

CDSi Resources
Practice Exercise

The Clinical Decision Support for Immunizations or CDSi project resources translate the clinical ACIP recommendations into technical information that can be used to update evaluation and forecasting engines.

The CDSi Resources - logic specification, supporting data, and test cases - are only helpful if they can be easily interpreted. The CDSi Practice Exercise is made up of questions that that will give you an opportunity to practice reading the supporting data and relevant business rules.

Supporting Data spreadsheets and business rules will help you answer the following questions.

Question 1 When should a newborn be forecasted to receive his or her first dose of Hib?

Refer to Dose 1 of the Hib supporting data spreadsheet and recommended date business rules to help answer this question.

Choose from the following answers:

- a) Earliest Date: 4 weeks, Recommended Date: 2 months
- b) Earliest Date: 6 weeks, Recommended Date: 2 months
- c) Earliest Date: 6 weeks – 4 days, Recommended Date: 3 months + 4 weeks

The correct answer is B. A newborn should be forecasted to receive their first dose of Hib at the Earliest Date of 6 weeks and the Recommended Date of 2 Months.

Question 2 When should dose 3 of Hep B be forecasted following two valid doses occurring at birth and 2 months?

Refer to series dose 3 of the Hep B supporting data spreadsheet and recommended date business rules to help answer this question.

Choose from the following answers:

- a) Earliest Date: The latest of the following:
 - a. 24 weeks of age, Recommended age = 6 months
 - b. 8 weeks after dose 2, Recommended age = 6 months
 - c. 24 weeks of age, Recommended age = 6 months
- b) Earliest Date: 6 Months, Recommended Date: 6 months
- c) Earliest Date: The latest of the following:
 - a. 24 weeks of age, Recommended age = 6 months

- b. 8 weeks after dose 2, Recommended age = 6 months
- c. 16 weeks after 1 dose

The correct answer is A. A dose 3 of Hep B should be forecasted following two valid doses occurring at birth and 2 months at the Earliest Date being: The latest of the following: 24 weeks of age, 8 weeks after dose 2, and 16 weeks after dose 1; and the Recommended Date at 6 months.

Question 3 How should the Earliest and Recommended Dates be calculated following an invalid dose? Refer to the recommended date business rules to help answer this question.

Choose from the following answers:

- a) Follow the same rules as valid dose forecasting per question 1 and 2
- b) Use calculated Earliest Date for both the Earliest Date and Recommended Date.
- c) Any and all doses should be forecasted to be repeated in 4 weeks.

The correct answer is A. The Earliest and Recommended Date should be calculated following an invalid dose by viewing the same business rules as valid dose forecasting. The “Earliest Date” must be the latest of the following: a) Minimum Age, b) Latest Minimum Interval, c) Latest Conflict End Interval. The “Recommended Date” must be the later of the Earliest Date and Unadjusted Recommended Date.

Question 4 What is the absolute minimum interval between MMR and LAIV for the LAIV dosing to be considered valid provided minimum ages are met and assuming they weren’t administered on the same day?

Refer to the MMR supporting data spreadsheet to answer this question.

Choose from the following answers:

- a) They can be administered in any spacing. No need to space.
- b) 24 Days
- c) 28 Days

The correct answer is C. The absolute minimum spacing between MMR and LAIV for the LAIV to be considered valid provided minimum ages are met (assuming they weren’t administered the same day) is 28 days.

Question 5 What is the absolute minimum interval between MMR and MMR for the second MMR dosing to be considered valid provided minimum ages are met?

Refer to the MMR supporting data spreadsheet to answer this question.

Choose from the following answers:

- a) They can be administered in any spacing. No need to space.
- b) 24 Days
- c) 28 Days

The correct answer is B. The absolute minimum spacing between MMR and MMR for the second MMR to be considered valid provided minimum ages are met is 24 days.

Question 6 If administered at these age and intervals, would this be a valid third dose of Hep B?

- 24 weeks – 4 days of age
- 8 weeks – 4 days after dose 2
- 16 weeks – 4 days after dose 1

Refer to series dose 3 of the Hep B supporting data spreadsheet to answer this question.

Choose from the following answers:

- a) Yes. The grace period is allowed to be used here.
- b) No. the grace period can't be used on the age.
- c) No. the grace period can't be used on the intervals.

The correct answer is A. The following would be a valid third dose of Hep B if administered at these age and intervals listed since the grace period is allowed to be used:

- 24 weeks – 4 days of age
- 8 weeks – 4 days after dose 2
- 16 weeks – 4 days after dose 1

Question 7 If a child was administered a fourth dose of DTaP at an interval of 4 months – 4 days from the previous dose, would the dose be considered valid at age 12 months – 4 days?

Refer to series dose 4 of DTaP supporting data spreadsheet to answer this question.

Choose from the following answers:

- a) Yes. The grace period is allowed to be used here.
- b) No. the grace period can't be used on the age.
- c) No. the grace period can't be used on the intervals.

The correct answer is C. If administered at the age and interval below, this would not be valid fourth dose of DTaP as the grace period can't be used.

- 12 months – 4 days of age
- 4 months – 4 days after dose 3

Question 8 Given this Immunization History, what should be the next course of action?

Dose 1, Rotarix (Rotavirus, monovalent) at age 6

Dose 2, Rotarix (Rotavirus, monovalent) at age 10 weeks – 4 days, interval 4 weeks – 4 days

Refer to series dose 1 and 2 Rotavirus supporting spreadsheet to answer this question.

Choose from the following answers:

- a) Both doses are valid. Forecast the 3rd and final dose as early as 14 weeks and recommended at 6 months
- b) The second dose is not valid and must be repeated. The dose should be repeated as early as 4 weeks from the invalid dose and recommended at 4 months
- c) Both doses are valid. No further doses of Rotavirus are needed given the products administered. The patient is complete.

The correct answer is C. Given the Immunization History: Rotarix (Rotavirus, monovalent) at 6 weeks and the second dose of Rotarix (Rotavirus, monovalent) at 10 weeks – 4 days, then no further doses of Rotavirus are needed. Both doses are valid and the patient is complete.

This concludes the Practice Exercise.

For additional support using the CDSi resources, visit:

www.cdc.gov/vaccines/cdsi