disease Control and Prevention (CDC), 2018. What vaccines are recommended for you – Adults 50 years or older. https://www.cdc.gov/vaccines/adults/rec-vac/index.html (accessed on May 2018). **5.**HKSAR Health Care Voucher, 2020. Background of Elderly Health Care Voucher Scheme. https://www.hcv.gov.hk/eng/pub_background.htm (accessed on Nov 2020). **6.**HKSAR Centre of Health Protection. Pertussis. https://www.chp.gov.hk/en/healthtopics/content/24/35.html (accessed on Nov 2020). **7.**Centers for Disease Control and Prevention (CDC). In: The Pink Book: Epidemiology and Prevention of Vaccine-Preventable Diseases, Hamborsky J et al (Eds). 13th edn. Washington, DC: Public Health Foundation, 2015. pp. 261–278. **8.**Cherry JD. Epidemiology of pertussis. Pediatr Infect Dis J 2006; 25: 361–362. **9.**Communicable Disease Watch. 2019;16(5):23-27. **10.**The Data-center of China Public Health Science. Pertussis zone statistics. 2004 – 2017. http://www.phsciencedata.cn/Share/en/data.jsp?id=316911b5-4011-4745-88f8-729f5080b55c (accessed Jan 2020). **11.**Huang H et al. Epidemiol Infect 2015;143:1950–1956. **12.**Fine PE. Epidemiol Rev 1993, 15:265-302. **13.**Biggerstaff M et al. J Infect Dis 2000; 182:174-179. **14.**Simon AK et al. Proc Biol Sci 2015;282:2014–3085. **15.**KH Wong. CEID. 2019. An Update on Infectious Diseases in Hong Kong. http://www.cuhk.edu.hk/med/ceid/images/asm/16_asm/Dr*20KH*20WONG.pdf Accessed Apr 2020 (Graph adopted). **16.**Centers for Disease Control and Prevention (CDC), 2020. Use of Tetanus Toxoid, Reduced Diphtheria Toxoid, and Acellular Pertussis Vaccines: Updated Recommendations of the Advisory Committee on Immunization Practices — United States, 2019 https://www.cdc.gov/mmwr/volumes/69/wr/mm6903a5.htm. (Accessed Jan 2020). **17.**Tanriover MD et al. Eur J Intern Med 2014;25:528–532. **18.**Buck PO et al. Epidemiol Infect 2017;145:2109–2121. **19.**Mbayei SA et al. Clin Infect Dis 2018;doi:10.1093/cid/ciy889. **20.**Karki S et al. Vaccine 2015;33:5647–5653. **21.**He COVID pneumonia coinfection.Diag Micro Infect Dis 2020. **22.**GOLD 2021 https://goldcopd.org/wpcontent/uploads/2020/11/GOLDREPORT-2021-v1.0-16Nov20_WMV.pdf (Accessed 17 Nov 2020). **23.**Hewlett EL & Edwards EM. N Engl J Med 2005352:1215–1222. **24.**Wendelboe AM et al. Pediatr Infect Dis J 200726:293–299. **25.**Zepp F et al. Lancet Infect Dis 201111(7):557–570.

Abbreviated Prescribing Information:
Name of the Medicinal Product: *Boostrix*. **Qualitative and Quantitative Composition:** 1 dose (0.5 ml) contains not less than 2 IU diphtheria toxoid, not less than 20 IU of tetanus toxoid, 8 mcg of pertussis toxoid, 8 mcg of filamentous haemagglutinin, 2.5 mcg of pertactin, adsorbed on aluminium hydroxide, hydrated and aluminium phosphate. **Indications:** Indicated for booster vaccination against diphtheria, tetanus and pertussis of individuals from the age of four years onwards. **Posology and Administration:** A single 0.5 ml dose of the vaccine is recommended. The use of *Boostrix* may be considered during the third trimester of pregnancy. **Method of administration:** *Boostrix* is for deep intramuscular injection, preferably in the deltoid region. **Contraindications:** Subjects with known hypersensitivity to any component of the vaccine or to subjects having shown signs of hypersensitivity after previous administration of diphtheria, tetanus or pertussis vaccines; Subject has experienced an encephalopathy of unknown aetiology, occurring within 7 days following previous vaccination with pertussis-containing vaccine. Administration should be postponed in subjects suffering from acute severe febrile illness As with other vaccines, administration of *Boostrix* should be postponed in subjects suffering from acute severe febrile illness **Special Warnings and Precautions for Use:** If any of the following events are known to have occurred in temporal relation to receipt of pertussis-containing vaccine, the decision to give doses of pertussis-containing vaccines should be carefully considered: temperature of ≥ 40.0°C within 48 hours of vaccination, not due to another identifiable cause; collapse or shock-like state (hypotonic-hyporesponsiveness episode) within 48 hours of vaccination; persistent, inconsolable crying lasting ≥ 3 hours, occurring within 48 hours of vaccination; convulsions with or without fever, occurring within 3 days of vaccination. *Boostrix* should under no circumstances be administered intravenously. Syncope (fainting) can occur following, or even before, any vaccination especially in adolescents as a psychogenic response to the needle injection. It is important that procedures are in place to avoid injury from faints. As with any vaccine, a protective immune response may not be elicited in all vaccinees. **Interactions:** If *Boostrix* is to be given at the same time as another injectable vaccine or immunoglobulin, the products should always be administered at different sites **Fertility, pregnancy and Lactation:** ***Pregnancy:*** The use of Boostrix may be considered during the third trimester of pregnancy. Limited data indicate that maternal antibodies may reduce the magnitude of the immune response to some vaccines in infants born from mothers vaccinated with *Boostrix* during pregnancy. The clinical relevance of this observation is unknown. **Breastfeeding:** The effect of administration of *Boostrix* during lactation has not been assessed. Nevertheless, as *Boostrix* contains toxoids or inactivated antigens, no risk to the breastfed infant should be expected. The benefits versus the risk of administering *Boostrix* to breastfeeding women should carefully be evaluated by the health-care providers. **Adverse Reactions: Clinical Trial Data:** *Children from 4 to 9 years of age* upper respiratory tract infection; anorexia; irritability; somnolence, headache and disturbances in attention; conjunctivitis; diarrhoea, vomiting, gastrointestinal disorders; rash; injection site reactions (including pain, redness and swelling), fatigue, fever ≥ 37.5 °C (including fever > 39 °C), other injection site reactions (such as induration) and pain. *Adults, adolescents and children from the age of 10 years onwards:* upper respiratory tract infection, pharyngitis; lymphadenopathy; headache, dizziness, syncope; cough; nausea, gastrointestinal disorders, diarrhoea, vomiting; hyperhidrosis, pruritus, rash; arthralgia, myalgia, joint stiffness, musculoskeletal stiffness; injection site reactions (including pain, redness and swelling), fatigue, malaise, fever ≥ 37.5°C, injection site reactions (such as injection site mass and injection site abscess sterile), fever > 39 °C, influenza like illness and pain. Data on 146 subjects suggests a small increase in local reactogenicity (pain, redness, swelling) with repeated vaccination according to a 0, 1, 6 months schedules in adults (>40 years of age). ***Post Marketing Data:*** Angioedema, allergic reactions, including anaphylactic and anaphylactoid reactions, convulsions (with or without fever), urticaria, extensive swelling of the vaccinated limb, asthenia. **Please read the full prescribing information prior to administration. Full prescribing information is available on request from GlaxoSmithKline Ltd, 23/F, Tower 6, The Gateway, 9 Canton Road, Tsimshatsui, Kowloon, Hong Kong.** Abbreviated Prescribing Information prepared in 11 Feb 2020 based on version HK022019 (GDS10/IPI11/MHRA20181214). For adverse event reporting, please call GlaxoSmithKline Limited at (852) 3189 8989 (Hong Kong) or (853) 2871 5569 (Macau), or send an email to us at HKAdverseEvent@gsk.com.

Please read the full prescribing information prior to administration. Full prescribing information is available on request from GlaxoSmithKline Ltd, 23/F, Tower 6, The Gateway, 9 Canton Road, Tsimshatsui, Kowloon, Hong Kong.

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