

Questionnaire for Patients with Diabetes who Inject

Coding:

To be completed
by your nurse

Country telephone
code

/

Centre number

/

Patient number
(in sequence from 1-25)

This questionnaire is voluntary and completely anonymous. If you choose not to participate your treatment will not be affected in any way. Persons who have injected insulin or another diabetes medicine for at least 6 months are invited to participate. The information you provide will be used to improve training and education for all people giving injections to manage their diabetes.

1. Sex? Female Male

2. Age? _____ Years

3. Weight? _____ kg

4. Height? _____ cm

5. How would you describe yourself?
 Self-injecting adult (18 years old or older)
 Self-injecting adolescent (13-17 years old)
 Self-injecting child (< 13 years old)
 Parent who gives injections to my child

6. How long have you had diabetes?
 > 6 months but <1 year - indicate number of months: _____ months
 ≥1 year - indicate number of years: _____ year(s)

7. How old were you when you were diagnosed with diabetes? _____ years

8. Which type of treatment are you currently taking for your diabetes (and how long)?
(tick all answers that apply)
 Pills (_____ years or _____ months)
 Insulin (_____ years or _____ months)
 GLP-1 receptor agonist such as Byetta or Victoza (_____ years or _____ months)

9. Which device do you normally use to inject? (tick all answers that apply)
 Syringe
 Pen
 Other (e.g. insulin pump)

10. How many total injections to you give per day?

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- More than 7

11. What length of needle do you currently use to inject (tick all answers that apply)?

- 12.7 mm
- 12 mm
- 10 mm
- 8 mm
- 6 mm
- 5 mm
- 4.5 mm
- 4mm
- Don't know

12. Has the length of your needle been changed since you started injecting?

- Yes
- No

13. If yes, do you know why the length has changed (tick all answers that apply)?

- To make injections more comfortable
- To reduce risk of going into muscle
- To reduce the risk of hypoglycemia
- Don't know

14. What injection sites do you use (tick all relevant answers)?

- Abdomen
- Thigh
- Buttocks
- Arm

15. If you use more than one site rank them 1 to 4 according to frequency used: most often

= 1, 2nd most often = 2, etc.?

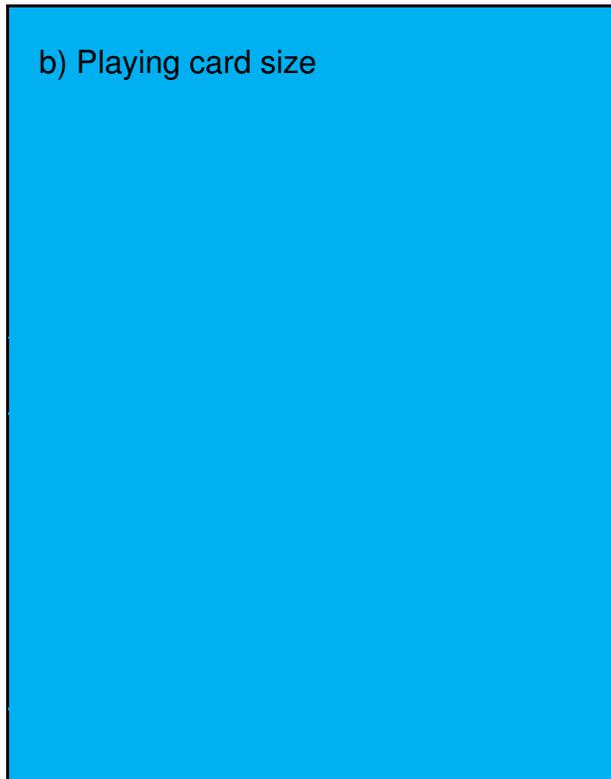
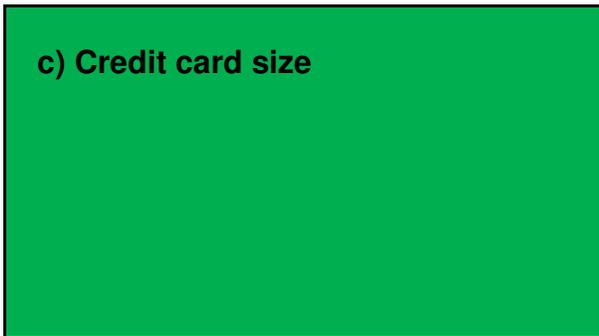
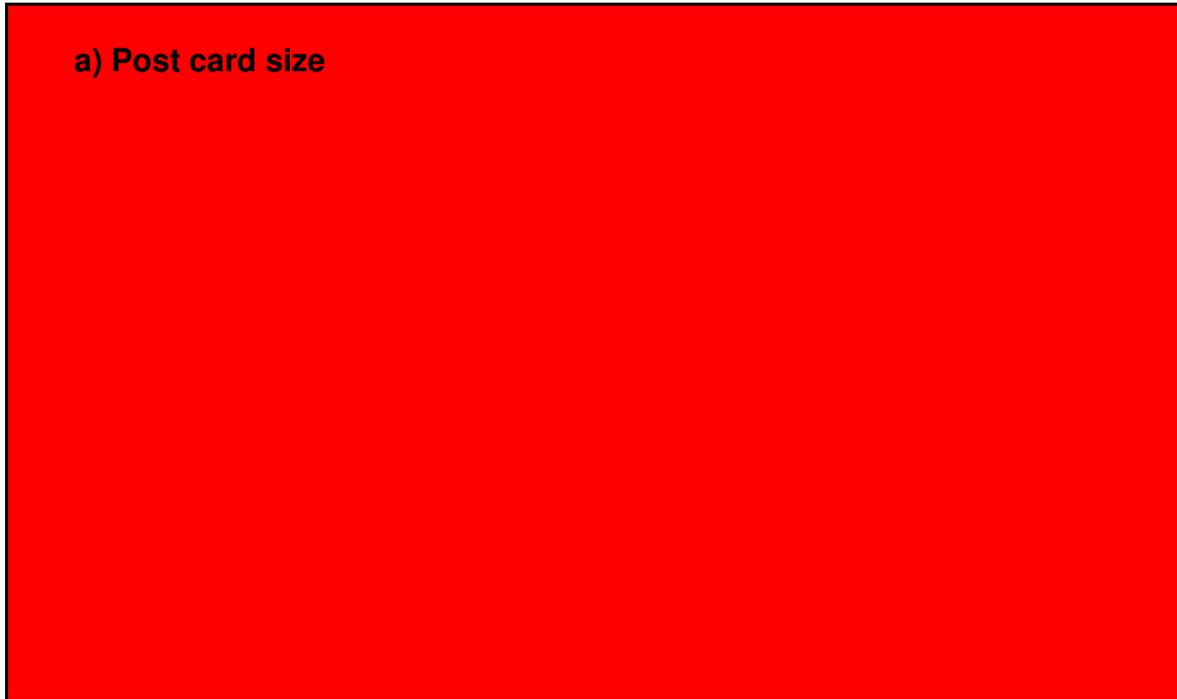
- _____ Abdomen
- _____ Thigh
- _____ Buttocks
- _____ Arm

16. How do you choose where to inject?

- I always inject in the same site at the same time of day (e.g. morning injection always in the abdomen)
- I inject in the same site for a whole day
- I inject in the same site for a few days
- I choose the site according to my physical activity
- I choose the site according to my rotation schedule (or plan)
- I have no specific injection routine regarding injection site
- I choose the site that hurts the least

17. In question 14, you specified the injection sites you use. From the boxes below, choose the one that most closely represents the size of the area of your injections:

	RED	BLUE	GREEN	GRAY
Abdomen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thigh	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Buttocks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



18. Do you rotate injection sites?
- Yes
 - No
19. If yes, how would you describe this rotation (tick all answers that are correct)?
- I move back and forth from right side of my body to left
 - I move from one injection site to another
 - I inject about a finger's breadth (1 cm) from where I previously injected
 - My injections describe a circle around my injection sites
 - My injections describe lines across my injection sites.
20. Do you have any swelling or lumps under the skin at your usual injection sites that have been there for some time (weeks, months or years)?
- Yes
 - No
21. If yes, at which site(s)?
- Abdomen
 - Thigh
 - Buttocks
 - Arm
22. Do you inject into these swellings or lumps?
- Always
 - Sometimes
 - Never
23. If yes, please indicate why you inject into them (tick all that are appropriate)
- It's convenient
 - It's less painful
 - Just a habit (I always inject there)
 - Don't know
24. **If you use a pen**, how long do you leave the needle under the skin after you have pushed the plunger in?
- < 5 sec
 - 5 – 10 sec
 - > 10 sec
 - I'm not aware of how long
25. Before the injection do you clean the skin with disinfectant (e.g. an alcohol swab)?
- Yes
 - No
26. Before inserting the needle into the vial or attaching a pen needle to the pen, do you clean the stopper with disinfectant (e.g. an alcohol swab)?
- Yes
 - No

27. If you use a pen, do you use your pen needle more than one time?

- Yes
- No

28. If Yes, how many times do you use a single pen needle?

- 2 times
- 3 to 5 times
- 6 to 10 times
- More than 10 times

29. If you use the pen needle more than 1 time, why do you do it (tick all appropriate answers)?

- Because you did not have another pen needle available
- To save money
- To prevent excess waste (environmental concern)
- For convenience

30. If you use a syringe, do you inject with it more than one time?

- Yes
- No

31. If Yes, how many times do you use a single syringe?

- 2 times
- 3 to 5 times
- 6 to 10 times
- More than 10 times

32. If you use the syringe more than 1 time, why do you do it (tick all appropriate answers)?

- Because you did not have another syringe available
- To save money
- To prevent excess waste (environmental concern)
- For convenience

33. Are your injections ever painful?

- Yes
- No

34. If yes, how would you best describe your injections?

- Always painful
- Often painful (several times a week)
- Sometimes painful (several times a month)
- Almost never painful (several times a year)

35. When you have a painful injection, what do you attribute it to? (tick all that may be appropriate)
- The injection site (e.g. I hit a nerve)
 - The amount or volume injected
 - I've already used the needle before
 - My injection technique wasn't right
 - The temperature of drug injected
 - I don't know
36. Do your injection sites ever bleed or look bruised?
- Yes
 - No
37. If yes, how often does the injection cause bleeding or bruising?
- Always
 - Often (several times a week)
 - Sometimes (several times a month)
 - Almost never (several times a year)
38. Does insulin ever leak **out of your injection site** on the skin?
- Yes
 - No
39. If yes, how often does fluid leak out of the skin from the injection site?
- Always
 - Often (several times a week)
 - Sometimes (several times a month)
 - Almost never (several times a year)
40. Is there any dribble/leakage of insulin **from your needle tip** after injection?
- Yes
 - No
41. If Yes, how often do you see such leakage from the needle?
- Every time I inject
 - Often (several times a week)
 - Sometimes (several times a month)
 - Almost never (several times a year)
42. Do you ever inject through your clothing?
- Yes
 - No
43. If yes, how frequently do you inject through clothing?
- Always
 - Often (several times a week)
 - Sometimes (several times a month)
 - Almost never (several times a year)

44. If you use cloudy insulin (NPH, N or pre-mixed insulin), do you re-mix your insulin prior to use?
- Yes
 - No
45. If yes, before injecting how many times on average do you roll and/or tip the pen or insulin vial _____
46. Where do you store your insulin **before** you begin to use the pen or vial?
- Refrigerator
 - Bathroom, purse, drawer or other – room temperature
47. Where do you store your insulin **after** you begin to use the pen or vial?
- Refrigerator
 - Bathroom, purse, drawer or other – room temperature
48. If you keep the insulin that you are using in the refrigerator, do you allow it to warm up to room temperature before injecting it?
- Yes
 - No
49. Do you ever use your insulin vial or cartridge after their expiry date?
- Yes
 - No
 - I don't usually keep track of expiry dates on my insulin
50. How do you dispose of your used pen needles/syringes?
- Into a container specially made for used sharps
 - Into a home container such as an empty bottle
 - Into the rubbish with the cap on
 - Into the rubbish without recapping
 - I clip off the needle and it stays in the clipper
51. If you dispose into a container, what do you do with the container?
- Put it into the rubbish
 - Take it to a pharmacist
 - Take it to a doctor's office
 - Take it to a laboratory
 - Take it to the hospital or clinic
 - Take it to a local deposit or collection service
 - None of the above
52. Do you ever miss or skip an injection?
- Yes
 - No
53. If yes, how often does this happen?
- Often (several times a week)
 - Sometimes (several times a month)
 - Almost never (several times a year)

54. What is/are the usual reason(s) for skipping an injection? (tick all that apply)

- I forgot
- I didn't eat
- I was sick (e.g. nausea and vomiting)
- I just didn't want to inject
- My glucose was too low

55. Who taught you how to give your injections?

- General Nurse
- Diabetes Nurse
- Diabetes Educator
- Doctor (General Practitioner)
- Doctor (Diabetes Specialist)
- Pharmacist
- A representative of the pen or needle manufacturer

56. How often does the nurse or doctor examine your injection sites?

- Routinely every visit. Specify how often this is: every _____ months
- Once a year
- Only if I complain of a problem at a site
- I can't remember my sites ever being checked

57. Tick YES if the subject was covered when you were taught about injecting or at any time since? Tick the last column if you feel you need more training on the subject?

	Yes	Still need more training
Injection sites (e.g. thigh, arm, buttock, abdomen)	<input type="checkbox"/>	<input type="checkbox"/>
Skin thickness and appropriate depth of injection	<input type="checkbox"/>	<input type="checkbox"/>
Length of needle	<input type="checkbox"/>	<input type="checkbox"/>
How to do a skin lift or "pinch up" the skin	<input type="checkbox"/>	<input type="checkbox"/>
How long to hold a skin lift or "pinch up"	<input type="checkbox"/>	<input type="checkbox"/>
Angle of needle entry	<input type="checkbox"/>	<input type="checkbox"/>
How long to keep the needle in the skin after injection	<input type="checkbox"/>	<input type="checkbox"/>
Rotating within an injection site	<input type="checkbox"/>	<input type="checkbox"/>
Prevention of air bubbles (syringe) or proper priming of pen needle	<input type="checkbox"/>	<input type="checkbox"/>
Mixing insulin in a syringe (for syringe users)	<input type="checkbox"/>	<input type="checkbox"/>
Re-suspension of cloudy insulin	<input type="checkbox"/>	<input type="checkbox"/>
Single use of pen needle/syringe	<input type="checkbox"/>	<input type="checkbox"/>
Safe disposal of sharps (pen needles, syringes)	<input type="checkbox"/>	<input type="checkbox"/>

58. When was the last time you received or reviewed instructions on injections?

- Within the past 6 months
- Within the past 6-12 months
- Sometime in the last 1 to 5 years
- Sometime in the last 5 to 10 years
- Never

- 59.** In the last six months have you experienced hypoglycemia (low blood sugar)?
- Yes
 - No
- 60.** If yes, how many times in the last six months have you had hypoglycemia so severe you needed assistance from another person?
- None
 - 1 to 2 times
 - 3 to 5 time
 - More than 5 times
- 61.** Did you require an ambulance or a visit to the hospital/clinic during any of these hypoglycemic episodes?
- Yes
 - No
- 62.** How often do you do finger-pricks to check your blood glucose?
- More than 4 times a day
 - 3 to 4 times a day
 - 1 to 2 times a day
 - Several times a week
 - I rarely or never check blood glucose
- 63.** Have you ever had to be admitted to a hospital, emergency unit or clinic because of diabetes ketoacidosis (DKA or diabetic coma)?
- Yes
 - No
- 64.** If yes, please indicate the timing of the DKA admissions?
- I've had DKA but only when I was first diagnosed with diabetes
 - I've had DKA but not within the last six months
 - I've had DKA including within the last six months
- 65.** Do you have frequent hyperglycemia (blood glucose values more than 250 mg/dL [13.9 mM/L])?
- Yes
 - No
- 66.** If yes, please indicate the frequency of the hyperglycemia?
- More than 5 high readings/week
 - 3 to 5 high readings/week
 - 1 or 2 high readings/week
 - An occasional high reading (less than 4 times/month)
- 67.** Are there any persons in your immediate surroundings who might accidentally get stuck with one of your used sharps (needle or lancet)?
- Yes
 - No

68. If yes, please identify the at-risk persons? (tick as many as appropriate)

- Children
- Other family members (e.g. spouse)
- Nurse or other professional
- House keeper or rubbish collector

69. Have any of these persons ever had an accidental injury with one of your diabetes sharps?

- Yes
- No

70. Please indicate why these persons may be at-risk? (tick as many as appropriate)

- I don't use devices that prevent injuries to others (safety devices)
- I don't have appropriate disposal containers for my used sharps
- Used sharps are sometimes left in places where others might get stuck
- I'm positive for hepatitis or another blood-borne illness

Thank you for your time